

# 2003 CME Syllabus and Proceedings Summary

#### **CERTIFICATE OF ATTENDANCE**

This certificate provides verification of your completion of educational activities at the 2003 Institute on Psychiatric Services.

The American Psychiatric Association certifies that

has participated in the 2003 Institute on Psychiatric Services of the American Psychiatric Association October 29–November 2, 2003 Boston, MA

and is awarded \_\_\_\_\_ credits for CME activities which have met the criteria for AMA-PRA category 1 credit.

Marcia Skaft Join, M.D.

Marcia K. Goin, M.D., Ph.D. APA President

James H. Scully, Jr., M.D.

Medical Director

Jams H Sully Se My

The American Psychiatric Association (APA) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The APA designates this educational activity for a maximum of 48 category 1 credits toward the AMA Physician's Recognition Award and for the CME requirement of the APA. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.



# DAILY LOG FOR ATTENDANCE AT CME FUNCTIONS AT THE 55<sup>th</sup> INSTITUTE ON PSYCHIATRIC SERVICES OCTOBER 29-NOVEMBER 2 • BOSTON, MA

**NOTE:** APA members are responsible for maintaining their own CME records. A copy of this certificate may be forwarded to other organizations requiring CME verification. Reporting is on an honor basis.

DAY	TITLE OF SESSION	NUMBER OF HOURS	CME CATEGORY
<del></del>			
	TOTAL		·

### HOW TO OBTAIN CME CREDIT

#### FOR THE

#### 2003 INSTITUTE ON PSYCHIATRIC SERVICES

The American Psychiatric Association is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians. The APA certifies that the continuing medical education activities designated as category 1 for the 2003 Institute sessions meet the criteria for category 1 of the Physician's Recognition Award of the American Medical Association and for the CME requirements of the APA.

The scientific program at the Institute offers a broad range of sessions designated for CME credit. The sessions that meet the criteria for <u>category 1 credit</u> include CME Courses, Full-Day Sessions, Industry-Supported Symposia, Innovative Programs, Leadership and Career Development Seminars, Lectures, Medical Updates, Psychiatric Services Achievement Awards Session, Symposia, and Workshops. Other sessions may be reported as <u>category 2 credit</u>. These include Caucuses, Clinical Consultations, Debates, Discussion Groups, Forums, and Posters.

NOTE: APA members must maintain their own record of CME hours for the meeting. To calculate credit, registrants should claim one hour of credit for each hour of participation in category 1 scientific sessions. To document that credit, participants should record the session(s) attended on the back page of the Certificate of Attendance found on page ii, in the front of this book. This Certificate is for your personal records and may be forwarded to other organizations requiring verification. Documentation of all CME credit is based on the honor system.

# RECORDING CME CREDIT THROUGH THE CME RECORDER

APA members can record the number of AMA-PRA category 1 hours they earn at the Institute on Psychiatric Services by completing the Computerized Evaluation Program and entering their CME hours. The hours entered onsite through the computerized evaluation are maintained for APA members in the personal CME Recorder section of the APA Web site.

The CME Recorder (for APA members) maintains a record of CME credits, which are earned at APA annual meetings and then entered through the Computerized Evaluation. It also records CME credits earned online through APA CME Web site programs. APA members may view and print these records from their personal computers. Members also have the capability to enter hours earned at other CME activities into their Recorder account.

APA members log in though the "Members Only" section of the APA Web site or through <a href="http://www.psych.org/cme">http://www.psych.org/cme</a>. Select the CME Recorder, access your personal record and view the hours you have earned through APA activities; view your APA CME certificate expiration date; learn about state CME requirements; and find direct links to state relicensing boards.

### **CME REQUIREMENTS FOR APA MEMBERS**

By referendum in 1974, the membership of the American Psychiatric Association (APA) voted that participation in continuing medical education (CME) activities be a condition of membership. The CME requirement aims at promoting the highest quality of psychiatric care through encouraging continuing professional growth of the individual psychiatrist.

Each member must participate in 150 hours of continuing medical education activities per three-year reporting period. Of the 150 hours required, a minimum of 60 hours must be in category 1 activities. Category 1 activities are sponsored or jointly sponsored by organizations accredited to provide CME and meet specific standards of needs assessment, planning, professional participation and leadership, and evaluation of learning.

(continued on next page)

#### CME REQUIREMENTS FOR APA MEMBERS

(Cont'd.)

In December 1983 the Board of Trustees ratified the current method of reporting CME activities. Although the basic requirement of 150 hours every three years (with at least 60 hours in category 1) remains the same, members no longer need to report these specific activities, but need only sign a compliance statement to the effect that the requirement has been met.

Individual members are responsible for maintaining their own CME records and submitting a statement of their compliance with the requirement after completing the necessary 150 hours of participation. APA certificates are issued only upon receipt of a complete report of CME activities. To receive an APA certificate, you can submit a completed APA report form or use one of the alternate methods detailed below. The APA Certificate is reciprocal with the Physicians' Recognition Award (PRA) of the American Medical Association.

### HOW TO EARN A CERTIFICATE FOR CME COMPLIANCE

As an APA member, you can obtain an APA CME certificate by using one of the following methods:

- If you are licensed in Arkansas, California, Delaware, Florida, Georgia, Hawaii, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nevada, New Hampshire, New Mexico, North Dakota, Ohio, Oklahoma, Rhode Island, South Carolina, Utah, or West Virginia, you may demonstrate that you have fulfilled your APA CME requirements by sending the APA a copy of your re-registration of medical license. These states have CME requirements for licensure comparable to those of the APA. Your APA Certificate will be valid for the same length of time as the re-registration.
- If you hold a current CME certificate from a state medical society having CME requirements comparable with those of the APA, you may receive an APA CME certificate by sending the APA a copy of your state medical society CME certificate. The APA will issue a CME certificate valid for the same period of time. The state medical societies currently having CME requirements comparable to those of the APA are Kansas, New Jersey, Pennsylvania and Vermont.
- If you have a current AMA Physician's Recognition Award (PRA), forward a copy of your PRA to the APA and you will receive an APA CME certificate with the same expiration date.
- You may also report your CME activities directly to the APA, using the official APA report form. This form may be obtained from the APA Office of Education, 1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209-3901, or call (703) 907-8632; or filed electronically via the APA Web site at <a href="http://www@psych.org">http://www@psych.org</a>.

#### **EXEMPTIONS**

All APA Life Fellows and Life Members who were elevated to that membership category on or before May 1976 are exempt from the CME requirement, but are urged to participate in CME activities. Members who became Life Members or Fellows after that date are not exempt.

Any member who is inactive, retired, ill or disabled may request an exemption from the CME requirement by applying to his or her District Branch Membership Committee. After determination that partial or total exemption from CME activities is warranted, the District Branch Membership Committee will forward its recommendation to the APA Office of Education.

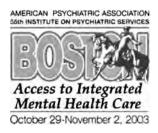
APA members residing outside of the United States are required to participate in 150 hours of CME activities during the three-year reporting period, but are exempt from the categorical requirements.

### CONTINUING MEDICAL EDUCATION

# SYLLABUS AND PROCEEDINGS SUMMARY FOR THE

# 55<sup>th</sup> INSTITUTE ON PSYCHIATRIC SERVICES

October 29-November 2, 2003 Boston, MA



Institute on Psychiatric Services American Psychiatric Association 1000 Wilson Boulevard, Suite 1825 Arlington, VA 22209-3901 1-888-357-7924

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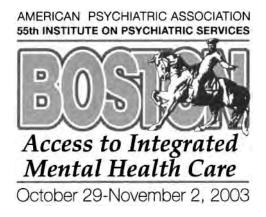
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### TABLE OF CONTENTS

2003 Certificate of Attendance	i
Daily Log for Attendance at CME Functions	ii
How to Obtain CME Credit	iii-iv
CME Courses	1-8
Debate	9
Full-Day Session	10
Industry-Supported Symposia	11-22
Innovative Programs	23-34
Leadership and Career Development Seminars	35-37
Lectures	38-51
Medical Updates	52-54
Posters	55-202
Psychiatric Services Achievement Awards Session 20	03-206
Symposia	07-239
Workshops	40-269





### MISSION STATEMENT



# VISION, MISSION, VALUES, AND GOALS of the INSTITUTE ON PSYCHIATRIC SERVICES

#### **VISION**

The Institute on Psychiatric Services (IPS) of the American Psychiatric Association is a yearly educational meeting which focuses on the needs of the most vulnerable, disenfranchised, and difficult-to-serve patients.

#### **MISSION**

The mission of the IPS is to train and support psychiatrists to provide quality care and leadership through study of the array of clinical innovations and services necessary to meet the needs of individuals who suffer from serious mental illness, substance abuse, or other assaults to their mental health due to trauma or adverse social circumstances, in order to assure optimal care and hope of recovery.

#### VALUES AND GOALS

To fulfill this mission, the IPS holds an annual meeting each fall that focuses on clinical and service programs, especially those that provide a complex array of services and clinical innovations to meet the needs of the most difficult-to-serve patients. Such programs constitute the continuum of care, from state and general hospitals to community-based drop-in centers, and attempt to meet the needs of persons living in rural communities as well as the urban poor. The focus on more difficult-to-serve patients requires attention to the social and community contexts in which these patients are treated and reside. Contextual issues must be addressed because they operate as significant variables in the course of the psychiatric illnesses of certain patient populations such as those with severe and persistent mental illness, members of minority groups and those suffering economic hardships, most children and adolescents, the elderly, patients living in rural communities or in communities of immigrants, and patients treated in settings for physically or intellectually disabled individuals.

The IPS, therefore, fosters discussions of such issues as housing and vocational rehabilitation equally with innovative psychological treatments and pharmacotherapy. The clinical focus of the IPS is on innovations and adaptations of proven therapies as they are applied to the more difficult-to-serve populations. The IPS also serves as a forum for discussing systems of care, quality management, government policy, and social and economic factors as they have an impact on the most vulnerable patients.

The mission of the IPS is of particular significance to an important subset of APA members who are its prime constituents. This includes psychiatrists who identify themselves as in community practice, those involved in teaching community practice, those who serve in the public sector, such as staff working in state, community, and Veterans Affairs hospitals, community clinics, jails, or other community agencies, psychiatric administrators and those with a particular interest in the social issues that have an impact on patients. It is a goal of the IPS to provide a venue for relevant scientific programs that will retain such psychiatrists as valued members of the APA and attract colleagues who are not yet members. The IPS functions as a prime APA service to these important, devoted, and often isolated colleagues, many of whom are psychiatrists of color or international medical graduates. It is the goal of the IPS to reach out and encourage these psychiatrists to join the APA and attend this meeting. In turn, the APA will strive to ensure that the IPS serves as a professional home for these groups of colleagues.

Serving the populations that have been identified as the focus of the IPS involves collaboration with a wide variety of other professionals as well as with consumers, family members, and advocates. Therefore, an important part of the mission of the IPS is to encourage interdisciplinary and family member participation. Indeed, this mission has been an organizing principle of the IPS since its inception. Efforts will be made to further reach out to families, consumers, and allied professionals in the communities where meetings are held, and attention will be paid to ensuring their access to the IPS. The IPS is supportive of allied psychiatric organizations who share a similar vision and mission for which the IPS can serve as a scientific venue. It is part of the mission of the IPS to meet the needs of such allied groups for meeting times and space.

# ENGAGING RESISTANT AND HOSTILE PATIENTS INTO PARTICIPATORY TREATMENT

David Mee-Lee, M.D., Assistant Clinical Professor of Psychiatry, University of Hawaii, and Chair, American Society of Addiction Medicine, 4228 Boxelder Place, Davis, CA 95616

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) identify ways for clinicians to better deal with resistance and hostility; 2) demonstrate skills to assess readiness and engage patients collaboratively; and 3) recognize ways to transform services to match interventions to patients' stage of change.

#### **SUMMARY:**

Resistance and hostility are not expected parts of many mental health and addiction patients' presentation. Yet many clinicians feel ill equipped to deal with resistance and hostility and try confrontation to "break-through denial" or passive styles of psychotherapy to explore psychodynamics and internal conflicts. The training of mental health and addiction treatment professionals frequently neglects strategies to engage patients into participatory treatment planning and how to finesse counseling skills to prepare people for change. This course is designed to help participants improve assessment and treatment of resistance and hostility in addiction and mental health patients and to become better acquainted with how people change. Faculty will teach skills that can help retain patients in treatment and encourage honesty, not game playing; accountability, not arguing; and confrontation. Besides improving clinical approaches, this course will also discuss the changes needed to reconfigure treatment services to better match patients' readiness to change. The format of the course will provide the opportunity to build skills around the assessment, engagement, and treatment of patients who are at varying stages of readiness to change.

#### **REFERENCES:**

- 1. Mee-Lee D: Treatment planning for dual disorders. Psychiatric Rehabilitation Skills 2001; 5:52–79.
- 2. Carey KB, Carey MP, Maito SA, Purnine DM: The feasibility of enhancing psychiatric outpatients readiness to change their substance use. Psychiatric Services 2002; 53:602–608.

# TREATING MEDICAL STUDENTS, TRAINEES, AND PHYSICIANS IN PRACTICE

Leah J. Dickstein, M.D., M.A., Professor Emeritus, Department of Psychiatry and Behavioral Science, University of Louisville, 3006 Dunraven Drive, Louisville, KY 40222; Michael F. Myers, M.D., 2150 West Broadway Suite 405, Vancouver, BC Canada V6K4L9

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) understand the role of stigma and other obstacles to care when treating medical students, residents and physicians in practice; 2) employ advocacy strategies on behalf of their patients; 3) appreciate the challenges when treating these patients with depression; and 4) identify transference and countertransference dynamics.

#### **SUMMARY:**

Beyond common issues i.e. biological family general medical and psychiatric history or adoption, gender, age, racial/ethnic, spiritual background, body image, early personal and educational life experiences, unique issues i.e. suicidal ideation/potential, homicidal potential, gender bias, sexual harassment will be discussed. The health professional as psychiatric patient, confidentiality, payment, time, boundaries, psychotherapy, psychopharmacotherapy, medical leaves, and licensure questions will be addressed. Self-medication, significant other(s)' involvement, transference, and countertransference as well as sexual orientation and issues will be included. Hospitalization, avoiding psychiatric treatment and the simultaneous rules of patient and health professional are highlighted.

#### **REFERENCES:**

- 1. Myers MF: Doctors' Marriages: A Look at the Problems and Their Solutions, Second Edition. The Free Press, 1994.
- Myers MF: Cracks in the mirror: when a psychiatrist treats physicians and their families, in A Perilous Calling: The Hazards of Psychotherapy Practice, edited by Sussman MB, John Wiley & Sons, Inc., 1995.

Course 3

Thursday, October 30 8:00 a.m.-12 noon

#### INTEGRATED MODEL FOR TREATMENT OF CO-OCCURRING PSYCHIATRIC AND SUBSTANCE DISORDERS

Kenneth M. Minkoff, M.D., Associate Clinical Professor, Department of Psychiatry, Harvard University Med-

ical School, 100 Powdermill Road, Box 319, Acton, MA Course 4 01720

Thursday, October 30 8:00 a.m.-12 noon

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) identify five philosophical/clinical barriers to integrated treatment and describe how to resolve them; 2) describe the four phases of treatment/recovery in an integrated disease and recovery model for mental illness and addiction; 3) describe and implement a protocol for diagnosing psychiatric illness in the presence of substance use disorder and vice versa; and 4) describe integrated program models for treatment of dual diagnosis and specific populations addressed by each model.

#### **SUMMARY:**

This course will provide a basic introduction to the complex topic of co-occurring psychiatric and substance disorders, with the goal of assisting the practitioner to develop a systematic, integrated, conceptual framework that facilitates rational treatment planning and treatment matching, and permits the design of a comprehensive, continuous, and integrated system of care. The course will begin with a brief overview of the problem of dual diagnosis and the difficulties practitioners encounter in providing successful treatment. Using national consensus best-practice models based on available research, subtypes of the dual-diagnosis population and basic principles of successful intervention will be identified. These principles will emphasize the importance of empathic, hopeful, continuous, integrated treatment relationships, integrated dual primary phase-specific treatment matching, and appropriate balance of case management/care with empathic detachment and confrontation. Barriers to integrated treatment will be identified, and an integrated parallel disease and recovery model will be utilized as a mechanism to address those barriers. This model will then be utilized to illustrate the process of integrated assessment, treatment matching (including motivational enhancement interventions), and strategies for psychopharmacologic intervention. Participants are encouraged to bring clinical and programmatic problems and scenarios for illustrative discussion.

#### **REFERENCES:**

- Barreira P, Espey B, Fishbein R, et al.: Linking substance abuse and serious mental illness service delivery systems: initiating a statewide collaborative. J Behavioral Health Services & Research 2000; 27:107-113.
- 2. Minkoff K: Developing standards of care for individuals with co-occurring psychiatric and substance use disorders. Psychiatric Services 2001; 52:597–599.

# CURRENT CODING AND DOCUMENTATION REQUIREMENTS

Chester W. Schmidt Jr., M.D., Department of Psychiatry, Johns Hopkins Bayview Medical Center, 4940 Eastern Avenue, Baltimore, MD 21224-2735

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) be knowledgeable about the use of psychiatric evaluation and therapeutic procedure codes and evaluation and management codes, and 2) document the provision of services denoted by the above two sets of codes.

#### **SUMMARY:**

This course is for clinicians (psychiatrists, psychologists, and social workers) who provide mental health services for which they bill patients using Current Procedural Terminology (CPT codes, copyrighted by the American Medical Association. Course attendees are encouraged to obtain the most recent published CPT Manual and read the Guideline Section for Evaluation and Management codes, the section "Evaluation and Management Codes" and the section "Psychiatric Evaluation and Therapeutic Procedures." The objectives of the course are twofold. First, to familiarize the attendees with all the CPT codes used by mental health clinicians and review issues and problems associated with payorimposed barriers to payment for services denoted by the codes. Second, the attendees will review the most upto-date AMA/CMS guidelines for documenting the services/procedures provided to their patients. Templates for model evaluation and treatment, initial evaluation and therapy notes will be used to instruct the attendees in efficient methods of recording data to support their choice of CPT codes, and the level of service provided.

#### **REFERENCES:**

- 1. American Medical Association: Current Procedural Terminology, Fourth Edition (CPT). American Medical Association, 2002.
- Muszynski S: Compliance 101, Psychiatric Practice & Managed Care. American Psychiatric Association, May/June 2001.

Course 5

Thursday, October 30 8:00 a.m.-12 noon

#### ANTIPSYCHOTIC-INDUCED MOVEMENT DISORDERS: ASSESSMENT AND TREATMENT

Leonardo Cortese, M.D., Associate Professor, Department of Psychiatry, University of Western Ontario, Lon-

COURSES 3

don Health Sciences Centre Hospital, London, Canada, 375 South Street, Room 833, London, ON Canada N6A 4G5; Richard Williams, M.D.; Michael P. Caligiuri, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) classify the types of movement disorders; 2) list clinical features, differential diagnosis, and risk factors of all four types of antipsychotic-induced movement disorders; 3) understand treatment modalities of all four types of extrapyramidal syndromes (EPS); 4) examine a patient for movement disorders; 5) identify EPS through video clips of patients with a vast array of movement disorders; and 6) understand the benefit of using instrumentation in the assessment of EPS.

#### **SUMMARY:**

Since the mid-1950s, antipsychotics have been the cornerstone of treatment for schizophrenia. Unfortunately, they have caused neurological side effects that, for some patients, have led to nonadherence and possibly, poor outcomes. These neuroleptic-induced, extrapyramidal syndromes (EPS) have consisted of motor and psychological disabilities of dystonia, parkinsonism, akathisia, and dyskinesia. They have been present not only in the acute form, but have progressed to the tardive phase in some vulnerable patients. Although there has been considerable attention paid to the assessment and treatment of EPS through the years, these difficulties have had a significant presence. EPS induced by firstgeneration antipsychotics have occurred in up to 50 percent to 70 percent of patients. Second-generation antipsychotics, due to their different receptor profiles, have decreased the onset of EPS considerably. Even in tardive dyskinesia, perhaps the most disabling of EPS forms. the incidence has decreased from five percent with firstgeneration antipsychotics and from zero percent to two percent with second-generation antipsychotics. This course will present and enhance the assessment and management of neuroleptic-induced movement disorders. It will be of benefit to all clinicians involved in the treatment of patients prescribed neuroleptics. The presentation will review the classification, clinical features, differential diagnosis, risk factors, and treatment modalities of all four major types of movement disorders. Patient video clips will help to enhance identification of these disorders. The course will also provide instruction of a clinical examination on a real patient to assess movement disorders. As quantitative evaluations of movement disorders have been shown to be most beneficial, this course will present an assessment by instrumentation on a patient with EPS.

#### REFERENCES:

1. Cortese L: New hope in the pharamacotherapy of schizophrenia. Hospital Physician 2002; 38:21–28.

 Malla AK, Ross RMG, Manchanda R, Scholten D, Takhar J, Harricharan R, Cortese L: One year outcome in first episode psychosis: influence of DUP and other predictors. Schizophrenia Research 2002; 54:231–242.

Course 6

Thursday, October 30 9:00 a.m.-4:00 p.m.

### PERSONNEL MANAGEMENT FOR CLINICIAN-ADMINISTRATORS

Stephen M. Soltys, M.D., Professor of Psychiatry, and Director, Psychiatry Residency Training, Southern Illinois University School of Medicine, 3605 Brandonshire Drive, Springfield, IL 62704; Alan Q. Radke, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) effectively deal with personnel situations which commonly confront a clinician-administrator; and 2) be familiar with related legal issues.

#### **SUMMARY:**

In order for a mental health organization to run effectively, employees from a range of disciplines must be recruited and motivated to work together as a team. However, some personnel may function in a disruptive manner. Clinicians in administrative positions quickly find that successfully motivating individuals to work with their coworkers requires personnel management skills, which are significantly different from the interpersonal clinical skills they have developed. In this highly interactive course, three psychiatrists with extensive senior management experience will help course participants develop the skills to deal with a range of personnel issues which commonly occur in private and public mental health settings. Techniques for effective recruitment, supervision, negotiating, discipline, and termination will be described with attention toward decreasing the risk of potential legal actions. Approaches toward motivating both professional and non-professional employees will be explained, as will the effects of managed care and downsizing on employee morale. Participants will be encouraged to share situations they have encountered for extensive discussion with course faculty.

- 1. Larson RC: Inappropriate workplace aggression: case examples. Psychiatric Annals 1998; 28:253–259.
- Soltys SM, Wowra SA, Hodo GL: Child psychiatry public sector leadership: two surveys of state departments of mental health. Psychiatric Services 1999; 12:1591–1595.

Course 7

Thursday, October 30 1:00 p.m.-5:00 p.m.

#### **MEDICAL ETHICS 101**

Edmund G. Howe, M.D., Professor, Department of Psychiatry, Uniformed Services University, 4301 Jones Bridge Road, Bethesda, MD 20814

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course the participant should be able to: 1) distinguish ethical from medical issues in clinical practice; 2) use four different approaches to resolving ethical conflicts; and 3) recognize areas of ethical consensus and controversy currently faced by ethics consultants and committees in general hospital settings.

#### **SUMMARY:**

To an ever-increasing extent, psychiatrists are taking on roles as ethics consultants and members of ethics committees in general hospital settings. Yet when psychiatrists are new to these roles, the philosophical language often used by those approaching ethical conflicts may sound like a foreign language. Even when psychiatrists are highly experienced, the task of keeping abreast of current thinking in medical ethics, as well as in psychiatry, may be overwhelming. This course will address both of these needs. Initial, the faculty will present core approaches used in resolving ethical conflicts, illustrating each with appropriate examples. Then, using a lecture-and-discussion format, the group will explore the most prevalent and cutting-edge ethical issues arising in these contexts. Time will be allotted from participants to share cases with which they have been involved, to raise issues, and ask questions. The course will focus on medical issues, such as withdrawing medical treatments and allocating limited resources, as opposed to psychiatric issues.

#### **REFERENCES:**

- McKay AC: Supererogation and the profession of medicine. The Journal of Medical Ethics 2002; 28:70-73.
- 2. Howe EG: How to determine competency. The Journal of Clinical Ethics 2001; 12:3–16.

Course 8

Thursday, October 30 1:00 p.m.-5:00 p.m.

# DSM-IV-TR CULTURAL FORMULATIONS: DIAGNOSIS AND TREATMENT

Russell F. Lim, M.D., Assistant Clinical Professor of Psychiatry, University of California School of Medicine at Davis, and Medical Director, Northgate Point, Regional Support Team, 601 West North Market Boulevard, #100, Sacramento, CA 95834; Candace M. Fleming, Ph.D.; Roberto Lewis-Fernandez, M.D.; J. Charles Ndlela, M.D.; Michael W. Smith, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) understand and describe the five parts of the *DSM-IV* outline for cultural formulation; 2) apply the cultural formulation to the treatment of African-American, Asian, Hispanic, and Native American patients; and 3) recognize how ethnicity affects psychopharmacology and psychotherapy.

#### **SUMMARY:**

The increasing cultural diversity in the United States, as shown by the United States census data, requires that clinicians understand cultural differences and how they affect diagnosis and treatment. From 1980 to 2000, the number of Asians in America increased by 230 percent, Hispanics by 142 percent, Native Americans by 139 percent, and African Americans by 32 percent, while Caucasians increased by only 11 percent. ACGME requirements for residents training in psychiatry now include a familiarity with cultural assessment. The publication of DSM-IV has added new emphasis to the influence of culture on diagnosis by including an outline for cultural formulation and a glossary of culture-bound syndromes. Culturally diverse individuals have special needs and require special skills and knowledge to receive appropriate and effective treatment. In 2001, the Surgeon General of the United States released a supplement of his report on mental health, titled "Culture, Race, and Ethnicity," which stated that "culture counts" in the diagnosis and treatment of the above four ethnic groups. Culturally diverse individuals have special needs, and clinicians require special skills and knowledge to treat them both appropriately and effectively. This course will present clinicians with a framework for the assessment of culturally diverse patients, as well as guidelines for psychopharmacology with these patients. Participants will attend two small groups that will discuss salient issues in the assessment of African-American, Asian, Hispanic, and Native American patients which will allow them to ask questions and to discuss their own cases in an in-depth manner. Faculty representing the various ethnicities from the University of California, San Francisco, Davis, and Los Angeles; the University of Colorado, and Columbia University will lead the discussions.

- 1. American Medical Association: Cultural Competence Compendium. American Medical Association, 1999.
- 2. Canino I, Spurlock J: Culturally Diverse Children and Adolescents, Second Edition. Guilford, 2000.

Friday, October 31 Course 10 8:00 a.m.-12 noon

Friday, October 31 9:00 a.m.-4:00 p.m.

#### DOING RESEARCH ON A SHOESTRING BUDGET

Mantosh J. Dewan, M.D., Professor and Chair, Department of Psychiatry, State University of New York, Upstate Medical University at Syracuse, 5310 Aquarius Drive, Syracuse, NY 13224-2146; Michele T. Pato, M.D.; Edward K. Silberman, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participate should be able to: 1) develop ideas into research projects, and 2) strategies for supporting projects with grand funding and getting results published.

#### **SUMMARY:**

This course would benefit junior faculty or clinicians in practice who are interested in doing research and in publishing despite minimal funding. It begins with a systematic explication of strategies for successful research, including a discussion of the need for research funds, sources for small amounts of money, and the advantages of collaboration. Examples of these strategies will be presented. Next, the contribution of unfunded research to the literature is reviewed. The characteristics of unfunded studies, profiles of their researcher, and resources needed to support these studies is described. A presentation on how to turn a notion into a testable hypothesis follows. Issues of experimental design such as the null hypothesis, operationlising terms, defining the sample, dependent and independent variables, rating instruments and measure of change, analysis of data, and conclusions that can be drawn from your results, will be addressed. Ethical issues and Institutional Review Board requirements for the conduct of research will be detailed. Then, faculty-facilitated small groups will work on generating ideas and developing them into researchable projects (preferably requiring minimal funding). Finally, a presentation on getting your work published addresses how to choose the appropriate journal, the structure of research reports, difficulties in starting to write, pre-submission reviews, and dealing with critiques and rejections. Discussion and interaction is encouraged throughout.

#### **REFERENCES:**

- 1. American Psychiatric Association: Handbook of Psychiatric Measures. APA Press, 2000.
- 2. Sajatovic M, Ramirez L: Rating Scales in Mental Health. Lexi-Comp, 2001.

#### THE ASSESSMENT AND TREATMENT OF CHILD MOLESTERS

Gene G. Abel, M.D., Medical Director, Behavioral Medical Institute of Atlanta, 1401 Peachtree Street, N.E., Suite 140, Atlanta, GA 30309-3000; John M. Bradford, M.B.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) recognize the extent of child molestation in North America; identify the theoretical framework of assessment and treatment of child molesters; 2) list behavioral psychopharmacological and psychosocial treatments for molesters; and 3) identify the ethical and legal issues involved in the treatment of molesters; and identify current steps being taken to prevent child molestation.

#### **SUMMARY:**

The course begins with a detailed didactic presentation regarding the incidence of child molestation and the nature of the problem. The possible causes of child molestation are reviewed. The methods of assessing possible child molesters, with special reference to the use of viewing time and penile plethysmography, and the role of sex hormones in identifying violent child molesters. The categories of cognitive-behavioral treatment with a strong relapse prevention component are reviewed along with specific pharmacological treatment. Treatment outcomes studies and sex offender recidivism are outlines as well as a presentation of legal and ethical issues involved in treatment. Finally, methods currently underway to prevent child molestation are elucidated. Ample opportunity will be provided at the conclusion of the course for open discussion with the faculty. Review articles covering various topics will be provided to participants, as well as copies of all PowerPoint slides.

- 1. Abel GG, Jordan A, Hand CG, Holland LA, Phipps A: Classification models of child molesters utilizing the Abel Assessment for sexual interest. Child Abuse and Neglect: The International Journal 2001; 25:703-718.
- 2. Brandford JMW: The treatment of sexual deviation using a pharmacological approach. Journal of Sex Research 2000; 37:248-257.

Course 11

Friday, October 31 1:00 p.m.-5:00 p.m.

# I FOUND IT AT THE MOVIES: USING FILM CLIPS TO UNDERSTAND AND TEACH PSYCHIATRY

Frederick W. Engstrom, M.D., FAPA, Senior Vice President of Medical Affairs, Brattleboro Retreat, Anna Marsh Lane, Box 803, Brattleboro, VT 05302

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) appreciate the emotional power that films clips can bring to any presentation; 2) find suitable film clips for teaching; 3) access readily at least 30 clips suitable for teaching; 4) lead discussions about psychiatric diagnosis and boundary theory using films clips; and 5) recognize the limitations and strengths of films as vehicles for teaching.

#### **SUMMARY:**

The course leader will show scenes (two to five minutes duration) from popular movies to illuminate. (a) diagnostic issues, esp. For controversial topics such as ADHD in adults, Bipolar II, and personality disorders (b) issues in treatment including boundary violations, empathy, and exploitation of patients. The course will focus on using these scenes to enhance curricula in teaching settings, as well as in patient education. The audience will also participate in the explication of each scene, partly to demonstrate the myriad ways that scenes can be interpreted. The course participants will receive detailed instructions for locating each scene (both DVD and VHS formats), summaries of the scenes are taken from 20 films including As Good As It Gets and Analyze This

#### **REFERENCES:**

- 1. Hyler SE: DSM III at the cinema: madness in the movies. Comprehensive Psychiatry 1988; 29:195–206.
- 2. McDonald A, Walter G: The portrayal of ECT in American movies. J ECT 2001; 17:264–274.

Course 12

Friday, October 31 1:00 p.m.-5:00 p.m.

### MULTIMODAL PSYCHOTHERAPY OF EATING DISORDERS

Kathryn J. Zerbe, M.D., Professor of Psychiatry, Oregon Health Sciences University at Portland, 3181 S.W. Sam Jackson Park Road, Portland, OR 97239

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) have at least three new cognitive-behavioral interventions to use with patients, and 2) understand and confront pertinent transference and countertransference paradigms; and treat eating disorder problems with greater attention to life-cycle issues.

#### **SUMMARY:**

Eating disorders are relatively common and the most life-threatening of any psychiatric illness. Yet, the latest outcome literature shows that these disorders are refractory to many psychopharmacological, educational, and nutritional interventions. This course will emphasize the pragmatics of a variety of treatment interventions and describe the outcome literature. Emphasis will then be placed on treating these patients psychotherapeutically, incorporating education, cognitive-behavioral, psychodynamic and life-cycle perspectives. Pertinent transference and counter transference modalities will also be discussed, giving participants ample time to bring some of their own case examples to the discussion.

#### **REFERENCES:**

- 1. Zerbe KJ: Women's Mental Health for Primary Care. W.B. Saunders Co., 1999.
- 2. Sokol MS, Kralick DS, Serbe KJ: Childhood eating disorders. Current Opinions in Pediatrics 1998; 10.

Course 13

Saturday, November 1 8:00 a.m.-12 noon

#### HELP! I'VE BEEN PROMOTED: INTRODUCTION TO ADMINISTRATION AND MANAGEMENT

L. Mark Russakoff, M.D., Director of Psychiatry, Phelps Memorial Hospital, 701 North Broadway, Sleepy Hollow, NY 10591; Philip E. Veenhuis, M.D., Medical Director, North Carolina Department of Health and Human Services, Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, 325 North Salisbury Street, Raleigh, NC 27603-1388

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participate should be able to: 1) articulate fundamental concepts of organizational structure, process, and functions; 2) describe parameters of leadership; 3) understand differing and complementary models of human motivation in the work place; and 4) appreciate the inevitable conflicts that evolve within organizations and describe methods to resolve them. COURSES 7

#### **SUMMARY:**

It is common for clinicians to be promoted to managerial positions in mental health organizations without being provided with the knowledge of administrative issues needed to facilitate their functioning in their new roles. Being an administrator draws on knowledge and skill sets that are distinct from being a good clinician, although many people rise to the occasion. There is substantial literature on administration and management that is pertinent to work as a clinical administrator. This course will provide those who are interested in clinical administrative positions, recently promoted to such positions and those who are open to new information and have been in such positions but never understood quite what they do, with the basic concepts central to understanding organizations, organizational processes, and the management of personnel. The purpose of an organization, its structure, and issues of planning and leadership will be discussed from the perspective of the clinical administrator. Various approaches that have been promulgated to understand motivation of employees and the relationship of employees to managers will be described. The course will be interactive, with the faculty offering anecdotes to illustrate the administrative issues and the participants invited to experiment with the concepts in the analysis of their particular situations.

#### **REFERENCES:**

- 1. Kotler P: Marketing Management, 11<sup>th</sup> Edition. Prentice Hall, 2003.
- 2. Reid WH, Silver SB: Administrative theory; Essential management functions, in Handbook of Mental Health Administration and Management, edited by Reid WH, Silver SB, Brunner-Routledge, 2003.

Course 14

Saturday, November 1 9:00 a.m.-4:00 p.m.

#### DAVANLOO'S INTENSIVE SHORT-TERM DYNAMIC PSYCHOTHERAPY IN CLINICAL PRACTICE

James Q. Schubmehl, M.D., Clinical Associate Professor of Psychiatry, University of Rochester, 2541 Monroe Avenue, Suite B-7, Rochester, NY 14618-3123; Alan R. Beeber, M.D.; Tewfik Said, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) acquire a vivid sense of the forces underlying human psychopathology; 2) view crucial elements of the healing process; and 3) describe main elements of Davanloo's technique and should find many aspects of the presentation useful to his/her own clinical practice.

#### **SUMMARY:**

Highly resistant, poorly motivated patients are a major challenge to every clinician, especially when the clinical picture includes a complex mixture of character pathology and symptom disturbances. Davanloo's Intensive Short-Term Dynamic Psychotherapy has shown rapid effectiveness with difficult to treat conditions, including functional disorders, depression, panic and other anxiety disorders. This course, for those who practice or make referrals to psychotherapy, will demonstrate the range of applications of this technique, with specific technical interventions for particular conditions. There will be extensive use of videotapes to demonstrate the innovative techniques and metapsychology underlying the activation of the therapeutic alliance even with hard to engage patients. As well, the catalytic role of the 'unlocking of the unconscious' in freeing the patient form the destructive forces of the punitive super-ego will be clearly shown. There will be periodic blocks of time for discussion. The course will provide participants with an overview of this uniquely powerful way of understanding human psychic functioning. It will further demonstrate how these techniques are used to help individuals free themselves from the crippling effects of their character logic and symptomatic psychopathology.

#### **REFERENCES:**

- 1. Beeber A: The perpetrator of the unconscious in Davanloo's new metapsychology parts I–III. The International Journal of Intensive Short-Term Dynamic Psychotherapy 1999; 13:151–189.
- 2. Davanloo H: Intensive Short-Term Dynamic Psychotherapy, Selected Papers of Habib Davanloo, MD. John Wiley and Sons, 1978.

Course 15

Saturday, November 1 1:00 p.m.-5:00 p.m.

#### PSYCHIATRIC REHABILITATION: CONCEPTUAL, EMPIRICAL, AND CLINICAL BASE

William A. Anthony, Ph.D., Professor and Executive Director, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215; Marianne Farkas, Sc.D.; Cheryl Gagne, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) recognize critical psychiatric rehabilitation principles, program models, components of the process and categories of the outcomes; and 2) demonstrate how psychiatric rehabilitation knowledge can be applied in one's clinical or administrative function. 8 COURSES

#### **SUMMARY:**

This course is designed for the treatment providers or administrators who have a minimal understanding of the entire psychiatric rehabilitation field. The course is intended for those individuals who interface with or refer to psychiatric rehabilitation programs, or who might be thinking about adding a psychiatric rehabilitation component to their practice or program. Psychiatric rehabilitation is a field of study and practice that emerged and evolved during the last three decades of the 20<sup>th</sup> century. The steady growth of the field can be attributed to the de-institutionalization movement, the resultant development by NIMH of the Community Support Program initiative, a more complete understanding of the needs of people with severe mental illnesses and an ever increasing data base with respect to the predictors of an effectors of psychiatric rehabilitation outcomes. The credibility of the Psychiatric Rehabilitation (PR) field has been enhanced by research support from the federal government and practice support from Medicaid and state departments of mental health. PR is now used to describe a distinct service, a philosophy, various program models and a process. We attempt to provide clarity to these PR terms, describe various applications and their relevance and utility to mental health practitioners and program administrators.

#### **REFERENCES:**

- 1. Anthony W, Cohen MR, Farkas M, Gagne, C: Psychiatric Rehabilitation. Boston University Center for Psychiatric Rehabilitation, 2002.
- 2. Anthony WA, Cohen M, Farkas M: The future of psychiatric rehabilitation. International Journal of Mental Health 1999; 28:48–68.

Course 16

Saturday, November 1 1:00 p.m.-5:00 p.m.

# CORRECTIONAL PSYCHIATRY Caucus of Psychiatrists Practicing in Criminal Justice Settings

Henry C. Weinstein, M.D., Clinical Professor of Psychiatry, New York University Medical Center, 1111 Park Avenue, New York, NY 10128; Kathryn A. Burns, M.D.; Kenneth G. Gilbert, M.D.; Annette L. Hanson, M.D.; John S. Zil, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant should be able to: 1) understand the basic principles of the practice of correctional psychiatry, and 2) become familiar with additional advanced issues and topics.

#### **SUMMARY:**

This course in correctional psychiatry is a presentation of the APA Caucus of Psychiatrists Practicing in Criminal Justice Settings. To meet the needs of a varied audience, with different levels of training and/or experience, this course will cover both basic and several advanced topics. Basic topics will include careers in correctional psychiatry, the legal context of correctional psychiatry. including the major cases, psychopharmacology in correctional settings, and basic ethics issues as well as the "rules of engagement," i.e., the rules, routines of a correctional environment, and how the correctional psychiatrist can work within such constraints. Some additional advanced topics will include integrating medical and mental health services, systems approaches, managed care issues, cross-training with security personnel, and special populations. The faculty for this course are members of the executive board of the caucus and task force that revised the APA guidelines.

- 1. American Psychiatric Association: Psychiatric Services in Jails and Prisons, Second Edition. American Psychiatric Psychiatric Press, 2000.
- Conover T: Newjack: Guarding Sing Sing. Random House, 2000.

Saturday, November 1 10:00 a.m.-11:30 a.m.

RESOLVED: IT IS UNETHICAL FOR PSYCHIATRISTS TO INVITE SALES REPRESENTATIVES TO MARKET PRODUCTS THROUGH SUCH METHODS AS EDUCATIONAL MATERIALS, SAMPLES, AND GIFTS IN CLINICAL SETTINGS

American Association of Community Psychiatrists

David Moltz, M.D., 14 Maine Street, #410, Brunswick, ME 04011-2026; Charles R. Goldman, M.D., Professor of Psychiatry, University of South Carolina School of Medicine, 15 Medical Park, Columbia, SC 29203; Michael A. Silver, M.D., Medical Director, The Providence Center, 530 North Main Street, Providence, RI 02904

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this debate, the participant should be able to (1) identify ethical issues involved in pharmaceutical marketing to psychiatrist, (2) define a position in relation to pharmaceutical representatives that is free of conflicts of interest.

#### **AFFIRMATIVE SUMMARY:**

The pharmaceutical industry spends over \$10,000 per physician annually on marketing and there is ample evidence that this marketing is effective. Sales reps receive regular reports detailing individual physicians' prescribing patterns and target their marketing accordingly. The educational materials they provide are carefully selected, and the research they refer to is strongly influenced by their company and/or the industry as a whole.

Studies show that prescribing patterns are influenced by sponsored events and by bribes as small as a "free" lunch.

Samples are effective marketing devices and reduce the likelihood that more appropriate financial supports will be developed.

Drug companies pay practicing physicians to recruit research subjects and provide research data for studies with dubious scientific value.

Many physicians view the rep as a friend and feel a sense of loyalty. Some physicians allow reps to accompany them while they see patients, thus providing the rep with quality "face time" and opportunities to suggest the use of their product.

All of the above facts suggest that any relationship between a physician and a sales rep sets up a conflict of interest, where the right of the patient to an impartial, objective treatment plan is compromised.

#### **NEGATIVE SUMMARY:**

Throughout medical school and residency, physicians are trained in the art and science of healing. The ethics of medicine are promoted, and trainees are also encouraged to develop critical thinking abilities. Idealism, responsibility, and commitment to care are strongly nurtured. However there is little to no discussion about anything concerning the economics of medicine or business ethics.

When doctors finish training, they do not join the Peace Corp. They become part of a small or large business. Suddenly, economic considerations increasingly become a significant factor in the day-to-day lives of physicians, regardless of their employment locale. Physicians are thrust into new business relationships and some feel ill prepared to deal with these new pressures. The very same discriminatory abilities that are so valued for evaluating science and research can disappear when it comes to judging appropriate action in this arena. Idealism may obscure common sense and turn complex issues into simplistic "black and white morality."

Marketing is a major thrust of many businesses in the U.S., and like it or not, physicians are clients of the drug industry so long as they choose to use the industry's products. The merit and appropriateness of marketing practices need to be judged on a situation-by-situation basis using common sense and good judgment.

- 1. Angell M, Relman AS: Patents, profits & American medicine: conflicts of interest in the testing & marketing of new drugs. D≈dalus, 2002, pp. 102–111, http://daedalus.amacad.org/issues/spring2002/angell.pdf.
- McCormick BB, Tomlinson G, Brill-Edwards P, Detsky A: Effect of restricting contact between pharmaceutical company representatives and internal medicine residents on posttraining attitudes and behavior. JAMA 2001; 286 (16): 1994–1999.
- 3. Wall LL, Brown D: Pharmaceutical sales representatives and the doctor/patient relationship. Obstet Gynecol 2002; 100(3):594–9.
- 4. Wazana A: Physicians and the pharmaceutical industry: Is a gift ever just a gift? JAMA 2000; 283(3): 373–393.

Friday, October 31 8:30 a.m.-5:00 p.m.

# THE RECOGNITION AND TREATMENT OF THE PSYCHIATRIC DIMENSIONS OF HIV/AIDS

APA Committee on AIDS

Francine Cournos, M.D., Professor of Clinical Psychiatry, College of Physicians and Surgeons, Columbia University, 5355 Hudson Parkway, 9-F, New York, NY 10471; Marshall Forstein, M.D.; Ewald Horwath, M.D.; Francisco Fernandez, M.D.; Richard Herman, M.A.; Meg Kaplan, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) understand the most recent HIV medical developments and treatments; (2) recognize the psychiatric and psychosocial dimensions of HIV/AIDS; (3) develop skills to help patients reduce their risk behaviors for HIV/AIDS; (4) identify practical strategies for helping patients adhere to their treatment plans; (5) recognize factors that may impact successful treatment of special populations.

#### **SUMMARY:**

HIV rates continue to rise throughout the world, especially among the young, sexually active population, among injecting drug users, and among people of color. Studies estimate that as many as 75% of all AIDS patients will show symptomatic CNS consequences. As HIV becomes increasingly a chronic disorder, the incidence of HIV-related neuropsychiatric manifestations is expected to rise. Mental health providers will continue to play a fundamental role in the care and treatment of HIV-infected patients.

This full-day AIDS program, The Recognition and Treatment of the Psychiatric Aspects of HIV/AIDS, combines lecture with interactive case discussions and group activities. The first session, 10 Things Mental Health Providers Should Know About HIV/AIDS, will provide psychiatrists and other mental health providers with the most up-to-date information on the clinical spectrum of the disease. The next session, the Neuropsychiatric Aspects of HIV Infection, will outline the major neuropsychiatric complications and offer the latest treatment modalities, followed by a case discussion that will provide practical examples of how to successfully work with and treat HIV-infected patients. After lunch, presenters will focus on clinical assessment and intervention and patient adherence. This full-day program will also emphasize risk reduction strategies as well as introduce psychosocial and sociocultural factors that impact treatment and care services for special populations. Question and answer periods staggered throughout the program will provide the audience with an opportunity to discuss individual clinical cases and explore questions and concerns.

- Panel on Clinical Practices for Treatment of HIV Infection. Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents. Department of Health and Human Services/Henry J. Kaiser Foundation 2002.
- 2. Cournos F, Forstein M (eds.): New Directions for Mental Health Services: What Mental Health Practitioners Need to Know About HIV and AIDS, 2000 Fall (87).
- 3. Goodkin K, Baldewicz TT, et al: Cognitive-motor impairment and disorder in HIV-1 infection. Psych Annals 2001; 31(1):37–44.
- 4. Fernandez F: Neuropsychiatric Aspects of Human Immunodeficiency Virus (HIV) Infection. Curr-Psychiatry Rep 2002; 4(3):228–31.

Industry-Supported Symposium 1

Wednesday, October 29 Thursday, October 30 12 noon-1:30 p.m.

#### INTEGRATING MIND AND BODY: TREATING THE WHOLE PATIENT TO ACHIEVE REMISSION: PARTS I AND II

Supported By Eli Lilly & Company

Jerrold F. Rosenbaum, M.D., Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street WACC 812, Boston, MA 02114

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, participants should be able to identify the symptomatology of patients with primary depression, including presentation with emotional and physical symptoms, such as pain; differentiate response from remission and recognize remission as the goal of therapy in treating depression; understand the role of neurotransmitters in depressant response and the differences that characterize their clinical effects, recognize that serotonergic and noradrenergic systems are involved in multiple emotional and physical symptom domains and their treatment; outline innovations in antidepressant therapy that will enhance response and remission in the treatment of depression.

#### **SUMMARY:**

Clinical data suggest that residual symptoms of depression impair the ability to achieve remission. Remission as a treatment goal will be discussed. This symposium will focus on the symptomatology of depression, and will strive to characterize the symptoms that are often residual in depressed patients not achieving remission. Published clinical and epidemiological data in the psychiatric setting suggest that depression presents as a combination of not only emotional, but also physical symptoms, including pain. Physical symptoms are common in depressed patients; pre-clinical and clinical data suggest this may be due to a common neurobiological link. This symposium will draw upon emerging epidemiological, pre-clinical, and clinical data sources to characterize our current knowledge of depression, its symptoms, and the neurotransmitters involved in symptom expression and treatment.

#### No. 1A EMOTIONS AND PHYSICAL SYMPTOMS OF DEPRESSION: TREATING THE WHOLE PATIENT

Vivien K. Burt, M.D., Ph.D., Department of Psychiatry, UCLA School of Medicine, 10921 Wilshire Boulevard, Suite 403, Los Angeles, CA 90024

#### **SUMMARY:**

Despite being highly treatable, depression remains underdiagnosed and undertreated. Among the reasons for this is that depressed patients often present with primarily physical symptoms of depression, which are frequently not recognized as cardinal depressive symptoms. Thus, the diagnosis of depression is often made only after extensive work-ups to rule out other disorders. Although physical discomfort correlates directly with depressive severity, both DSM and ICD fail to take into account these physical symptoms. Recent studies suggest that physical symptom improvement correlates with the likelihood of achieving full remission of depression. Pre-clinical and clinical data suggest that modulation of 5-HT and NE play an important role in management of certain types of pain, as well as in the treatment of depression. Evidence supports the effectiveness of certain dual-acting antidepressants such as TCAs, venlafaxine, and duloxetine in the relief of pain. This presentation will review theories that explain the link between depression and pain. Other topics to be discussed include the use of dual acting antidepressants in relieving physical symptoms of depression and achieving full remission of depression.

#### **REFERENCES:**

- Paykel ES, Ramana R, Cooper R, et al: Residual symptoms after partial remission: an important outcome in depression. Psychol Med 1995;25:1171– 1180.
- Fava M: Somatic symptoms, depression, and antidepressant treatment. J Clin Psychiatry 2002;63:305–7.

#### No. 1B CHALLENGES TO ACHIEVING REMISSION IN DEPRESSION

Maurizio Fava, M.D., Psychopharmacology Unit, Mass General Hospital, 15 Parkman Street, WACC 812, Boston, MA 02114

#### **SUMMARY:**

A substantial proportion of depressed patients treated with antidepressants does not achieve adequate response. Residual symptoms are common in major depressive disorder (MDD), and their presence following antidepressant treatment is associated with poorer outcome. In fact, patients who remained anxious at the point of remission of the index episode of MDD had a significantly shorter time to relapse/recurrence. Clinicians typically use a number of strategies to enhance the chances of achieving remission in the treatment of patients with MDD. These strategies include psycho-education, ensuring adequacy of dose and duration of the antidepressant trial, and addressing residual symptoms (including phys-

ical symptoms and anxiety). The choice of antidepressant treatments with relatively greater efficacy is also important, as certain agents have demonstrated greater efficacy in certain subtypes. For example, MAOIs have shown to be superior to TCAs in atypical depression, and dual-action antidepressants have shown to be more effective than SSRIs in severe/endogenous/melancholic depression. To address residual symptoms (including physical symptoms and anxiety), clinicians often use combination or augmentation strategies, or choose agents with relatively greater efficacy in treating specific residual symptoms. There are several methodological issues in the studies of strategies among patients who do not achieve an adequate response. In the absence of pertinent studies, we can extrapolate the efficacy of treatment strategies from studies that include both partial and non-responders. Since remission is the ultimate goal of treatment in MDD, it is important for clinicians to be proactive about eliminating residual symptoms that may adversely affect outcome.

#### **REFERENCES:**

 Nierenberg AA, Keefe BR, Leslie VC, Alpert JE, Pava JA, Worthington JJ 3rd, Rosenbaum JF, Fava M: Residual symptoms in depressed patients who respond acutely to fluoxetine. J Clin Psychiatry 1999;60(4):221-5).

#### No. 1C THE SPECTRUM OF SEROTOIN AND NOREPINEPHRINE RESPONSIVE DISORDERS

John H. Greist, M.D., Director, Healthcare Technology Systems, 7617 Mineral Point Road, Suite 300, Madison, WI 53717

#### **SUMMARY:**

Depression describes a symptom, a syndrome, a disorder, and a disease. Our multifarious use of the word depression oversimplifies a multitude of constructs and complexities. Is depression best understood as a common diathesis or discrete disorders with different pathophysiologies? The human genome is identical in 99.9% of its composition, but expression of these genes and variability in the remaining 0.1% provide myriad differences that charm and challenge us.

Depression involves soma as well as psyche with prominent physical and anxiety symptoms. Nature is complex and has evolved many neurotransmitters and neuromodulators that mediate mood, other emotions, and physical functions. Nature is also parsimonious, utilizing these mediators to modulate many functions.

This presentation will discuss clinical and epidemiologic presentations of depression, review evidence-based data on efficacy of serotonin and norepinephrine-specific treatments, and emphasize clinical empiricism that are essential for the effective treatment of depression.

#### **REFERENCES:**

1. Korn ML: Serotonin and Norephinephrine Antidepressant Effects. Presented at the APA 155th Annual Meeting, May 18–23, Philadelphia, Pa; www.medscape.com/viewarticle/436395).

#### No. 1D SEROTONIN AND NOREPINEPHRINE: KEY NEUROTRANSMITTERS INTEGRATING MIND AND BODY

J. Craig Nelson, M.D., Department of Psychiatry, University of California, San Francisco, 401 Parnassus Ave., Box 0984-F, San Francisco, CA 94143

#### **SUMMARY:**

Depletion studies indicate that both serotonin (5-HT) and norepinephrine (NE) mediate antidepressant response and it is reasonable to question if antidepressants selective for NE and 5-HT have similar efficacy. Several prior reviews have compared response to tricyclic antidepressants and SSRIs, but the TCAs represent a heterogeneous group of agents. Fifteen studies, with 1,563 patients, have compared response to a selective 5-HT agent and a NE selective agent. The NE selective agents included desipramine, nortriptyline, reboxeline, lofepramine, and macrotiline. Response rates were similar, 61.4% and 59.5%, for the SSRIs and NRIs. These findings beg the question, do these agents treat the same patients? In those comparison studies that examined response predictors, few symptoms were identified and there were no consistent findings across studies. The findings also raise the question whether combining NE and 5-HT mechanisms will enhance response. If all patients had a 100% remission of symptoms, this would be a moot point. In fact, only about 50% of all patients starting treatment on a selective agent reach a 50% improvement criterion. And even fewer remit. We examined this question in a prospective study combining the NE selective agent designamine with the 5-HT selective agent fluoxetine. The combination was more likely to result in remission than either desigramine or fluoxeline alone. If drug combinations are more effective, will single agents with two mechanisms have similar advantages. The Danish University studies demonstrated that clomipramine, a dual-action tricyclic, was more effective than citalopram or puroxetine. A recently meta-analysis of eight comparison studies found venlafaxine more likely to result in remission than SSRIs. A review of four mirtazapine comparison studies, another agent with dual action, found that effects of that drug occurred more quickly than with SSRIs. Studies with duloxetine, a new agent that is a serotonin reuptake inhibitor with a more potent effect on norepinephrine than venlafaxine, also indicate greater effects on remission than occur with selective agents such as fluoxetine or paroxedine. These findings illustrate the role of NE and 5-HT in mediating antidepressant response and demonstrate the advantage of combining these effects during treatment.

#### **REFERENCES:**

1. Nelson JC: A review of the efficacy of serotonergic and noradrenergic reuptake inhibitors for treatment of major depression. Biol Psychiatry 1999;46:1301–1308.

#### No. 1E INNOVATIONS IN THE TREATMENT OF DEPRESSION WITH PAINFUL PHYSICAL SYMPTOMS

Michael J. Detke, M.D., Eli Lilly and Company, One Lilly Corporate Center, Drop Code 4025, Indianapolis, IN 46285

#### **SUMMARY:**

Physical symptoms, including complaints of pain, are common in depression. Often, it is assumed that treatment of the emotional symptoms of depression will lead to resolution of the physical symptoms. However, failure to address physical complaints may adversely affect the treatment of depression. Tricyclic antidepressants, especially dual 5HT and NE reuptake inhibitors, have documented efficacy in both depression and chronic pain. SSRIs, while effective for depression, have been found less effective for pain. More recently, novel agents have been developed that recreate the dual 5HT and NE reuptake inhibition of some TCAs, without the limitations on safety and tolerability. These agents include venlafaxine, milnacipran, and duloxetine. Data for the effectiveness of antidepressants in the treatment of the painful physical symptoms of depression will be reviewed. In addition, there will be some review of the thesis that treatment of both the emotional and physical symptoms of depression may lead to better overall patient outcomes. Finally, data on the effectiveness of duloxetine and other dualaction antidepressants in painful disorders themselves will be reviewed.

#### **REFERENCES:**

 Detke MJ, Lu Y, Goldstein DJ, Hayes JR, Demitrack MA: Duloxetine 60 mg once daily for major depressive disorder: a randomized, double-blind, placebo controlled study. J Clin Psych 2002; 63(4): 308-315. Industry-Supported Symposium 2

Thursday, October 30 6:30 a.m.-8:00 a.m.

#### NOVEL ANTIPSYCHOTIC DRUGS: ADVANCES IN THE TREATMENT OF PSYCHOTIC SPECTRUM DISORDERS

Supported By Bristol-Myers Squibb

Jacqueline Feldman, M.D., 4116 River View Circle, Birmingham, AL 35243-4704

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, participants should be able to (1) understand the different mechanisms of action of antipsychotics and the implications for efficacy, safety, and tolerability, (2) discuss the role of antipsychotic agents in the management of bipolar disorder, (3) understand the major differences that influence the choice of the most appropriate antipsychotic for the management of geriatric patients with psychosis, and (4) discuss the impact of the safety and tolerability profiles of antipsychotics on long-term effectiveness of treatment.

#### **SUMMARY:**

Schizophrenia is a lifelong condition, often requiring effective pharmacotherapy over many years. The longterm effectiveness of antipsychotic therapy is influenced by both efficacy and adverse effects profiles. Atypical antipsychotics have emerged as the standard of pharmacotherapy, largely due to improvements in efficacy and tolerability over first-generation agents. However, treatment-related adverse effects, such as the dyslipidemias, glucose dysregulation, and weight gain associated with some agents, may have significant negative effects on patient medical health, in particular in long-term therapy. The tolerability profiles of different agents also warrant special consideration because of the impact on patient satisfaction, which influences treatment adherence and the long-term risk of relapse. Differences in mechanisms of action and receptor-binding profiles underlie significant variations in both efficacy and tolerability among atypical antipsychotics and make it imperative to consider the full spectrum of a particular agent's impact on a patient's life when negotiating the treatment parameters of long-term therapy.

#### No. 2A IMPACT OF SAFETY AND TOLERABILITY PROFILES OF ANTIPSYCHOTICS ON LONG-TERM EFFECTIVENESS OF TREATMENT

Jacqueline M. Feldman, M.D., Department of Psychiatry, University of Alabama at Birmingham, 4-CCB 908 20th Street, South, Birmingham, AL 35294

#### **SUMMARY:**

Schizophrenia is a lifelong condition, often requiring effective pharmacotherapy over many years. The longterm effectiveness of antipsychotic therapy is influenced by both efficacy and adverse effects profiles. Atypical antipsychotics have emerged as the standard of pharmacotherapy, largely due to improvements in efficacy and tolerability over first-generation agents. However, treatment-related adverse effects, such as the dyslipidemias, glucose dysregulation, and weight gain associated with some agents, may have significant negative effects on patient medical health, in particular in long-term therapy. The tolerability profiles of different agents also warrant special consideration because of the impact on patient satisfaction, which influences treatment adherence and the long-term risk of relapse. Differences in mechanisms of action and receptor-binding profiles underlie significant variations in both efficacy and tolerability among atypical antipsychotics and make it imperative to consider the full spectrum of a particular agent's impact on a patient's life when negotiating the treatment parameters of long-term therapy.

#### REFERENCES:

1. Kane JM, Carson WH, Saha AR, et al: Efficacy and safety of aripiprazole and haloperidol versus placebo in patients with schizophrenia and schizoaffective disorder. J Clin Psychiatry 2002;63:763–771.

#### No. 2B THE EVOLUTION OF PHARMACOTHERAPY FOR BIPOLAR MANIA: EMERGING ROLE OF ATYPICAL ANTIPSYCHOTICS

John M. Kane, M.D., Department of Psychiatry, The Zucker Hillside Hospital, 75-59 263rd Street, Glen Oaks, NY 11004-1150

#### **SUMMARY:**

Although the mechanism of antipsychotic efficacy is better established in schizophrenia than in bipolar disorder, there is a valid mechanistic rationale for the growing number of clinical trials of atypical antipsychotics in bipolar mania. Dysfunctional dopaminergic and serotoninergic neurochemical pathways are major etiological components of most mood disorders, and atypical antipsychotics can modulate both dopamine and serotonin receptors. The unique mechanism of action of the next generation of antipsychotics, which combines partial agonism at dopamine D<sub>2</sub> receptors with partial agonism at serotonin 5-HT<sub>1A</sub> and antagonism at serotonin 5-HT<sub>2A</sub> receptors, has potentially important implications for efficacy in bipolar disorders. As a result, several atypicals are well studied in the management of acute

mania, and efficacy in maintenance therapy. Combination therapy and treatment of bipolar depression have also been investigated. This presentation will review both the mechanistic considerations and the recent clinical data underlying our current understanding of the role for atypical antipsychotics in the management of mania.

#### **REFERENCES:**

- 1. Judd LL, et al.: The long-term natural history of the weekly symptomatic status of bipolar I disorder: Arch Gen Psychiatry 2002;59(6):530–7.
- 2. Strakowski SM, DelBello MP, Adler CM: Comparative efficacy and tolerability of drug treatments for bipolar disorder. CNS Drugs 2001;15(9):701–18.

#### No. 2C ADVANCES IN THERAPIES FOR GERIATRIC PSYCHOSIS

Anton P. Porsteinsson, M.D., University of Rochester, Monroe Community Health/435 E. Henrieta, Rochester, NY 14620

#### **SUMMARY:**

Psychotic symptoms are prevalent in the elderly suffering from Alzheimer's disease and other dementias, depression, or delirium. Geriatric patients present unique challenges for the medical management of psychosis since effective pharmacotherapy is hindered by the sensitivity of the elderly to the extrapyramidal symptoms (EPS) and to the anticholinergic and sedating adverse effects associated with a number of antipsychotics. Comorbid conditions, such as cognitive impairment, osteoporosis, diabetes, dyslipidemias, and cardiovascular syndromes, are an additional concern since they may be exacerbated by the metabolic and cardiovascular side effects of particular agents. Concomitant medical conditions also generally impose a polypharmacy regimen and, as a result, the drug interactions of antipsychotics warrant special consideration. Emerging clinical evidence indicates that atypical antipsychotics are at least as effective as conventional antipsychotics for the treatment of geriatric psychosis, while having fewer adverse effects. Nevertheless, the differences in safety and tolerability profiles between atypicals are significant and require careful consideration of the full spectrum of a drug's effects as well as its drug interactions profile. Recent clinical data on the use of atypicals in the longterm care setting will be presented and the impact of safety and tolerability on effectiveness will be discussed.

#### **REFERENCES:**

 Katz IR, Jeste DV, Mintzer JE, Clyde C, Napolitano J, Brecher M: Comparison of risperidone and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. Risperidone Study Group. J Clin Psychiatry 1999; 60(2):107–115.

Industry-Supported Symposium 3

Thursday, October 30 12 p.m.-1:30 p.m.

### PRACTICAL MANAGEMENT OF BIPOLAR DISORDER

Supported By AstraZeneca Pharmaceuticals

Gary S. Sachs, M.D., Department of Psychiatry, Massachusetts General Hospital, 50 Staniford Street, 5th Floor, Boston, MA 02114

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, participants should be able to: recognize systematic approaches that integrate psychosocial and pharmacological treatments in the management of bipolar disorder.

#### **SUMMARY:**

Bipolar disorder is a complex, chronic mental disorder, with often devastating consequences for patients and their families. Bipolar disorder accounts for approximately 15% of all psychiatric admissions and 5% of mental health visits in the U.S. Despite an increase in the number of apparently efficacious treatments available in the United States, the annual cost of bipolar disorder amounts to a staggering 45 billion dollars. This symposium will offer practical strategies that aim to increase the utilization and effectiveness of treatments that have been shown to be efficacious.

Appropriate diagnosis and treatment clearly impact the course of bipolar disorder and reduce suicide and all cause mortality. Unfortunately, the potential benefits of treatment are reduced by the long lag time from onset of illness to diagnosis and treatment and the high rates at which patients discontinue medications. Better recognition of bipolar disorder, an appreciation for risk factors, and a systematic approach to treatment, which integrates psychosocial and psychopharmacological approaches, are likely to reduce the morbidity and mortality associated with bipolar disorder.

#### No. 3A BIPOLAR DEPRESSION: RECURRENT, TREATMENT RESISTANT

Robert M. Post, M.D., NIMH 10/3S239, NIMH/NIH, 10 Center Drive, MSC 1272, Bethesda, MD 20892

#### **SUMMARY:**

Bipolar depression is a major public health problem, often treatment resistant, functionally impairing, potentially lethal, and yet is understudied. Treatment guidelines are ambiguous and controversial. Recent prospective studies utilizing daily ratings found that bipolar outpatients treated aggressively in academic centers have a very high incidence of treatment resistance and depression. The number of days depressed exceeds number of days manic by a factor of three. While number of prior depressions is a risk factor for a less positive prospective outcome, there was an astounding average lag of ten years between the first symptoms and first treatment. This problem is compounded by evidence suggesting that more prior depressive episodes are associated with more cognitive deficits, increased substance abuse, and lack of response to lithium and lamotrigine. New treatment data are emerging in five areas (1) If one is doing well for two months on adjunctive antidepressants, continuation results in lower risk of relapse into depression without an increased rate of switch into mania over the next year. (2) Lamotrigine exceeds lithium and placebo in prevention of depressive episodes. (3) Several atypical antipsychotics may have utility in bipolar depression. (4) Potential adjunctive agents include T3, folate, omega 3 fatty acids, high-dose T4. (5) rTMS and vagal nerve stimulation (VNS). As patients in many settings are being treated with complex combination regimens, new initiatives and methodological approaches are needed to better define the best approaches to bipolar depression.

#### **REFERENCES:**

- 1. Post RM, Denicoff KD, Leverich GS, et al.: Morbidity in 258 bipolar outpatients followed for one year with daily prospective ratings on the NIMH-LCM. J Clin Psychiatry 2002, in press.
- 2. Altshuler L, Kiriakos L, Calcagno J, et al.: Mintz J. The impact of antidepressant discontinuation versus antidepressant continuation on 1-year risk for relapse of bipolar depression: a retrospective chart review. J Clin Psychiatry 2001;62:612–616.

#### No. 3B MANAGEMENT OF ACUTE MANIA

Gary S. Sachs, M.D., Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street, WAC 812, Boston, MA 02114

#### **SUMMARY:**

Acute mania is a severe illness that most frequently requires medical intervention under the controlled conditions of a psychiatric inpatient unit. The first priority of treatment is to assure safety. This means both ruling out life-threatening conditions and initiating treatments to restore behavioral control. Given the potential hazards associated with unmodified mania, initial treatment options should be selected from those that have proven

efficacy. Empirical data from adequately controlled double-blind studies are available to support use of lithium, valproate, carbamazepine, and an increasing number of antispychotic medications (olanzapine, risperidone, haloperidol, ziprasidone, quetiapine, and aripiprazole). Most guidelines suggest initial treatment with a mood stabilizer, an antipsychotic, or the combination of a mood stabilizer and an antipsychotic. The choice of agents depends in part on the acuity of presenting symptoms. Manic patients with relatively good behavioral control could be managed with a sequential treatment strategy, which maximizes tolerability of medication. A strategy that favors rapidly achieving therapeutic effectiveness is appropriate for more severely ill patients. Hospitalized manic patients, such as those that are extremely agitated or psychotic, are candidates for initial treatment that combines mood stabilizers and antipsychotics.

#### **REFERENCES:**

- Sachs GS, Yan LJ, Swann AC, Allen MH: Integration of suicide prevention into outpatient management of bipolar disorder. J Clin Psychiatry 2001;62(suppl 25):3-11.
- 2. Sachs GS, Printz DJ, Kahn DA, Carpenter D: The expert consensus guideline series. Medication Treatment of Bipolar Disorder. Postgrad Med 2000;1–104.

#### No. 3C SUICIDAL BEHAVIOR IN BIPOLAR DISORDERS

Maria A. Oquendo, M.D., NYSPI, Columbia University, 1051 Riverside Drive, New York, NY 10032

#### **SUMMARY:**

A recent comprehensive review and meta-analysis found a weighted mean of 18.9% mortality from suicide in subjects with bipolar disorder (BD) and that 25% to 50% of all bipolar patients report at least one suicide attempt.

Risk for suicidal acts in bipolar disorder appears to be related to the presence of aggressive traits, a personal or family history of suicidal acts, and comorbidity with psychoactive substance use disorders or cluster B personality disorders. In addition, suicidal behaviors rarely occur in the manic phase of the illness. Rather, they are more likely to surface in the setting of major depression or mixed states.

Mood stabilization is a critical component of suicide prevention in BD. However, pharmacologic approaches perhaps mediated through dampening effects on aggression may have a role in suicide prevention independent of mood stabilization. In addition, psychosocial strategies that integrate psychoeducation and family involvement are critical tools for the clinician managing patients with this high-risk disorder.

Identification of risk factors and the availability of management approaches and preventive strategies, including psychopharmacologic and psychosocial intervention, have an important role in preventing suicidal acts and will be discussed.

#### **REFERENCES:**

- 1. Oquendo MA, Mann JJ: Identifying and managing suicide risk in bipolar patients. J Clin Psychiatry 2001; 62(suppl 25):31–34.
- Oquendo MA, Barrera A, Mann JJ: Psychopharmacologic strategies for the prevention of suicidal behavior in bipolar patients. Clin Neurosci Research 2001; 1:387–393.

#### No. 3D PSYCHOSOCIAL TREATMENT: FAMILY FOCUSED THERAPY

David J. Miklowitz, Ph.D., Department of Psychology, University of Colorado, Muenzinger Building Room D244, Boulder, CO 80309

#### **SUMMARY:**

Several randomized, controlled trials indicate that combining a structured psychosocial intervention with mood stabilizing medications leads to better outcomes of bipolar disorder over one- to two-year periods of maintenance treatment. Because bipolar disorder has a strong impact on care-giving family members as well as patients, some psychosocial interventions have included a focus on providing education and support to the family. Family-focused therapy (FFT), a nine-month program administered in combination with pharmacotherapy during the post-episode phases of the illness, has been shown to delay relapses, improve symptom adjustment, and improve drug therapy adherence among bipolar I patients. FFT proceeds in three consecutive modules: psychoeducation about bipolar illness, communication enhancement training, and problem-solving skills training. This talk will describe the FFT model and review randomized trials establishing its efficacy.

- Miklowitz DJ, Goldstein MJ: Bipolar Disorder: A Family-Focused Treatment Approach. New York, NY, Guilford Press, 1997.
- Miklowitz DJ, Simoneau TL, George EL, Richards JA, Kalbag A, Sachs-Ericsson N, Suddath R: Familyfocused treatment of bipolar disorder: 1-year effects of a psychoeducational program in conjunction with pharmacotherapy. Biol Psychiatry 2000; 48:582–592.

Industry-Supported Symposium 4

Thursday, October 30 6:30 p.m.-9:30 p.m.

# WHAT'S NEW IN BIPOLAR DISORDER: DIAGNOSIS AND TREATMENT

Supported by GlaxoSmithKline

Alan C. Swann, M.D., Department of Psychiatry, UTMSH Psychiatry, 1300 Moursund Street Suite 270, Houston, TX 77030

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should understand the practical physiology, course, and differential diagnosis of bipolar disorder, the role of new brain imaging techniques, and the most recent developments in the diagnosis, monitoring, and integrated treatment of bipolar depression, mania, and rapid cycling.

#### **SUMMARY:**

Bipolar disorder is a lifelong, recurrent, pervasive illness. This symposium will discuss practical application of new information on what distinguishes bipolar disorder as an illness and the optimal management of the phases of the illness. Its clinical features usually predate the first manic episode. This can lead to years of misdiagnosis and inappropriate treatment. Distinguishing features of bipolar disorder include early onset, strong recurrence, familiality, comorbidities related to impulsivity and abnormal arousal, and physiological and behavioral characteristics that are present between episodes. Brain imaging, including PET, functional imaging, and magnetic spectroscopy, are yielding information that aids our practical understanding of bipolar disorder, the mechanisms of its treatments, and its differential diagnosis. Recent advances in long-term treatment of mania show that the monitoring of mood instability provides a superior method for managing ongoing treatment. Pharmacological and nonpharmacological treatment strategies have synergistic roles in the effective treatment and prevention of mania and its complications. Most of the morbidity and mortality of bipolar disorder is associated with depression. Depression also plays a more prominent role in rapid cycling than is generally appreciated. New and more effective treatments for bipolar depression are now available, and their use must often be coordinated with other treatments. The four presentations will discuss the practical application of new findings related to these aspects of bipolar disorder, and will conclude with a panel discussion led by the presenters.

#### No. 4A WHAT IS THE ESSENCE OF BIPOLAR DISORDER?

Alan C. Swann, M.D., Department of Psychiatry, UTMSH Psychiatry, 1300 Moursund Street Suite 270, Houston, TX 77030

#### **SUMMARY:**

Bipolar disorder is not mania and is not depression, but is a lifelong condition that predisposes to depressive and manic episodes. The onset of illness usually precedes the onset of mania, and for many patients its most salient feature is not mania, but depression, mood lability, or impulsivity. What are the characteristics that truly distinguish bipolar disorder and that might yield clues as to its pathophysiology and practical treatment? The course of bipolar disorder may be more diagnostic than its syndromal episodes. We will discuss onset, including initial presentations and possible prebipolar conditions, and recurrence, including evidence for its possible mechanisms and their treatment. Even between episodes, bipolar disorder may have distinguishing physiological and clinical features. We will discuss evidence for abnormal control of impulsivity and arousal in bipolar disorder between episodes, and their possible consequences. Mechanisms of recurrence and inter-episode features of the illness may provide clues to effective long-term treatments. This presentation will set the stage for discussion of diagnosis and treatment of specific phases of bipolar disorder.

#### **REFERENCES:**

- 1. Swann AC: Is bipolar depression a specific biological entity? in Bipolar Disorder: Biological Models and Their Clinical Applications. Edited by Young LT, Joffe RT. New York, Marcel Dekker, 1997, pp 1–35.
- 2. Lessing LV: Recurrence in affective disorder. II. Effect of age and gender. British J Psychiatry 1998; 172:29–34.

#### No. 4B BRAIN IMAGING IN BIPOLAR DISORDER: WHAT CLINICIANS NEED TO KNOW

Jair C. Soares, M.D., Psychiatry MC7792, U Texas Health Sci Ctr San Antonio, 7703 Floyd Curl Dr, San Antonio, TX 78229-3900

#### **SUMMARY:**

Over the past decade, important developments in brain imaging methodology with single photon emission computerized tomography (SPECT), positron emission tomography (PET), functional magnetic resonance im-

aging (fMRI), magnetic resonance imaging (MRI), and magnetic resonance spectroscopy (MRS) have provided new possibilities for the study of brain mechanisms involved in neuropsychiatric disorders. These new advances have started to be applied for the study of pathophysiology of bipolar disorder, as well as mechanisms involved in action of treatments for these conditions (Soares and Innis 2000). Structural and functional imaging modalities have started to examine the brain substrate of dysfunction in these disorders, and available findings reveal abnormalities in brain neuroanatomic circuits involved in mood regulation. Our presentation will review basic aspects of these methodologies and available literature findings, and will discuss potential implications of these new tools for the diagnosis and treatment of bipolar disorder.

#### **REFERENCES:**

Soares JC, Innis KB: Brain imaging findings in bipolar disorder. In Soares JC, Gershon S (eds). Basic Mechanisms and Therapeutic Implications of Bipolar Disorder. New York, Marcel Dekker, 2000, pp 227–252.

#### No. 4C MANIC SYMPTOMS AND MOOD INSTABILITY IN BIPOLAR MAINTENANCE TREATMENT

Charles L. Bowden, M.D., Department of Psychiatry, University of TX Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78229–3900

#### **SUMMARY:**

Manic symptoms are more common than full manic episode relapse during maintenance treatment of bipolar disorders. Recent studies have used time to intervention for manic symptoms, rather than presence of mania, as a primary, and more clinically relevant outcome measure. An episode of mania is more likely to be followed by recurrence of mania than development of depression. Mood instability presents differently in bipolar I than in bipolar II patients, with signs of instability easily overlooked in the latter. Mood stabilizing drugs have differential effectiveness on manic and depressive symptoms in bipolar disorder. Lithium divalproex, antipsychotics, and carbamazepine have their predominant effects on manic symptomatology. Although understudied in bipolar disorders, recent data suggest that psychosocial support provides clinically significant benefits in delaying return of mood instability and mania. Even simple educational approaches may improve manic phase outcomes in bipolar disorder. Encouraging, albeit sparse data regarding both the tolerability and greater efficacy of combination drug regimens will also be presented.

#### **REFERENCES:**

 Bowden CL, Calabrese JR, McElroy SL, Gyulai L, Wassef A, Petty F, Pope HG Jr., Chou JC-Y, Keck PE Jr., Rhodes LJ, Swann AC, Hirschfeld RMA, Wozniak PJ: A randomized, placebo-controlled 12month trial of divalproex and lithium in treatment of outpatients with bipolar I disorder. Archives of General Psychiatry 2000; 57:481–489.

#### No. 4D BIPOLAR DEPRESSION AND RAPID CYCLING: NEW DATA ON PHARMACOTHERAPY

Mark A. Frye, M.D., 300 UCLA Medical Plaza, Suite 1544, Los Angeles, CA 90095-7057

#### **SUMMARY:**

Recent data suggest that rapid cycling may present in as many as 20% to 30% of patients with bipolar disorder. Generally, clinical outcome in patients with rapid cycling is often poor and the use of antidepressants in this population has been discouraged because of concerns about the possibility of cycle acceleration. This presentation will analyze the phenomenology of rapid cycling with an emphasis on depressive symptoms and discuss the limited literature of controlled studies reporting on acceleration and augmentation approaches. Pharmacotherapeutic approaches including three common types of combination strategies—adjunctive, acceleration, and augmentation—and their role in optimizing treatment responses will be discussed as well.

#### **REFERENCES:**

- 1. Altshuler LL, Frye MA, Gitlin MJ: Acceleration and augmentation strategies for treating bipolar depression. Biological Psychiatry 2003; 53(8):691–700.
- Calabrese JR, Shelton MD, Bowden CL, et al: Bipolar rapid cycling: focus on depressions as its hallmark. J Clin Psychiatry 2001:62 Suppl 14:34–41.

Industry-Supported Symposium 5

Friday, October 31 12 noon-1:30 p.m.

# BEYOND SYMPTOM CONTROL: MOVING TOWARD POSITIVE PATIENT OUTCOMES

Supported By Pfizer, Inc.

Rajiv Tandon, M.D., Department of Psychiatry, University of Michigan Medical Center, 1500 East Medical Center Drive, UH 9C-9150, Ann Arbor, MI 48105-0120

#### **SUMMARY:**

The so-called EPS advantage of atypical antipsychotics has translated into several important clinical benefits for patients with schizophrenia, including better negative symptom efficacy, less dysphoria, less impaired cognition, and a lower risk of tardive dyskinesia. While atypical agents share this EPS advantage—ie, they are clinically effective at doses at which they do not cause extrapyramidal side effects—there are important distinctions between these agents that translate into differences in their side-effect profiles. I

Weight gain, sedation, anticholinergic side effects, and cardiovascular, hepatic, and sexual issues are all important considerations when selecting medication for patients with schizophrenia. Although the neuroendocrine aspects of schizophrenia generally receive little attention, they, too, should be considered. Hypercortisolemia has been extensively documented in patients with schizophrenia, particularly during acute exacerbations. Persistent hypercortisolemia is associated with ventricular enlargement and poor outcome. Abnormalities in thyroid function, the hypothalamo-pituitary-gonadal axis, growth hormone, prolactin, neurotensin, and other neuroendocrine parameters have also been described.

Conventional and atypical antipsychotics variably contribute to hyperprolactinemia, insulin resistance, and other abnormalities. This presentation will review the differences between available therapy for treating patients with schizophrenia in relation to their side-effect profiles.

#### No. 5A SELECTING THE RIGHT MEDICATION BASED ON PATIENT PROFILE

Rajiv Tandon, M.D., Department of Psychiatry, University of Michigan Medical Center, 1500 East Medical Center Drive, UH 9C-9150, Ann Arbor, MI 48105-0120

#### **SUMMARY:**

The so-called EPS advantage of atypical antipsychotics has translated into several important clinical benefits for patients with schizophrenia, including better negative symptom efficacy, less dysphoria, less impaired cognition, and a lower risk of tardive dyskinesia. While atypical agents share this EPS advantage—ie, they are clinically effective at doses at which they do not cause extrapyramidal side effects—there are important distinctions between these agents that translate into differences in their side-effect profiles.

Weight gain, sedation, anticholinergic side effects, and cardiovascular, hepatic, and sexual issues are all important considerations when selecting medication for patients with schizophrenia. Although the neuroendocrine aspects of schizophrenia generally receive little attention, they, too, should be considered. Hypercortisolemia has been extensively documented in patients with schizophrenia, particularly during acute exacerbations. Persistent hypercortisolemia is associated with ventricular enlargement and poor outcome. Abnormalities in thyroid function, the hypothalamo-pituitary-gonadal axis, growth hormone, prolactin, neurotensin, and other neuroendocrine parameters have also been described.

Conventional and atypical antipsychotics variably contribute to hyperprolactinemia, insulin resistance, and other abnormalities. This presentation will review the differences between available therapy for treating patients with schizophrenia in relation to their side-effect profiles.

#### **REFERENCES:**

- 1. Tandon R: Safety and tolerability: how do newer generation "atypical" antipsychotics compare? Psychr Q. 2002;73:297–311.
- Tandon R, Halbreich U: The second-generation "atypical" antipsychotics: similar improved efficacy but different neuroendocrine side effects. Psychoneuroendocrinology 2003;1:1–7.

#### No. 5B COGNITIVE EFFECTS OF NOVEL ANTIPSYCHOTIC TREATMENT IN SCHIZOPHRENIA

Philip D. Harvey, Ph.D., Department of Psychiatry, Mt. Sinai School of Medicine, 1425 Madison Avenue, New York, NY 10029

#### **SUMMARY:**

Background: Cognitive enhancement has been demonstrated with novel antipsychotic medications. These studies have been plagued by methodological problems, including short duration of the studies or use of non-blinded methodology. In this lecture, the results of recent, more sophisticated studies will be presented.

Methods: Five separate clinical trials will be reported in this study. Each involved the direct comparison of newer antipsychotic medication to each other or to older medications. In addition, a new study of cognitive enhancement with a novel strategy, alpha-2 antagonism, will be described as well.

Results: Treatment with newer antipsychotic medications was associated with wide ranging cognitive functioning changes relative to treatment with older medication. Improvements were found in learning and memory, vigilance, executive functioning, and visuo-motor skills. Possibly more important, the rate of skills learning and practice-related improvement in information processing was notably better in patients treated with newer antipsychotic medications. Finally, patients treated with newer

antipsychotics plus alpha-2 agonists manifested improvement in their working memory and vigilance, while patients on low doses of haloperidol and alpha-2 agonists did not improve.

Implications: These data suggest that cognitive functioning, the most consistent predictor of functional outcome in schizophrenia, is markedly improved by treatment with newer antipsychotics compared to treatment with conventional medications. These data indicate that the use of older antipsychotic medications should be reconsidered, especially in light of the previous findings that these medications are not associated with improvement in functional outcome relative to early days of the 20th century.

#### **REFERENCES:**

 Harvey PD, Keefe RSE: Studies of cognitive change in patients with schizophrenia following with novel antipsychotic treatment. Am J Psychiatry 2001; 76–184.

#### No. 5C DEPRESSION AND NEGATIVE SYMPTOMS IN SCHIZOPHRENIA PATIENT OUTCOMES

Henry A. Nasrallah, M.D., Department of Psychiatry, University of Cincinnati Medical Center, 231 Albert Sabin Way, P.O. Box 670559, Cincinnati, OH 45267-0559

#### **SUMMARY:**

One of the major advantages of the second-generation atypical antipsychotics is their broader efficacy spectrum that includes negative and mood symptoms, not just the positive symptoms. Most patients with schizophrenia manifest negative symptoms (e.g. asociality, blunted affect, alogia, anhedonia) as well as mood symptoms (dysphoria, apathy, irritability, agitation) that must be improved in addition to suppressing delusions and hallucinations, in order to achieve full recovery. Some of the negative and mood symptoms are present at the onset of the illness (i.e. primary), but other negative and mood symptoms are known to emerge as part of the extrapyramidal side effects (EPS) that are due to excessive dopamine blockade, often associated with the firstgeneration conventional antipsychotics. All atypicals tend to have minimal EPS and thus all of then avoid the secondary negative and mood symptoms. In addition, certain atypicals, such as ziprasidone, have a monoamine reuptake inhibitory effect, which is a known mechanism for antidepressant effects, and may therefore exert additional therapeutic benefits for patients with comorbid mood symptoms. The better functional outcome with atypicals appear to be due not only to the efficacy on the psychotic components of schizophrenia, but also on the debilitating effects of negative symptoms and mood symptoms that often prevent the schizophrenic patients from achieving a meaningful social and vocational recovery. This presentation will discuss the effectiveness of atypical antipsychotics in the short and long-term management of schizophrenia.

#### **REFERENCES:**

1. Nasrallah HA, Smeltzen DJ: Contemporary Diagnosis and Management of the Patient with Schizophrenia. Handbooks in Healthcare Books, Philadelphia, 2002.

Industry-Supported Symposium 6

Saturday, November 1 12:00 p.m.-1:30 p.m.

#### NEW PHARMACOECONOMIC STRATEGIES FOR THE MANAGEMENT OF BIPOLAR DISORDER AND ACUTE PSYCHOSIS

Supported By Abbott Laboratories

Charles L. Bowden, M.D., Department of Psychiatry, University of TX Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should recognize the relationship between poor clinical outcome and increased costs associated with bipolar disorders. (2) Understand the link between unsatisfactory adherence to treatment and increased treatment costs.

#### **SUMMARY:**

Most clinical studies report efficacy, psychiatrists, patients, and leaders in health policy and financing have equal interests in effectiveness and treatment costs. Whereas efficacy deals with the percentage of persons who achieve a designated degree of improvement, effectiveness also takes into account the proportion of all patients treated who tolerate, continue to take, and benefit symptomatically from the treatment. Effectiveness is in many ways a more clinically relevant measure of a treatment's utility, since a highly efficacious treatment is of limited benefit if a high proportion of patients are unable or unwilling to take it in the manner needed for efficacy. Recent studies in bipolar disorder and schizophrenia that highlight the contrasts between efficacy and effectiveness of current treatment regimens will be presented.

Of similar importance is pharmacoeconomic analyses. Of illness costs, drug costs have seen the largest increase over the past decade. Complex combination regimens further drive up treatment costs, as does drop-out from treatment. Drop-outs and other types of poor treatment adherence often result in early and full relapse in bipolar disorders, which increase costs dramatically. The speakers will present strategies likely to improve treatment effectiveness, which can improve cost efficiency, and reduce illness burden in bipolar disorders.

#### No. 6A EFFECTIVENESS AND PHARMACOECONOMICS IN THE TREATMENT OF BIPOLAR DISORDER

Charles L. Bowden, M.D., Department of Psychiatry, University of TX Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900

#### **SUMMARY:**

Because lithium has provided the standard of treatment for bipolar disorder since its approval 30 years ago, it has often been employed as a control drug in studies of new treatments. This presentation addresses the comparative effectiveness and tolerability of lithium with that of divalproex, lamotrigine, and olanzapine in recent randomized, blinded clinical studies.

Side-effect profiles often dictate dropout rates. One study comparing divalproex and lithium found that patients who dropped out early, regardless of regimen, incurred treatment costs over three times that of patients who adhered to treatment longer. A comparative presentation of adverse events characteristic of mood stabilizing agents will be presented, with emphasis on medications that have implications for improving adherence while decreasing illness burden and treatment costs. Direct treatment costs and indirect societal costs such as lost wages and caretaker burden denote the significant cost of bipolar disorder. These costs are disproportionately greater among patients with unstable illness courses and severe symptomatology. Therefore, a paramount consideration should be to achieve and maintain syndromal and symptomatic control of the illness. Education about the illness, counseling, an effective therapeutic relationship, and a well tolerated drug regimen all factor into achieving this goal with patients who have bipolar disorders.

#### **REFERENCES:**

1. Bowden CL, Calabrese JR, McElroy SL, et al: A randomized, placebo-controlled 12-month trial of divalproex and lithium in treatment of outpatients with bipolar I disorder. Divalproex Maintenance Study Group. Arch Gen Psychiatry 2000;57(5):481–9.

#### No. 6B CLINICAL OUTCOMES AND COST OF TREATMENT FOR BIPOLAR DISORDER

Dennis A. Revicki, Ph.D., Health Outcomes, Medtap International, 5656 Eastwind Drive, Sarasota, FL 34233

#### **SUMMARY:**

Bipolar illness is a severe, heterogeneous disorder with a prevalence of approximately 1% in the population, which presents clinicians with numerous challenges. Rapid reduction of manic symptoms is a key goal in the acute pharmacologic treatment of bipolar disorder. This is significant for both pharmacoeconomic reasons and a patient's health-related quality of life. New treatments for bipolar disorder have been developed, which translates to a wide range of pharmacologic options that provide optimal efficacy and better side-effect profiles. The acute efficacy, long-term safety, and tolerability of divalproex and olanzapine will be reviewed and their impact on the course of illness will be examined. Also, the clinical, health-related quality of life and economic outcomes of divalproex and olanzapine in the treatment of acute mania associated with bipolar disorder will be discussed.

#### **REFERENCES:**

 Revicki DA, Paramore LC, Sommerville KW, Swann AC, Zajecka JM: Divalproex sodium versus olanzapine in the treatment of bipolar disorder: health-related quality of life and medical cost outcomes. J Clin Psychiatry, In press.

#### No. 6C CLINICAL AND ECONOMIC IMPLICATION OF COMBINATION TREATMENT IN SCHIZOPHRENIA

John M. Kane, M.D., Department of Psychiatry, The Zucker Hillside Hospital, 75-59 263rd Street, Glen Oaks, NY 11004-1150

#### **SUMMARY:**

Short and long-term care of schizophrenia remains a major challenge. Schizophrenia is associated with enormous costs to society, both direct and indirect. The costs range from those associated with acute hospital care to loss of functioning, family burden, and the costs of long-term outpatient treatment. The new generation of antipsychotic drugs has helped to improve overall effectiveness and benefit-to-risk ratio of pharmacotherapy in schizophrenia. However, there are still many patients who fail to respond adequately or rapidly to new-generation antipsychotic medications. As a result, many patients receive various types of combination therapy.

#### **INDUSTRY-SUPPORTED SYMPOSIA**

Nonetheless, there are relatively few well-controlled, well-designed studies that assess the overall effectiveness of combination treatment. Although divalproex is widely used as adjunctive treatment in schizophrenia and schizoaffective disorder, large-scale, controlled trials are relatively rare. The results of a recent trial are encouraging and suggest that divalproex and second-generation antipsychotics can be helpful in enhancing rapidity of response in acutely ill patients. Details of this study will be presented as well as an overview of the implications

of more rapid onset of action. Potential mechanisms for this effect will be discussed, and the need for further research will be highlighted.

#### **REFERENCES:**

1. Casey DE, Daniel DG, Wassef AA, Tracy KA, Wozniak P, Sommerville KW: Effect of divalproex combined with olanzapine or risperidone in patients with an acute exacerbation of schizophrenia. Neuropsychopharmacology 2003;28(1):182–92.

#### INNOVATIVE PROGRAMS: SESSION 1 INNOVATIONS IN PSYCHIATRIC REHABILITATION

Innovative Program 1 Wednesday, October 29 1:30 p.m.-3:00 p.m.

#### WAVERLEY PLACE: IS THERE ROOM FOR A DIFFERENT MODEL FOR A PSYCHIATRIC REHABILITATION PROGRAM?

Paul J. Barreira, M.D., Department of Psychiatry, McLean Hospital, 11 Fern Croft Road, Waban, MA 02468; Mark A. Rosania, B.A., Peer Educator and Peer Counselor, Waverley Place, 12 Church Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should be able to identify the core principles of psychiatric rehabilitation, understand the existing models, and evaluate the effectiveness of a new model for rehabilitative services.

#### **SUMMARY:**

Waverley Place, a community-based psychiatric rehabilitation program sponsored by McLean Hospital, has adopted a unique "evolutionary" approach to program development that incorporates the principles of psychiatric rehabilitation into a structure borrowed from a variety of existing models, including Clubhouse, ACT, and consumer-run programs. Clinicians (MSW, OT, RN, MD) and peer counselors are working together as a team to build a supportive community. Waverley Place's interdisciplinary team listens closely to each member's account of life circumstances; and then works with the community of staff and members to design a rehabilitation and living program that will meet the unique psychiatric, educational, employment, spiritual, and social needs of every member. The success of particular services or delivery strategies in the eyes of members and staff is the primary criterion for incorporation into the evolving service model. The presenters will describe the development of Waverley Place and its staff during the first year of the program, including the integration of peer counselors/educators as both staff and members. This presentation will be of interest to all clinical and rehabilitative staff who work in community settings, as well as service administrators who are themselves developing new programs. The audience should have some knowledge of basic psychiatric rehabilitation principles.

#### **REFERENCES:**

- 1. Fishcer E, Shumway M, Owen R: Priorities of consumers, providers, and family members in the treatment of schizophrenia. Psychiatric Services 2002; 53(6):724–729.
- 2. Perkins R: What constitutes success? The relative priority of service user's and clinicians' views of mental health services. British Journal of Psychiatry 2001; 179:9–10.

Innovative Program 2 Wednesday, October 29 1:30 p.m.-3:00 p.m.

# THE RECOVERY CENTER: A HOLISTIC HEALTH PROGRAM FOR PEOPLE WITH MENTAL ILLNESS

Dori S. Hutchinson, Sc.D., Director of Services, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215; Alexandra Bowers, M.P.H., M.S.W., Senior Program Specialist, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, (1) participants will understand how innovative wellness practices affect persons with mental illness and (2) participants will gain program knowledge about wellness interventions useful in clinical settings.

#### **SUMMARY:**

This presentation will describe an innovative wellness program at Boston University's Center for Psychiatric Rehabilitation designed to address the significant comorbidity issues in people with serious mental illness. The Recovery Center, which is partially funded by the National Institute on Disability and Rehabilitation Research, uses an adult education model to assist people with serious mental illness to strengthen and broaden their knowledge and skills of traditional and innovative wellness practices that may support their treatment and rehabilitation process. The presentation will overview the holistic health interventions and courses and describe their clinical impact. Interventions include tai chi, chi kung, reiki, yoga, mindfulness meditation, supported fitness, sexuality and intimacy, living well seminars, and nutritional courses. The presentation will also briefly describe the five-year process and outcome study under way and highlight preliminary findings on outcomes of functioning, symptoms, physical health, and quality of life. Participants will engage workshop participants in discussion about the integration of wellness interventions into clinical settings. As the comorbidity and mortality rates rise and interfere with successful treatment and rehabilitation, knowledge of effective alternative wellness interventions are essential for clinicians.

#### **REFERENCES:**

- 1. Cassidy F, Ahearn E, Carroll BJ: Elevated frequency of diabetes mellitus in hospitalized manic-depressive patients. Am J Psychiatry 1999; 156(9):1417–1420.
- Aquila R, Emanuel M: Interventions for weight gain inadults treated with novel antipsychotics. Primary Care Companion J Clin Psychiatry 2000; 2:20–23.

### Innovative Program 3 Wednesday, October 29 1:30 p.m.-3:00 p.m.

### INTENSIVE PSYCHIATRIC REHABILITATION SERVICES IN IOWA

Marsha L. Ellison, Ph.D., Senior Research Associate, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215; William A. Anthony, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the content and outcomes of an innovative intensive psychiatric rehabilitation program administered in Iowa.

#### **SUMMARY:**

This presentation will describe an innovative program that provides Intensive Psychiatric Rehabilitation Services (IPR) to individuals with serious mental illness, who are Medicaid beneficiaries in Iowa. Its purpose is for participants to set an overall rehabilitation goal, typically in housing or employment, and then to acquire the skills and supports needed to achieve and keep this goal. It is a systematic approach that engages participants in a sequential rehabilitation process with a rehabilitation practitioner. This program is unique because it is state sponsored, it results from a coalescing of stakeholders in the mental health community committed to rehabilitation, and because it is administered by the contractor for behavioral health services to the State of Iowa. Results of an outcomes investigation of participants in IPR will be presented. Interim results showed significant gains in employment and residential statuses for those who completed or continued with the program for at least 12 months. Relative to a matched control group. IPR completers showed a smaller decrease in use of all mental health services. However, IPR completers showed a larger decrease in use of inpatient and day treatment services relative to controls while they had some gains or shallower decreases in community-based services.

#### **REFERENCES:**

- 1. Ellison ML, et al: The integration of psychiatric rehabilitation services in behavioral health care structures. J of Behav Svcs & Research 2002; 20:381–393.
- 2. Lamberti JS, et al: Intensive psychiatric rehabilitation treatment. Psych Quarterly 1998; 69:211–235.

#### INNOVATIVE PROGRAMS: SESSION 2 INNOVATIONS IN THE ASSESSMENT AND TREATMENT OF OLDER ADULTS

Innovative Program 4 Wednesday, October 29 3:30 p.m.-5:00 p.m.

# PHYSICAL REHABILITATION FOR PATIENTS WITH DEMENTIA

Edward M. Phillips, M.D., Consultant, Physical Medicine and Rehabilitation, McLean Hospital, 62 Henderson Street, Needham, MA 02492; Ruthanne Lamborghini, P.T., Physical Therapist, Physical Medicine and Rehabilitation Department, McLean Hospital, 115 Mill Street, Belmont, MA 02178

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the critical role of physical rehabilitation in maintaining mobility even in severely demented patients; (2) evaluate the role of mobilization in reducing agitation, improving safety by reducing fall risks and, (3) understand that even severely demented patients can be evaluated and treated with common physical therapy techniques to improve balance, increase endurance and reduce fall risk.

#### **SUMMARY:**

Maintaining mobility in dementia patients is crucial to reduce falls, improve quality of life, reduce caregiver cost and burden, and reduce agitation. Indeed, as of March 2002, Medicare expanded coverage for treatment of Alzheimer's disease including physical therapy interventions.

The severity of dementia is not well correlated with the individual's ability to walk. Indeed, even severely demented patients may walk long distances unless hindered by comorbid conditions including osteoarthritis; neurologic illness including stroke; Parkinson's disease and peripheral neuropathy; hearing and visual deficits; and notably, medication side effects.

Physical rehabilitation techniques can effectively improve balance, increase endurance, enhance gait, and reduce the need for physical and chemical restraints in dementia patients. Regular assessment of gait skills helps

the psychiatric team titrate the optimal psychotropic medication regimen.

The presenters have assessed and treated the balance and mobility problems of several thousand patients with dementia on an inpatient geriatric psychiatry unit at McLean Hospital over the past eight years. They will present select case reports and illustrate physical rehabilitation techniques successfully used with dementia patients.

This course is designed for psychiatrists and other mental health professionals treating individuals with dementia.

#### **REFERENCES:**

1. Eslinger PJ, Damasio AR: Preserved motor learning in Alzheimer's disease: implications for anatomy and behavior. J Neurosci 1986; 6:3006–3009.

## Innovative Program 5 Wednesday, October 29 3:30 p.m.-5:00 p.m.

#### OVERVIEW OF THE KENNEDY AXIS V

James A. Kennedy, M.D., Associate Professor of Psychiatry, University of Massachusetts Medical School, 55 Colonial Drive, Shrewsbury, MA 01545

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to demonstrate basic understanding of the K-Axis tool, and to consider methods for training and its basic psychometric properties.

#### **SUMMARY:**

The purpose of this presentation is to describe a training method and related pilot data for the Kennedy Axis V (K-Axis V). It is intended for the multidisciplinary hospital treatment team member, as well as the researcher or hospital administrator interested in multidimensional clinical outcomes measurement. A clinicianrated measure of patient function, the K-Axis provides behavioral anchors for the rating of eight functional domains (psychological and social skills, violence, ADLs, substance abuse, medical impairment, ancillary problems and global functioning (GAF-Equivalent)). Data were collected during administration of a training method developed for the K-Axis V for use by treatment staff in a forensic and general psychiatric hospital. As anticipated, analyses revealed adequate interrater reliability during training. Comparisons of interrater reliability estimates based on training are also compared with estimate obtained from actual practice. In sum, the K-Axis V appears to provide an adequately reliable, straightforward, clinically relevant, multidimensional description of patient functioning well-suited for tracking inpatient treatment progress and outcome.

#### **REFERENCES:**

- 1. Higgins J, Purvis K: A comparison of the Kennedy Axis V and the Global Assessment of Functioning Scale. Journal of Psychiatric Practice 2000;6:84–90.
- 2. Kennedy JA: Fundamentals of Psychiatric Treatment Planning. Washington, D.C., American Psychiatric Press, 1992.
- 3. Kennedy JA: Kennedy Axis V: Powerful Tool of Capturing, Tracking, and Profiling Your Clinical Impressios. Amercan Psychiatric Publishing, Inc., in press.

Innovative Program 6 Wednesday, October 29 3:30 p.m.-5:00 p.m.

# AN INTEGRATED MODEL OF MENTAL HEALTH TREATMENT FOR OLDER ADULTS IN PRIMARY CARE

Cynthia M. Zubritsky, Ph.D., Department of Psychiatry, University of Pennsylvania, 3535 Walnut Street, Philadelphia, PA 19104; Stephen J. Bartels, M.D., State Medical Director, New Hampshire State Department of Mental Health, 105 Pleasant Street, Concord, NH 03301; Eugenie Loakley, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to assess a variety of treatments for older adults in primary care.

#### **SUMMARY:**

This presentation reports results from a study comparing integrated treatment with enhanced referral to specialty mental health clinics for older primary care patients with depression, anxiety, or at-risk alcohol use. Ten sites participated in the randomized longitudinal PRISMc study. Over 2,200 primary care patients over age 65 with depression, anxiety disorder, or at-risk drinking were randomized either to: (1) an integrated model of collaborative care consisting of a mental health provider located within the primary care setting or (2) to an enhanced referral model of specialty mental health care. Most participants were between age 65 and 74, were of male gender, and over half were Caucasian. Overall, the integrated care model resulted in greater engagement in treatment than the enhanced referral model of care. Among diagnostic subgroups, the greatest difference between integrated and referral models was for at-risk alcohol use. Of note, there was substantial variation in the comparative rates of engagement in treatment between the integrated and enhanced referral models by site and ethnicity. Implications of these findings will be discussed with respect to health policy and implications for mental health service delivery to older persons.

#### **REFERENCES:**

- 1. Bartels et al: American Journal of Geriatric Psychiatry 2002; 10(4), 417–427.
- 2. Bartels et al: International Journal of Psychiatry in Medicine 1997; 27(3):215–234.

#### INNOVATIVE PROGRAMS: SESSION 3 INNOVATIONS IN THERAPEUTIC APPROACHES TO THE MENTALLY ILL

Innovative Program 7 Thursday, October 30 8:00 a.m.-9:30 a.m.

### MOTIVATION FOR EXERCISE: THE PSYCHIATRIST'S ROLE

Edward M. Phillips, M.D., Consultant, Physical Medicine and Rehabilitation, McLean Hospital, 62 Henderson Street, Needham, MA 02492; Alison C. Phillips, M.D., Private Practice, Hestia Institute, 12 Mica Lane, Wellesley, MA 02481

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to apply the Transtheoretical Model of Change to exercise behavior, and counsel patients to overcome common obstacles to beginning and maintaining a regular program of physical activity.

#### **SUMMARY:**

Physicians are critical to motivating patients to achieve the Surgeon General's recommendation to all Americans to accumulate 30 minutes of moderately intense physical activity most, if not all days of the week. Psychiatrists should not be exempt from the goal of physicians counseling every patient about the benefits of exercise. Rather, the increased medical risks to psychiatric patients and the reduced motivation often associated with mental illness makes motivation for exercise in this population even more important.

The transtheoretical model of change adapted to exercise behavior will be presented with a simple five-question survey to help place the patient along the continuum of change. Participants will learn how to most effectively tailor their advice and exercise prescription to the patient.

Selected cases will be presented from Dr. Edward Phillips's experience as a specialist in physical medicine and rehabilitation working at a psychiatric hospital and from Dr. Alison Phillips's experience using these techniques to motivate her psychiatric patients to increase exercise compliance.

#### **REFERENCES:**

1. Marcus BH, Rossi JS, Selby VC, Niaura RS, Abrams DB: The stages and processes of exercise adoption

- and maintenance in a worksite sample. Health Psychol 1992; 11:386–95.
- 2. Marcus BH, Goldstein MG, Jette A, Simkin-Silverman L, Pinto BM, Milan F, Washburn R, Smith K, Rakowski W, Dube CE: Training physicians to conduct physical activity counseling. Preventive Med 1997; 26:382–388.

Innovative Program 8 Thursday, October 30 8:00 a.m.-9:30 a.m.

#### LIFE ENHANCEMENT GROUP: REFOCUSING DIALECTICAL BEHAVIOR THERAPY FOR AXIS I POPULATIONS

Joann Heap, M.S.W., Clinical Coordinator, Community Mental Health, University of Michigan Health System, 2140 East Ellsworth, Ann Arbor, MI 48108; Carol Hartford, M.S.W., Clinicial Social Worker, Community Mental Health, University of Michigan, 2140 East Ellsworth, Ann Arbor, MI 48108; Karen K. Milner, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to develop adaptations of DBT more suitable for client populations normally excluded from such therapy because they do not meet full DBT criteria.

#### **SUMMARY:**

Community Support and Treatment Services in Washtenaw County treats population with chronic and persistent major mental illness. Given the diversity of incoming patient conditions, significant Axis II symptoms would often interfere with treatment for Axis I and divert attention to Axis II. Hence, the development over the last ten years of a specialized Dialectical Behavior Therapy unit to treat complicated overlapping Axis II diagnoses. However, this strategy, while effective, disenfranchises a major sector of consumers, namely, those with severe Axis I conditions, which render them unable to absorb and benefit from conventional DBT; consequently, they typically receive case management and medication. The innovative approach described here provides a significant improvement and enhanced treatment by adapting DBT to the needs of this large sector. The changes involve switching the therapy from a classroom format including homework, to a less rigorous model that is experientially based with adventure and psychoeducation components. This "Life Enhancement Group' incorporates self-determination, wellness, humor, and integration into the community, and it furthers the practice of person-centered planning. The group may eventually be available also to medical and university psychiatry patients. Data are currently being reviewed and will be available by fall 2003.

#### **REFERENCES:**

- 1. Mueser KT, et al: Illness management and recovery: a review of the research. Psychiatric Services 2002; 53:10:1272–1284.
- Lineham MM: Cognitive Behavioral Treatment of Borderline Personality Disorder. New York, Guilford, 1993.

# Innovative Program 9 Thursday, October 30 8:00 a.m.-9:30 a.m.

# THE EFFECTS OF MUSIC THERAPY ON MEDICATION COMPLIANCE IN PSYCHOTIC PATIENTS

Ruby C. Castilla, M.D., Co-Investigator, Department of Epidemiology, University of Pittsburgh, 7205 Witherspoon Street, Pittsburgh, PA 15206; James Perel, Ph.D., Professor Emeritus, Department of Psychiatry, University of Pittsburgh, 3811 O'Hara Street, Pittsburgh, PA 15213

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize the important role of group music therapy on medication compliance in psychotic patients.

#### **SUMMARY:**

Objective: This study examined the effects of treatment for chronic psychotic disorders on medication compliance. The authors hypothesized that patients with chronic psychotic disorders would have better psychotropic compliance with medication and Group Music Therapy (GMT) than with medication alone.

Methods: A total of 85 psychotic patients, including patients with schizophrenia (n=38), psychosis NOS (n= 19), bipolar disorder (n=18), and schizoafective disorder (n=10) diagnosed according to DSM III-R criteria were included in the study. Their ages ranged between 15 and 65 years. Patients were randomly assigned to two groups. None of them had had a previous treatment using GMT. Group 1 (n=42) received 60-min GMT, once a week. Patients participated in the study for eight weeks. Group 2 (n=43) was accepted as the control group. By consensus, family members (or primary caregivers), psychiatric nurses, and psychiatrists complete the medication compliance assessment initially, after the therapy, and at the end of the sixth month, including number of psychotropic medications used, type, frequency, and an overall degree of compliance. The evaluation consisted of a four-point scale (0=noncompliance, 3=best compliance).

Results: In Group 1, there were statistically significant differences in the degree of medication compliance after

the therapy program (73.8% vs. 16.2%, P<0.001). Also, six months later in Group 1, there was still an improvement in the medication compliance (69.0% vs. 16.3%, P<0.001). Patients with bipolar disorder showed more improvement compared with other groups in the degree of compliance.

Conclusions: Treatment of chronic psychotic disorders with medication and GMT is more likely to maintain medication compliance than treatment with medication alone.

#### **REFERENCES:**

- 1. Clair AA: Therapeutic Uses of Music With Older Adults. Baltimore, MD, Health Professional Press, 1996.
- 2. Lane D: Effects of music therapy on immune function of hospitalized patients. Quality of Life 1994; 3:74–80.

#### INNOVATIVE PROGRAMS: SESSION 4 INNOVATIONS IN HOLISTIC INTEGRATED CARE OF THE MENTALLY ILL

Innovative Program 10 Friday, October 31 10:00 a.m.-11:30 a.m.

# CAN THE PACT EVIDENCE-BASE PROVIDE CLINICAL DECISION RULES FOR CLIENT CARE?

Paul B. Gold, Ph.D., Assistant Professor and Clinical Psychologist, Department of Psychiatry, Medical University of South Carolina, 67 President Street, Suite 506, Charleston, SC 29425; Neil Meisler, M.S.W., Deputy Executive Officer for Research and Development, Psychotherapeutic Services, 114 Mill Street, Unit E, Mt. Pleasant, SC 29464; Robert B. Becker, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participant should be able to (1) more systematically apply PACT research findings in individualizing client treatment plans and services delivered, and (2) appreciate the need for, and means to, assess and/or limit measurement error of clinical and functional outcomes tracked over time.

#### **SUMMARY:**

PACT randomized clinical trials (RCTs) show benefits of reduced psychiatric hospitalization and improved community housing. However, relatively few RCTs show benefits in other important domains such as employment, family functioning, and substance abuse. These findings raise new questions: Does PACT as a

programmatic package of interventions generally improve client illness and functioning, or must the package include specific targeted interventions to result in client improvement in corresponding specific functional domains?

In an RCT, we tested a tightly-integrated PACT and evidence-based supported employment intervention, with traditional community mental health and vocational rehabilitation services, on the primary outcome of competitive employment. On a series of clinical outcome measures (e.g., PANSS) administered at six-month intervals over a 24-month study period, we investigated whether the "true response rate" of each individual client could be estimated with sufficient precision to determine impact from the general PACT model and/ or the targeted employment intervention. Specifically, longitudinal data analysis of multiple measurements over time markedly reduces outcome measurement error, enabling us to precisely characterize which PACT and SE interventions effectively assist which clients, and to develop clinical decision rules for selecting a set of optimal interventions for each individual client.

#### **REFERENCES:**

- 1. Gold PB, Meisler N, Keleher J, Williams O, Drake RE, Becker DB: Assertive community treatment and individual placement and support: moving evidenced-based rehabilitation interventions for persons with severe mental illness from the laboratory into clinical practice. Cognitive and Behavioral Practice, in press.
- 2. Becker RE: Focusing pharamacological research on patient care: using clinical trials to develop clinical decision rules. Clinical Drug Investigations. 2002;22:269-278.

Innovative Program 11 Friday, October 31 10:00 a.m.-11:30 a.m.

#### COMPREHENSIVE, INTEGRATED SERVICES FOR YOUNG ADULTS WITH PSYCHIATRIC DISTURBANCES AND PSYCHOSEXUAL BEHAVIOR PROBLEMS IN CONNECTICUT

Thomas H. Styron, Ph.D., Assistant Professor, Department of Psychiatry, Yale University School of Medicine, 34 Park Street, Room 144, New Haven, CT 06519; Douglas Rau, Ph.D., Associate Research Scientist, Department of Psychiatry, Yale University School of Medicine, 34 Park Street, Room 144, New Haven, CT 06519; Jennifer F. Frey, Ph.D., Psychologist, and Assistant Clinical Professor of Psychiatry, Yale University School of Medicine, 34 Park Street, Room 144, New Haven, CT 06519

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should possess an understanding of the challenges associated with the development and ongoing implementation of a state-wide innovative program for young adults with psychiatric disturbance and psychosexual behavior problems, including program strengths, limitations, and future directions.

#### **SUMMARY:**

In 1997, several Connecticut state agencies began a collaborative effort to address the lack of mental health and other community support services for young adults with high-risk behaviors who were "aging out" of the state child welfare/protective service system. In 1998, the Young Adult Services (YAS) project was developed to provide comprehensive and integrated support services to young adults with a history of significant sexually inappropriate or sexual offending behavior and a history of psychiatric disturbance; or a history of pervasive developmental disorder with high-risk behaviors, including aggression, fire setting, inappropriate sexual behavior, or property destruction. Currently, over 200 individuals who meet admission criteria for YAS are being served at ten different sites across the State of Connecticut, with each site providing a mix of clinical, residential, case management, educational, vocational, social rehabilitation, and other support services depending on client needs. Recently, the first comprehensive evaluation of the YAS project was completed by faculty at the department of psychiatry of the Yale University School of Medicine. These faculty will present an overview of the development and implementation of the YAS project and findings from their evaluation.

#### **REFERENCES:**

- Gil E, Johnson TC (Eds.): Sexualized Children: Assessment and Treatment of Sexualized Children and Children Who Molest. Rockville, MD, Launch Press, 1993.
- 2. Marshall WL, Fernandez SM, Hudson SM, Ward T(Eds.): Sourcebook of Treatment Programs for Sexual Offenders. New York, Plenum, 1998.

Innovative Program 12 Friday, October 31 10:00 a.m.-11:30 a.m.

### UNMET MEDICAL NEEDS OF HOMELESS SHELTER CLIENTS

Albert Bono, P.A., Department of Psychiatry, Lehigh Valley Hospital, 2545 Schoenersville Road, Bethlehem, PA 18017; Laurence P. Karper, M.D., Vice Chair, Department of Psychiatry, Lehigh Valley Hospital at Muh-

lenberg, 2545 Schoenersville Road, 5th Floor, Bethlehem, PA 18107; Gary Milspaugh, M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to develop an understanding of medical needs of the homeless and approaches to evaluate them.

#### **SUMMARY:**

Homeless individuals have substantial unmet needs across many dimensions. Mental health and drug and alcohol problems often result in homelessness and many shelters have developed formal and informal relationships with psychiatric services and providers. In addition to their psychosocial needs, homeless individuals also may have obvious and subtle medical problems that significantly impact on their treatment. The lack of adequate resources creates significant barriers for providing care to this group of patients. According to Census Bureau figures the percentage of Americans who were uninsured for all of 2001 was 14.6%. This percentage indicates that over 41 million people slipped through the safety net that our society has constructed utilizing Medicaid, Medicare, county funding, and private insurance. The effects on individuals, families, and our public health system are staggering. Uninsured homeless individuals routinely put off needed preventative care and often receive minimal emergency or acute care, leading to higher costs and greater pathology later. Given the increasing pressure on public services from the uninsured, it is not surprising that non-governmental providers for the poor are also under stress to improve services and to ensure that they are responsive to the public's needs as well as being cost efficient. In this paper we will present the data we have collected regarding the unmet medical needs of clients we have evaluated as part of a needs assessment project in a faith-based shelter. Our data support the need to comprehensive medical evaluation of shelter clients to improve their care and to protect public health as well.

#### **REFERENCES:**

- 1. Olfson M, et al: National trends in the outpatient treatment of depression JAMA 2002; 287:203–209.
- Folsom DP, et al: Medical comorbidity & receipt of medical care by older homeless people with schizophrenia or depression. Psychiatric Services 2002.

INNOVATIVE PROGRAMS: SESSION 5 INNOVATIONS IN THE INTEGRATION OF PRIMARY CARE AND MENTAL HEALTH

**Innovative Program 13** 

Friday, October 31 1:30 p.m.-3:00 p.m.

## MEDICAL EDUCATION AND THE CASE FOR PUBLIC PSYCHIATRY

Lydia E. Weisser, D.O., Clinical Director, West Central Georgia Regional Hospital, 3000 Schatulga Road, P.O. Box 12435, Columbus, GA 30917

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to identify learning environments within the public sector mental health model suitable for medical student educational opportunities.

#### **SUMMARY:**

The past decade's downtrend in medical students choosing psychiatry as a specialty continues to negatively impact the already serious shortage of practicing public-sector psychiatrists. One hypothesis is the lack of adequate exposure during the medical school psychiatric clerkship. This program will attempt to convey the numerous possibilities and benefits of using a community mental health model for medical student training. Topics will include multicultural diversity issues, use of impatient and outpatient populations, mentoring relationships, utilizing the multidisciplinary team, dual diagnosis and developmentally disabled patients, transitional homes, and other unique teaching opportunities. Suggestions for mental health curriculum development and implementation will be provided.

#### **REFERENCES:**

- Kern DE (editor): Curriculum Development for Medical Education: A Six-Step Approach Baltimore MD, Johns Hopkins University Press, 1998.
- 2. Wear D (editor): Educating for Professionalism: Creating a Culture of Humanism. Medical State University of Iowa Press, 2000.

Innovative Program 14 Friday, October 31 1:30 p.m.-3:00 p.m.

#### AN INTEGRATED MODEL OF TRAINING: TEACHING PSYCHIATRY TO FAMILY MEDICINE RESIDENTS

Richard C. Christensen, M.D., Clinical Associate Professor, and Director, Community Psychiatry Program, Health Science Center at Jacksonville, University of

Florida College of Medicine, and Former APA/Bristol-Myers Squibb Fellow, 280 19th Avenue, South, Jackson-ville, FL 32250

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to better understand the need for models of training, which seek integration between psychiatry and primary care. This Innovative Program will describe the development and implementation of an integrated training model at the University of Florida designed for PGY-2 family medicine residents.

#### **SUMMARY:**

At the University of Florida (UF), under the auspices of the community psychiatry program, training of PGY-2 family medicine residents in psychiatry takes place through a unique clinical collaboration emphasizing the integration of psychiatric services with the delivery of primary care. During their one-month rotation in psychiatry, the family medicine resident has the opportunity to develop their knowledge and skills in psychiatric diagnostic assessment, psychotherapy, and psychopharmacologic management within a context of integrated primary care. Established in October, 2001, this training model was developed through a collaboration between UF's Community Psychiatry Program and the Community Health Family Medicine (CHFM) primary care clinic. The CHFM clinic, based in urban Jacksonville, is staffed by six family physicians, two nurse practitioners, and one physician assistant. It provides primary care to over 10,000 unduplicated patients annually. Like most family medicine practices, a large percentage of the clinic's patients seek treatment for psychiatric disorders as well as their primary care needs. Mental health services were integrated into the daily flow of the clinic through the presence of an attending psychiatrist from the Community Psychiatry Program, a rotating PGY-2 family medicine resident and a Ph.D psychotherapist. This model of training attempts to achieve several objectives. First, it seeks to impart to the resident the necessary psychiatric knowledge and skills required to meet the needs of the patients they are likely to encounter in the primary care setting. Second, by providing direct supervision of the resident, the psychiatry faculty attending is able to highlight the emotional aspects of physical illnesses as well as draw attention to the psychosocial dimensions of patient care. Finally, this model promotes the practice of medical specialty collaboration and multidisciplinary teamwork in meeting the complex needs of the primary care patient who has mental health issues and psychopharmacologic management within a context of integrated primary care. This Innovative Program will describe the development and implementation of an integrated model of training for family medicine residents in community psychiatry education.

#### **REFERENCES:**

- Christensen RC: Teaching psychiatry to family medicine residents: An integrated training model. Academic Medicine, in press.
- 2. Matorin AA, Ruiz P: Training family practice residents in psychiatry: an ambulatory training model. Int J Psychiatry Med 1999; 29(3):327–336.

**Innovative Program 15** 

Friday, October 31 1:30 p.m.-3:00 p.m.

## INTEGRATING PRIMARY AND MENTAL HEALTH SERVICES FOR THE MENTALLY ILL

Michael E. Swerdlow, Ph.D., Director, Department of Behavioral Health, Community Mental Health Center, St. Mary Hospital, 506 Third Street, Hoboken, NJ 07040; Donna Degovine, R.N., M.S., Clinical Nurse Specialist, Community Mental Health Center, St. Mary Hospital, 506 Third Street, Hoboken, NJ 07040

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to develop a program to better meet the primary health care needs of the severely mentally ill.

#### **SUMMARY:**

The mental health and primary health care systems are not well integrated. As a result, people with severe mental illness have higher mortality and morbidity rates than the general population. The presentation will describe a three-year project, which integrated primary health care services at four partial hospitalization sites serving over 300 clients. The clinical and system difficulties in integrating the primary health care and mental health system are described as well as the methods used to improve the coordination of care. The role of the psychiatrist, primary care physician, nurse, and other mental health providers will be described. Data will be presented that show the clinical results of this program. Finally, funding mechanisms will be described. The target audience for this program is psychiatrists, nurses, psychologists, and social workers. There are no special background requirements.

#### **REFERENCES:**

- 1. Mechanic D: Approaches for Coordinating Primary Care for Person with Mental illness. General Hospital Psychiatry 19:395–402.
- 2. Crews: Primary care for those with severe mental illness West J of Medicine 1998;169:245–250.

INNOVATIVE PROGRAMS: SESSION 6 INNOVATIONS IN SOCIAL SUPPORTS FOR MENTALLY DISABLED PERSONS IN THE COMMUNITY

Innovative Program 16 Saturday, November 1 10:00 a.m.-11:30 a.m.

## COMMUNITY MENTAL HEALTH AND PUBLIC HOUSING: AN EFFECTIVE PARTNERSHIP

John L. Schippers, M.S., Washtenaw County Community Support and Treatment Services, 3981 Varsity, Ann Arbor, MI 48108

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to describe the cost/benefit of a program involving a partnership between public housing and community mental health.

#### **SUMMARY:**

This innovative initiative was a joint creation of the Ann Arbor Housing Commission and Washtenaw County Community Mental Health. It was noted by both organizations that a large population of mental health consumers resided in public housing because they received subsidies to their rent through the federal Housing and Urban Development Administration due to their disabilities. Both organizations pooled their resources to make a full-time mental health professional available on-site to residents of Miller Manor, a 105-unit building in Ann Arbor, Michigan. This worker fulfills a dual role. As case manager for all mental health consumers, he is more accessible than a worker off site. As resource manager, he is a source of aid for all residents, often referring them to specialized agencies and sources of assistance in the community. There are several important results of this cost-effective partnership. Among them are an increased stability in housing with fewer evictions and a decreased number of costly hospitalizations for mental health consumers. Efficiency in the delivery of mental health services is also increased, and new individuals are referred for needed mental health services. The overall result of this program is a general improvement in the quality of life for residents.

#### **REFERENCES:**

 Carling P: Community integration of people with psychiatric disabilities: emerging trends, in Jacobson J, Burchard S, Carling P, eds. Community living for people with developmental and psychiatric disabilities. Johns Hopkins University Press 1992; pp 20–32. 2. Reinstein M: Long-term psychiatric care service and coordination gaps in Michigan's publicly funded mental health system. Employee Assistance Quarterly 2001; 16:1–19.

Innovative Program 17 Saturday, November 1 10:00 a.m.-11:30 a.m.

## FROM ILLNESS TO WELLNESS: A CONSUMER-TO-CONSUMER APPROACH TO RECOVERY

Anne Whitman, Ph.D., Joanthan Cole Mental Health Resource Center, 115 Mill Street, Belmont, MA 02478; William S. Pollack, Ph.D., Department of Psychiatry, Harvard Medical School, 115 Mill Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the significance of stigma on the lives of the mentally ill and how to reduce it working cooperatively in a consumer to physician/psychiatrist alliance.

#### **SUMMARY:**

Anne Whitman will present her own personal journey through mental illness to recovery. She will share her experiences with mental illness, family and employment, relationships, and outline available resources for individuals suffering from mental illness. Dr. Whitman is the cofounder of the Jonathan O. Cole Mental Health Resource Center house at McLean Hospital in Belmont, Mass. This consumer-to-consumer program is dedicated to help mental health consumers achieve a full and healthy life by responding to their concerns with compassion and pragmatism necessary to alleviate their hardship and aid in their recovery. The center is committed to providing the latest educational material, the training of the mental health community, and media outreach programs to reduce the stigma surrounding mental illness. The center was founded, created, and is entirely staffed and operated by mental health consumers who have dealt successfully with mental illness. The center is dedicated to serving as a model for other resource centers nationwide with a consumer-operated approach and a close partnership with the psychiatric community.

Dr. William Pollack will present the physician's connection to the resource center and how physicians can link psychiatric treatment with a consumer-to-consumer approach to wellness. Dr. Pollack will speak on the elimination of stigma through education and the power of consumer advocacy that helps clinicians help consumers to reconnect with the community and daily activities of life.

#### **REFERENCES:**

- 1. Nasar S: A Beautiful Mind. Simon & Schuster, 1998.
- 2. 2000 National Edition, HealthCare Resource Directory. National Center for Mood Disorders, 2000.

### Innovative Program 18 Saturday, November 1 10:00 a.m.-11:30 a.m.

#### TRAINING FOR THE FUTURE: COMPUTER TRAINING FOR ADULTS WITH PSYCHIATRIC DISABILITIES

Larry Kohn, M.S., Director of Development, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215; Kimberly Bisset, M.A., Employment and Training Manager, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, (1) each participant will understand the impact of recovery oriented computer training on people with psychiatric disabilities, and (2) each participant will acquire program knowledge to address the employment needs of people with psychiatric illness.

#### **SUMMARY:**

The purpose of this Innovative Program presentation is to describe a unique computer-skills training and employment program at Boston University's Center for Psychiatric Rehabilitation. This program, Training for the Future, was developed as a partnership between IBM, Boston University, state and federal agencies, and corporate sponsorship. The program is designed to address the issue of underemployment for people with psychiatric disabilities by teaching marketable computer skills combined with the skills of choosing, getting, and keeping employment. The presenters will describe the program's ten-year history, its components, and the employment outcomes. Data will be presented reflecting the importance of vocational education in assisting the identity transition from patient to more valued social roles such as student and employee. The program utilized a one group pre-test/post-test design over a five-year period. Outcome measures include role status, financial status, and mental health utilization. Specific results include positive change in overall work status and reduced service utilization. The presentation and the results underscore the need for innovative vocational rehabilitation programs that take advantage of the impact that the newer medications have had on functional levels of people with psychiatric illness.

#### **REFERENCES:**

- 1. Bond GR, Drake RE, Becker DR, Mueser KT: Effectiveness of psychiatric rehabilitation approaches for employment of people with severe mental illness. J of Disability Policy Studies 1999; 10(1):18–52.
- 2. Mowbray CT, Bybee D, Harris SN, McCrohan N: Predictors of work status and future work orientation in people with a psychiatric disability. Psych Rehab J 1995; 19(2), 17–28.

#### INNOVATIVE PROGRAMS: SESSION 7 PUSHING THE ENVELOPE: REDEFINING TRADITIONAL MODELS

Innovative Program 18 Saturday, November 1 3:30 p.m.-5:00 p.m.

## SEEDS OF HOPE: A COMMUNITY COLLABORATION SERVICE MODEL

Kathe Blakemore, R.N., Health Services Supervisor, Washtenaw County Community Support and Treatment Services, 2140 East Ellsworth, Ann Arbor, MI 48108; Larry Galligan, C.S.W., M.S.W., Mental Health Professional, Washtenaw County Community Support and Treatment Services, 2140 East Ellsworth, Ann Arbor, MI 48108; Elizabeth Dorda, R.N., M.S., Mental Health Nurse, Washtenaw County Community Support and Treatment Services, 555 Towner, Ypsilanti, MI 48198

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, institute participants will learn how to conduct a Community Health Needs Assessment; engage at-risk populations by identifying strengths, bias and barriers; build Partnerships with other community health providers; recognize and plan for recovery stages; promote and instruct wellness and life skills sets; and address low health literacy findings.

#### **SUMMARY:**

The risk factors that individuals with a major mental illness experience are poverty, homelessness, victimization by crime, likelihood of substance abuse, social isolation, assignment by host community to a stigmatized group, eviction, and difficulty maintaining stable employment. These clustered experiences appear simultaneously in communities where affordable housing is lacking. Adequate housing in a supportive community and access to available health care are essential to achieving integrated health. Since December 2001, a team of mental health professionals provided weekly life skills and wellness interventions to 45 SMI consumers, residing in a subsidized high-rise. Outcome measurements point to improved health monitoring, eliminated over-utilization of psychiatric emergency services, and in-

creases in life satisfaction. Indications are educated consumers are more likely to advocate for individual health needs. Consumers returning to community living after a hospitalization or relapse frequently conceptualize this transition as a return to previous functioning. This significant belief can mask the absence of important competencies. Key features are "joining up" with consumers where they live and where they want to succeed. In implementing wellness concepts such as balancing physical and mental health needs with applied healthy behaviors, consumers have achieved reported increased well being and sense of choice and control over their health needs.

#### **REFERENCES:**

- 1. Clark CC: Health Promotion in Communities: Holistic and Illness Approaches. Springer Publishing Company, Inc. New York, 2002.
- Young SL, Ensing D: Exploring recovery from the perspective of people with psychiatric disabilities. Psychiatric Rehabilitation Journal 1999; 22(3):219-231.

## Innovative Program 19 Saturday, November 1 3:30 p.m.-5:00 p.m.

## REDESIGNING THE MENTAL HOSPITAL: A NEW MODEL

Peter Schieldrop, M.D., Clinical Director, Seven Oaks, 4575 Blenkinsop Road, Victoria, BC Canada V8X 2C7; Thomas E. Newton, M.S.W., Rehabilitation Coordinator, Seven Oaks, 4575 Blenkinsop Road, Victoria, BC Canada V8X 2C7

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to demonstrate knowledge of the principles underlying (1) a new facility that provides an alternative to the mental hospital, and (2) a new approach to integrating rehabilitation into the daily life of patients.

#### **SUMMARY:**

This presentation will describe a new concept in the design of the tertiary care psychiatric hospital. In 1990, the British Columbia government initiated plans to downsize the 1,100-bed Provincial Mental Hospital and replace it with smaller units dispersed around the province. The first such unit, the Seven Oaks Centre for Rehabilitation, was built as a provincial pilot project and houses 38 patients in small home-like units of seven to ten beds. The majority of patients are involuntary, since it is a designated facility under the B.C. Mental Health Act. There is a strong focus on rehabilitation, which is integrated into the daily life of the residents. We will describe its funding, design, and development, as well

as the patient selection, rehabilitation, and treatment programs, and staffing. Our preliminary experience, in terms of outcomes, and patient, family, and staff satisfactions will be presented, together with a discussion of the successful and unsuccessful elements of the project. An independent five-year research study to evaluate outcomes is under way. Seven Oaks represents a unique approach to the hospital care and treatment of difficult to manage persistent mental illness.

#### **REFERENCES:**

- 1. Gudeman JE, Shore MF: Beyond deinstitutionalization: a new class of facilities for the mentally ill. The New England Journal of Medicine 1984; 311:832–836.
- 2. Bridges K, Davenport S, Goldberg D: The need for hospital-based rehabilitation services. Journal of Mental Health 1994; 3:205–212.

Innovative Program 20 Saturday, November 1 3:30 p.m.-5:00 p.m.

### THE BUSINESS OF MENTAL HEALTH: DO I REALLY NEED AN M.B.A.?

Lydia E. Weisser, D.O., Clinical Director, West Central Georgia Regional Hospital, 3000 Schatulga Road, P.O. Box 12435, Columbus, GA 30917

#### **EDUCATIONAL OBJECTIVES:**

At the end of this session, the participant should be familiar with the general MBA curriculum, the variety of current programs available, and their costs. Participants should be able to recognize ways in which an MBA may prove useful in their work.

#### **SUMMARY:**

As the mental health care industry has changed over the past decade, in terms of strategy, organization, disease management, law, clientele, the impact of government, and many other parameters, the role of providers has likewise expanded to include a greater emphasis on health care management. This is an area frequently minimized or overlooked during professional school and residency training. Thus, many psychiatrists and mental health professionals are poorly equipped to deal with issues regarding budgets, financial statements, reimbursement, marketing, staff recruitment, and human resource management, although they may be held accountable in these areas.

Many health care providers are now seeking additional training in the form of a Master's degree in Business Administration (MBA) in order to offset these deficiencies. This program will explore the types of programs currently available, discussing such issues as curriculum, cost, length of time involved, as well as the pros and cons

of obtaining such a degree. The presenter is presently completing an MBA.

#### **REFERENCES:**

- 1. Stahl MJ, Dean PJ: The Physician's Essential MBA. Gaithersburg, MD, Aspen Publishers Inc, 1999.
- 2. Silver JK (Editor): The Business of Medicine. Hanley & Belfus, 1998.

Leadership and Career Thursday, October 30 Development Seminar 1 10 a.m.-11:30 a.m.

#### MAKING THE MEDIA WORK FOR YOU

Nada L. Stotland, M.D., M.P.H., Secretary, APA Board of Trustees; Past Speaker, APA Assembly; and Professor of Psychiatry and Obstetrics and Gynecology, Rush Medical College, 5511 South Kenwood Avenue, Chicago, IL 60637-1713; John Blamphin

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to conduct a successful media interview. Participants will work, hands-on, with different case scenarios for interviews. Participants will come away with the skills they need to teach the public about psychiatry, and to demonstrate what accessible, honest, caring, and knowledgeable professionals psychiatrists are.

#### **SUMMARY:**

As experts in mental health, psychiatrists are often sought after by the media. However, most psychiatrists are not formally trained in how to speak to members of the press, and may feel intimidated, and worry that they will look funny on camera, or will be tripped up by a trick or hostile question. In this special session targeted toward Members in Training and Early Career Psychiatrists, participants will learn how to communicate with the media and the public. This will be a highly interactive workshop, with attendees participating in videotaped mock interviews. This workshop will cover the specifics of conducting an interview, and will offer tips on such topics as managing stress and positioning in front of the camera. Different interviewing scenarios will be discussed. This workshop will help build young psychiatrists' communication skills, and will enable them to better draw upon their extensive medical knowledge and convey information to the public through the media with accuracy, confidence, empathy, and care.

#### **REFERENCES:**

- 1. Stotland NL: Psychiatry, the law, and public affairs. J Am Acad Psychiatry Law 1998; 26(2):281–7.
- 2. Sabbagh LB: Managing the media interview, Compr Ther 1998; 24(1):33–5.

Leadership and Career Thursday, October 30 Development Seminar 2 1:30 p.m.-3:00 p.m.

## ADVOCATE TO REJUVENATE: A PRESCRIPTION FOR LEGISLATIVE SUCCESS

David A. Pollack, Associate Professor of Psychiatry, and Associate Director, Public Psychiatry Training Pro-

gram, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201; Kamlyn R. Haynes, M.D.; Andrew J. Kolodny, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) contact legislators at the state and federal levels in writing and verbally, and (2) recognize current legislation at the state and federal levels which impacts psychiatry and patients.

#### **SUMMARY:**

If you are registered to vote, you possess the most important qualification needed to be a successful advocate on legislative issues affecting your patients and your profession.

Participants will learn about current state and federal legislative issues, the legislative process, and resources available to stay on top of the issues. Attendees will learn how to shape the future of psychiatric practice through relevant legislative advocacy and be briefed on current state and federal legislative issues that affect patients and the practice of psychiatry.

The APA's Division of Government Relations offers many resources to encourage and assist APA members to become successful advocates. For example, the APA's web-based "Advocacy Action Center" will be explained as well as other tools developed for APA members to enhance and increase the impact of their advocacy efforts.

Psychiatric practitioners who have been successful lobbyists at both the state and federal levels will describe their experiences as advocates and explain why psychiatric practitioners' participation in the legislative process is crucial to the development of mental health public policy.

Attendees will learn about legislative activity in the 108<sup>th</sup> Congress, pressing legislative issues in key states, and their influence as constituents in the development of mental health policy in the 21<sup>st</sup> century.

#### **TARGET AUDIENCE:**

MITs, ECPs, third and fourth year residents.

#### **REFERENCES:**

- 1. Redman E: The Dance of Legislation. University of Washington Press, 2000.
- 2. What have medical lobbyists done for you lately? Organized medicine has clout, but practicing physicians are more effective at the influence game. Medical Economics 2000; 9(18):46–60.

Leadership and Career Saturday, November 1 Development Seminar 3 1:30 p.m.-3:00 p.m. Leadership and Career Saturday, November 1 Development Seminar 4 3:30 p.m.-5:00 p.m.

## WHEN THE PATIENT IS DIFFERENT FROM YOU

Carl C. Bell, M.D., President and Chief Executive Officer, Community Mental Health Council, Inc., and Professor of Public Health and Psychiatry, University of Illinois at Chicago School of Medicine, 8704 South Constance Avenue, Chicago, IL 60617-2746; Stephen M. Goldfinger, M.D.; Darin D. Signorelli, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, (1) participants will understand the concept of ethnocentric monoculturalism. (2) Participants will be able to list two major mental health factors for each nonwhite racial group within the U.S. (3) Participants will be able to list factors that can shape the direction of the therapeutic relationship when the patient is different from the therapist.

#### **SUMMARY:**

For most of us healing is much more than a transactional process that involves being remunerated for psychiatric services rendered, and this recognition is honored in many nonwhite cultures by the patient bestowing a gift upon the therapist. Unfortunately, ethnocentric monoculturalism denigrates this behavior and this value may interfere when the patient is different from the therapist. In addition to cultural issues, there are issues of acculturation, and issues of being victimized by racism and terrorism. Dr. Bell will highlight these issues by illustrating the complexity of racial identity, social classes, and the diversity of cultural values held in a multiracial, multi-religious society.

#### **REFERENCES:**

- U.S. Department of Health and Human Services. Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Mental Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, 2001.
- 2. First MB, Bell CC, Cuthbert B, Krystal JH, Malison R, Offord D, Reiss D, Shea T, Widiger T, Wisner K: Personality disorders and relational disorders: a research agenda for addressing critical gaps in DSM, in American Psychiatric Association Research Agenda for DSM V. Edited by DJ Kupfer, MB First, & DA Regier. Washington, D.C., American Psychiatric Press, Inc, 2002: p123–199.

## THE OTHER SIDE OF THE MOUNTAIN: FROM RESIDENCY TO REALITY

Stephen M. Goldfinger, M.D., Liaison, APA Institute Scientific Program Committee, and Chair, Department of Psychiatry, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203; Stuart A. Anfang, M.D.; Sandra M. DeJong, M.D.; Cynthia J. Telingator, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) describe the differences between the structured learning of residency program and continuing medical education in the "outside world", (2) describe critical factors and limitation of clinical preparation in residency training, and (3) describe three dimensions well covered and three not covered in training.

#### **SUMMARY:**

Increasingly, the APA and academic medical centers have been focusing on recognizing and addressing the needs of recent residency graduates or early career psychiatrists (ECPs). Sponsored APA-based fellowships have begun to bring together early career psychiatrists and offer continuing structured learning and individual mentoring experiences. This forum will focus on an interactive discussion between ECPs and senior psychiatrists in an exploration of how we have, and have not, met young professionals' needs in our current training paradigms.

Trainees in every program learn the basics of differential diagnosis, psycho- and pharmacotherapeutics, and other aspects of clinical psychiatry. Many programs, however, address only peripherally, or not at all, essential needs to translate this information into practice. Ranging from operational assistance in such essentials as joining provider panels, purchasing office equipment, or deciding on malpractice insurance, to discussions on how best to continue one's ongoing medical education after formal training is over, we often provide young professionals with inadequate tools to face the challenges ahead. Hopefully, drawing on the real-world expertise of both junior and senior panel members, we will be able to help further the discussion of what is most needed and how best to meet these needs as we prepare ourselves, our field, and our trainees for the millennium ahead.

#### **REFERENCES:**

1. The American Psychiatric Association: Practice Management for Early Career Psychiatrists, Washington, D.C., 1999.

2. The Association for Women Surgeons: The Pocket Mentor: A Manual for Surgical Interns and Residents, Westmont IL, 1997.

Wednesday, October 29 10:00 a.m.-11:30 a.m.

# THE LIMBIC LOBE IN RELATION TO PSYCHOSIS: ABNORMAL CORTICOLIMBIC CIRCUITRY IN SCHIZOPHRENIA AND BIPOLAR DISORDER

Francine M. Benes, M.D., Ph.D., Director, Program in Structural and Molecular Neuroscience, and Professor of Neuroscience, Harvard Medical School, 115 Mill Street, Belmont, MA 02178-1041

#### **EDUCATIONAL OBJECTIVES:**

1. To learn about the potential role of limbic lobe abnormalities in the pathophysiology of schizophrenia and bipolar disorder; 2. To understand the potential ways in which normal developmental changes in the limbic lobe during adolescence could contribute to the onset of symptoms in patients who carry susceptibility genes for schizophrenia and bipolar disorder.

#### **SUMMARY:**

Postmortem studies in Dr. Benes' lab have demonstrated that schizophrenia and bipolar disorder are probably caused by subtle disturbances in the neural circuitry of the limbic lobe that includes the anterior cingulate cortex (ACCx), hippocampus (HIPP), and amygdala (AMYG). In both disorders, a latent defect of GABAergic transmission could become manifest when the ingrowth of DA and amygdalar fibers in layer II of ACCx are attained during adolescence, and when stress increases the release of the dopamine. The latter neuromodulator exerts an inhibitory influence on GABA cells and the increased release that occurs under conditions of stress could cause an impaired population of these cells to decompensate. Some data suggest that the "miswiring" of dopamine projections to GABA cells requires exposure to adrenal steroid hormone both pre- and postnatally. Most recently, we have developed a "partial" rodent model of SZ and BD in which picrotoxin is injected into the amygdala to induce changes in GA-BAergic terminals in the anterior cingulate cortex and hippocampus where we have observed remarkably similar changes. Overall, this program of research is seeking to understand how normal and abnormal postnatal development may trigger the onset of the major psychoses.

#### **REFERENCES:**

- 1. Benes FM: Emerging principles of altered neural circuitry in schizophrenia. Brain Research Reviews 2000; 31: 251–269.
- 2. Benes FM, Berretta S: GABAergic interneurons: implications for understanding schizophrenia and bipo-

- lar disorder. Neuropsychopharmacology 2002; 25: 1–27
- 3. Benes FM: Emerging principles of altered neural circuitry in SZ. Brain Research Reviews Interactive, November, 1999: Nobel Symposium #111 (www.elsevier.nl/locate/bres) or Brain Res. Reviews 2000; 31: 251–269.
- 4. Benes FM: The role of stress and dopamine-GABA interactions in the vulnerability for schizophrenia. J Psychiat Res 1997; 31: 257–275.
- Benes FM: Convergence and competition of monoaminergic fibers on intrinsic neurons in rat medial prefrontal cortex during the postnatal period. Cerebral Cortex 2000, in press.
- Stone DJ, Walsh J, Benes FM: Localization of cells preferentially expressing GAD<sub>67</sub> with negligible GAD<sub>65</sub> transcripts in the rat hippocampus. A double in situ hybridization study. Molecular Brain Research 1999; 71: 201–209.

#### Lecture 2

Wednesday, October 29 10:00 a.m.-11:30 a.m.

# ALCOHOLICS ANONYMOUS, CULT OR CURE? A 60-YEAR FOLLOW-UP OF 200 COMMUNITY RESIDENTS WITH ALCOHOL DEPENDENCY

George E. Vaillant, M.D., Professor of Psychiatry, Harvard Medical School, and Director, Study of Adult Development, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115-6110

#### **EDUCATIONAL OBJECTIVES:**

To help the audience distinguish fact from fantasy regarding AA.

#### **SUMMARY:**

Many thoughtful observers worry that Alcoholics Anonymous (AA) is a cult or at best a folk medicine that lacks scientific validity. The purpose of this paper is to treat AA like any new drug.

What is its mechanism of action? What evidence is there of its efficacy? What are its side effects? First, evidence is marshaled that AA embodies the four variables most important in relapse prevention of the addictions. These four components are compulsory supervision (external superego), substitute dependency (competing reinforcer), new love objects, and spiritual or religious commitment.

Second, using long-term follow-up (5+ years), common in cancer therapy but rare in addiction treatment, evidence is marshaled that Alcoholics Anonymous is superior to competing treatments. Third, using evidence from its literature and traditions evidence is presented

that AA is very different from cults. Especially, unlike cults and religion and psychoanalysis. AA has always been able to laugh at itself.

2. WHO: World Health Report 2001. Geneva, Switzerland, World Health Organization, 2001.

#### **REFERENCES:**

- 1. Vaillant GE: Natural History of Alcoholism Revisted. Harvard University Press, 1995.
- 2. Twelve Steps and Twelve Traditions. AA World Services Inc.

#### Lecture 3

Wednesday, October 29 1:30 p.m.-3:00 p.m.

#### PSYCHIATRIC SERVICES IN GLOBAL PERSPECTIVE: RESEARCH, PUBLIC HEALTH, AND ETHICAL ISSUES

Arthur M. Kleinman, M.D., Rabb Professor of Anthropology, Department of Anthropology, Harvard University, and Professor of Medical Anthropology and Professor of Psychiatry, Harvard Medical School, 33 Kirkland Street, Cambridge, MA 02138-2044

#### **EDUCATIONAL OBJECTIVES:**

1. Review of current situation of psychiatric services in the developing world; 2. Review of economic, political, and cultural influences on services; 3. Influence of pharmaceutical industry on globalization of health services; 4. Ethical questions

#### **SUMMARY:**

Psychiatric services in the developing world have, for the first time, been given serious consideration by WHO, international NGOs, and ministries of health. A key problem is the limitation of financial and professional resources. Research data challenge conventional expectations about the potential contribution of primary care services. New treatment models are being developed. Pharmaceutical industry has become a major influence. Ethical and cultural issues loom large. The intersection of mental health and infectious disease problems (AIDS, TB, malaria, etc.) is crucial. American psychiatry has a unique opportunity to contribute to global health through the broadcasting of salient research on services. Global mental health policy is now on the agenda. Demonstration projects that are carefully evaluated and generalized, the development of global mental health policy research centers, and research training are objectives for the future. Depression, suicide, and schizophrenia are used as illustrations.

#### **REFERENCES:**

 Cohen A, Kleinman A, Saraceno B (eds): World Mental Health Casebook. New York, Plenum, 2002 Lecture 4

Wednesday, October 29 1:30 p.m.-3:00 p.m.

### RECENT ADVANCES IN THE PSYCHOLOGICAL TREATMENT OF PTSD

Terence Keane, Ph.D., Director, VA National Center for PTSD; Chief, Psychology Service, VA Boston Healthcare System; and Professor and Vice Chair of Research in Psychiatry, Boston University School of Medicine, 150 South Huntington Avenue, Boston, MA 02138-2044

#### **EDUCATIONAL OBJECTIVES:**

(1) To learn the prevalence of exposure to traumatic events and the eventual development of PTSD; (2) To understand the various conceptual models currently employed to understand the development of PTSD and to guide treatment; (3) To understand the psychological treatment methods known to promote improvement for individuals with PTSD; (4) To equip oneself with treatment strategies and techniques to employ with PTSD patients.

#### **SUMMARY:**

Recent advances in the psychological treatment of PTSD indicate that there are now multiple treatments available with great promise and demonstrated efficacy. In particular, there are more than a dozen clinical trials examining the effectiveness of cognitive-behavioral treatments for PTSD. Impressively, these treatments appear to be successful in treating PTSD secondary to a wide variety of traumatic life events. The purpose of this lecture is to provide a systematic overview of the theoretical conceptualization underlying many of the proven treatments, a review of the extant literature on treatment efficacy, and to critique the methodological approaches employed to date in studying treatment outcome. A second objective of this lecture is to identify critical gaps in the treatment literature that need to be addressed. Particularly important is the relative paucity of data addressing issues of effectiveness outside research laboratories. As well, few studies to date address systematically the outcomes associated with group treatments for PTSD, internet self-help approaches, and studies of the interaction of pharmacotherapy and CBT. Strategies will also be suggested to improve and enhance the acceptance and adaptation of empirically supported psychosocial treatments for PTSD in clinical settings.

#### **REFERENCES:**

- Keane TM, Barlow DH: Posttraumatic stress disorder, in Anxiety and its Disorders. Edited by Barlow DH. New York, Guilford Press, 2002.
- 2. Foa EB, Keane TM, Friedman MJ: Effective Treatments for PTSD. New York, Guilford Press, 2000.

Lecture 5 Wednesday, October 29 3:30 p.m.-5:00 p.m.

## PSYCHOPHARMACOLOGY OF ADDICTION: WHERE ARE WE HEADED?

Domenic A. Ciraulo, M.D., Professor and Chair, Division of Psychiatry, Boston University School of Medicine, and Psychiatrist-In-Chief, Boston Medical Center, 720 Harrison Avenue, Suite 914, Boston, MA 02118

#### **EDUCATIONAL OBJECTIVES:**

(1) To understand current clinical research in developing medications to treat the addictions; (2) To understand the clinical role of medication in treating addictions; (3) To understand the future directions of medication development for the addictions

#### **SUMMARY:**

The development of new medications for the treatment of addiction and alcoholism has taken on new energy, and the clinical use of pharmacotherapy for the addictions has expanded. For the past several decades the role of pharmacotherapy was limited to a few compounds with small to moderate efficacy. Recent research based on our knowledge of reward pathways has led to the introduction of novel agents that have demonstrated efficacy in clinical trials. Some new medications, chosen for their actions on mediators of brain reward, have demonstrated efficacy in single-site studies. Combination therapies also provide promise of improved outcomes. Attention to the typology of individuals with alcoholism may also lead to improved pharmacotherapy.

#### **REFERENCES:**

- 1. Kranzler HR: Pharmacotherapy of alcoholism: gaps in knowledge and opportunities for research. Alcohol 2000; 35(6):537–47.
- 2. Gottschalk PC, Jacobsen LK, Kosten TR: Current concepts in pharmacotherapy of substance abuse. Current Psychiatry Reports 1999; 1(2):172-8.

Lecture 6

Thursday, October 30 8:00 a.m.-9:30 a.m.

## ETHICAL CONSIDERATIONS IN PSYCHIATRIC RESEARCH

Laura Weiss Roberts, M.D., Professor and Vice Chair, Department of Psychiatry, University of New Mexico Health Sciences Center, 1126 Cuatro Cerros, S.E., Albuquerque, NM 87122-5610

#### **EDUCATIONAL OBJECTIVES:**

This workshop is aimed at enhancing the research ethics understanding and skills of psychiatric trainees and psychiatrists who serve as clinicians, clinical investigators, and institutional research and journal peer reviewers. The objectives are: (1) to increase understanding of ethically important aspects of research involving seriously ill participants; and (2) to enhance skill set of psychiatric trainees, clinicians, and investigators in evaluating protocols and constructing ethically sound protocols.

#### **SUMMARY:**

This workshop will provide a systematic review of the major ethical issues in serious mental illness research, offering a coherent presentation of key concepts and relevant empirical evidence. The principles underlying ethically sound research will be defined, and the multiple forms of safeguards in human research will be outlined. Emphasis will be given to the safeguard of informed consent, including its three core components. A model for understanding the concept of vulnerability in human research will be presented. Data from a series of empirical studies clarifying the perspectives and experiences of individuals with mental illnesses (e.g., schizophrenia, schizoaffective disorder, bipolar disorder, major depression), physical illnesses (e.g., HIV, cancer, diabetes), and healthy comparison subjects will be presented. Videotape footage of mentally ill research participants, describing aspects of their experiences in research and their ethical expectations of clinical investigators, will be shown.

#### **REFERENCES:**

- 1. Roberts LW: Ethics and mental illness research. Psychiatric Clinics of North America 2002; 25(3): 525–545.
- Roberts LW: Informed consent and the capacity for voluntarism. Am J Psychiatry 2002; 159:705-712.
- Roberts LW: Warner TD, Brody JL, Roberts B, Lauriello J, Lyketsos C: Patient and psychiatrist ratings of hypothetical schizophrenia research protocols: assessment of harm potential and factors influencing participation decisions. Am J Psychiatry 2002; 159:573-584.

Lecture 7

Thursday, October 30 8:00 a.m.-9:30 a.m.

## WHAT'S NEW IN TREATING PATIENTS WITH BORDERLINE PERSONALITY DISORDER?

John G. Gunderson, M.D., Professor of Psychiatry, Harvard University Medical School, and Director, The Bor-

derline Center, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

(1) To encourage optimism and enthusiasm about the treatability of borderline patients; (2) to inform clinicians about the selection of appropriate treatment modalities; (3) to describe how and why explicit use of the "borderline personality disorder" diagnosis promotes a therapeutic alliance.

#### **SUMMARY:**

Optimism about the treatability of borderline patients originated with the claims for care from intensive psychoanalytical therapies. While such therapies retain a place in therapeutic plans, they have been largely replaced by other modalities, each of which addresses sectors of the borderline psychopathology. Amongst the more important developments have been DBT, psychoeducation, groups, and medications. This talk will suggest practical and cost-effective ways to sequence these modalities. Their appropriate usage and the reliance from experienced clinicians who like borderline patients now gives a more substantial basis for therapeutic optimism.

#### **REFERENCES:**

- Gunderson JG: Borderline Personality Disorder: A Clinical Guide. Washington, D.C., Am Psych Press, Inc, 2001.
- Oldham, et al: Guidelines for Treatment of Borderline Personality Disorder. Washington, D.C., Am Psych Press Inc, 2001.

Lecture 8

Thursday, October 30 10:00 a.m.-11:30 a.m.

#### BODY DYSMORPHIC DISORDER: UPDATE ON IMAGINED UGLINESS

Katharine A. Phillips, M.D., Professor of Psychiatry, Brown Medical School, and Director, Body Dysmorphic Disorder Program, Butler Hospital, 345 Blackstone Boulevard, Providence, RI 02906-4861

#### **EDUCATIONAL OBJECTIVES:**

(1) To learn about recent research findings on the clinical features of BDD; (2) To learn about recent research findings on the treatment of BDD; (3) To be able to recognize and diagnose BDD.

#### **SUMMARY:**

Body dysmorphic disorder (BDD) is a relatively common and often disabling disorder that often goes unrecognized in clinical practice. BDD consists of a distressing and impairing preoccupation with imagined or slight defects in appearance that can focus on any body

area. Typical associated behaviors include skin picking, mirror checking, and camouflaging. BDD causes marked impairment in functioning and is associated with a high suicide attempt rate and notably poor quality of life. Most patients receive surgery or other nonpsychiatric medical treatment (e.g., dermatologic), with a generally poor outcome. In contrast, SRIs and cognitive-behavioral therapy are often effective. This presentation will review BDD's clinical features and treatment, with a focus on recent research findings of relevance to clinical practice. It will also discuss how to recognize and diagnose BDD, and will offer practical treatment suggestions for clinicians who encounter these often-difficult-to-treat, high-risk patients.

#### **REFERENCES:**

- 1. Phillips KA, Albertini RS, Rasmussen SA: A randomized placebo-controlled trial of fluoxetine in body dysmorphic disorder. Arch Gen Psychiatry 2002;59:381–388.
- Phillips KA: Pharmacologic treatment of body dysmorphic disorder: review of the evidence and a recommended treatment approach. CNS Spectrums 2002;7:453–460.

Lecture 9

Thursday, October 30 1:30 p.m.-3:00 p.m.

### PROGRESSIVE POLITICS AND PSYCHIATRIC EDUCATION

APA/NIMH Vestermark Psychiatry Educator Award Lecture

Frederick S. Sierles, M.D., Professor of Psychiatry and Behavioral Sciences, Finch University of Health Sciences, Chicago Medical School, and Chair, Psychiatry Workforce Coalition, 3333 Green Bay Road, North Chicago, IL 60064

#### **EDUCATIONAL OBJECTIVES:**

(1) Discuss the ethics of including politically-charged topics in medical curricula; (2) Summarize the main findings about the influence of managed care and pharmaceutical marketing on psychiatric and general medical education; (3) Suggest strategies for addressing the problems presented by managed care and pharmaceutical marketing on medical education.

#### **SUMMARY:**

The variety of psychiatric topics that we can teach skillfully to medical students and residents is unprecedented (as is our capacity to use a biopsychosocial model), teaching technology has improved, and we have a good supply of devoted teachers. But during the past decade, medical education has been too strongly influ-

42 LECTURES

enced by profit-driven values. Managed care has reduced the time available for devoted teachers to teach and fails to cover health care for millions. Pharmaceutical marketing influences medical education too much and increases costs of medications excessively. Should these politically-charged problems be included in medical school and residency curricula? The author suggests ways of addressing these problems, in terms of the ethics of teaching about politically-charged topics, the content of what we teach, the influence we could exert in medical schools and academic organizations, and our participation in national political organizations.

#### **REFERENCES:**

- 1. Brodkey AC, Sierles FS, Spertus IL, Weiner CL, McCurdy FA: Clerkship directors' perceptions of the effects of managed care on medical students' education. Acad Med 2002;77:1112–1120.
- 2. Wazana A: Physicians and the pharmaceutical industry: is a gift ever just a gift. JAMA 2000:283:373–380.

Lecture 10

Thursday, October 30 3:30 p.m.-5:00 p.m.

## EARLY INTERVENTION IN DIFFERENT PHASES OF SCHIZOPHRENIA

APA/APF Alexander Gralnick Award Lecture

Marvin I. Herz, M.D., Professor of Psychiatry, University of Miami, 255 Evernia Street, Apt. 806, West Palm Beach, FL 33401

#### **EDUCATIONAL OBJECTIVES:**

To provide information about early intervention preventive clinical strategies that have been employed in different phases of schizophrenia to reduce morbidity and improve the long-term outcome.

#### **SUMMARY:**

Three types of early interventions for schizophrenia are reviewed: (1) interventions during the prodromal phase with the goal of preventing the onset of schizophrenia, (2) interventions during the early phases of a first episode of schizophrenia, and (3) interventions during the prodromal phase of relapse in patients who have had previous psychotic episodes. The author describes each type of intervention and reviews the outcomes associated with each based on studies in the treatment literature. The author concludes that while early intervention strategies may not prevent schizophrenia from developing, they can be valuable in delaying the onset of the disorder.

The author reports that early intervention during a first-break episode can reduce the duration of symptoms.

Since the evidence seems to indicate that the longer the duration of untreated psychosis, the less favorable the outcome, early intervention in first-episode schizophrenia may improve long-term outcomes. Early intervention later in the course of the disorder can help reduce relapse and rehospitalization rates.

#### **REFERENCES:**

- 1. Herz MI, et al: A program for relapse prevention in schizophrenia: a controlled study. Archives of General Psychiatry 2000; 57(3): 277–283.
- 2. Herz MI, Marder S: Schizophrenia: Comprehensive Treatment and Management. Baltimore, Md., Lippincott, Williams and Wilkins, 2002.

Lecture 11

Thursday, October 30 3:30 p.m.-5:00 p.m.

#### CREATING A CULTURE OF SAFETY: CHALLENGE YOUR MENTAL MODELS

APA Task Force on Patient Safety

James B. Conway, Senior Vice President and Chief Operating Officer, Dana-Farber Cancer Institute, 44 Binney Street, D-1630, Boston, MA 02115

#### **EDUCATIONAL OBJECTIVES:**

Model the critical role that leadership must play in the patient safety area; provide the inside and honest perspective on an organization dealing with a most tragic and public sentinel event; share specific action items and success stories to improve safety, including the powerful role of patients and families; create and/or further stimulate a tension for improved safety, particularly among leaders; demonstrate the power that an effectively handled medical error can have to stimulate dramatic improvement and growth in a health care facility; underscore that the work is never done and patient safety will remain a topic for continuous improvement.

#### **SUMMARY:**

Drawing on the experience of an organization that had a tragic and high-profile sentinel event in 1995, this presentation provides an executive overview of the seven years of learning with particular emphasis on the following: the enormous responsibilities of leadership; the importance of designing systems and an environment to support safe practice and prevent error; the power of interdisciplinary practice; the enabling role of patients and families in care design, measurement, assessment, and improvement; and the influence of all these elements on the workplace. The speaker will also provide an overview of the national patient safety movement, drawing from the personal perceptions of patients, family members, staff, leaders, and trustees. Also presented will

be a number of mental models believed to be true but essential to be shed if we are going to advance the quality of our care for our patients, family members, and staff. 2. Lotterman A: Specific Techniques for the Psychotherapy of Schizophrenic Patients. Madison, CT, International Universities Press, 1996.

#### **REFERENCES:**

- 1. Kohn LT, Corrigan JM, Donaldson MS (eds): To Err is Human. Building a Safer Health System. Washington, National Academy Press, 1999.
- 2. Leape L, Berwick DM: Safe health care: are we up to it? Br Med J 2000; 320:725-726.
- 3. Millenson M: The silence. Health Affairs 2003; (22)2:103-112.

#### Lecture 12

Friday, October 31 8:00 a.m.-9:30 a.m.

## PSYCHODYNAMIC APPROACH TO THE PSYCHOTIC PATIENT

Lisa A. Mellman, M.D., Associate Clinical Professor of Psychiatry, Columbia University, 1051 Riverside Drive, Box 103, New York, NY 10032

#### **EDUCATIONAL OBJECTIVES:**

Participants will be able to understand the limitations of phenomenological psychiatry in comprehensively describing patients with psychosis, identify the elements of a psychodynamic formulation of the psychotic patient, and understand how psychodynamic interviewing contributes to case formulation.

#### **SUMMARY:**

Psychiatrists are trained in a medical model that privileges diagnosis based on phenomenology, and treatment that targets symptoms. In this model, patients are grouped together according to features or symptoms they have in common, and individual differences are often ignored. Psychiatrists do not come to understand the person who carries the diagnosis, but instead become familiar with the patient's symptoms.

In this lecture, elements of a psychodynamic understanding of patients will be reviewed. A videotaped interview of a psychotic patient will be shown and interviewing technique discussed: Psychodynamic formulation of this psychotic patient will then be presented based on the findings from the interview, and its contribution to development of a biopsychosocial formulation and treatment plan will be discussed.

#### **REFERENCES:**

Gabbard GO: Psychodynamic assessment of the patient, in Psychodynamic Psychiatry in Clinical Practice, 3<sup>rd</sup> ed. Washington, D.C., American Psychiatric Press, Inc. 2000.

#### Lecture 13

Friday, October 31 8:00 a.m.-9:30 a.m.

## CHILDHOOD BIPOLAR DISORDER AND SCHIZOPHRENIA: PHENOMENOLOGY, NEUROBIOLOGY, AND TREATMENT

Jean A. Frazier, M.D., Director, Child Psychiatry Outpatient Clinic, and Director, Pediatric Psychotic Disorders Research Program, McLean Hospital, and Assistant Professor of Psychiatry, Harvard Medical School

#### **EDUCATIONAL OBJECTIVES:**

1. The attendee will learn about the clinical presentation of pediatric bipolar disorder and psychotic disorders and the developmental issues that impact on the clinical presentation; the attendee will learn new information from an ongoing MRI study about the existing differences between the brain structures in children with BPD and schizophrenia in relationship to psychiatrically healthy children; the attendee will learn about the use of atypical antipsychotics in these populations and about the developmental differences in children's response to the atypical antipsychotics.

#### **SUMMARY:**

Bipolar disorder and schizophrenia are illnesses associated with a great deal of morbidity. These are devastating illnesses at any age, but particularly when they affect children. This lecture will outline the developmental differences seen in the clinical presentation of these illnesses in those with childhood onset relative to those with adult-onset symptomatology. In addition, data from ongoing neuroimaging studies will be presented to highlight some of the possible neurobiological underpinnings of these illnesses. Finally, treatment studies will be presented, with a particular focus on the use of atypical antipsychotics, in the treatment of these disorders as they present in childhood. Differences in treatment response and side-effect profiles seen on these agents in children versus adults will be discussed.

#### **REFERENCES:**

- 1. Carlson G, Fennig S, Bromet E: The confusion between bipolar disorder and schizophrenia in youth? Where does it stand in the 1990's. J Am Acad Child Adolesc Psychiatry 1994; 33: 453–460.
- 2. Faedda G, Baldessarini R, Suppes T: Pediatric onset bipolar disorder: a neglected clinical and public health problem. Harv Rev Psychiatry 1995; 3: 171–195.

- 3. Frazier JA, Biederman J, Tohen M, Feldman PD, Jacobs TG, Toma V, Rater MA, Tarazi RA, Kim GS, Garfield SB, Sohma M, Gonzalez-Heydrich J, Risser RC, Nowlin ZM: A prospective open-label treatment trial of olanzapine monotherapy in children and adolescents with bipolar disorder. Journal of Child and Adolescent Psychopharmacology 2001; 11 (3): 239–250.
- 4. Frazier JA, Kennedy D, Chiu S, Rauch S, Herbert M, Garroway J, Melrose R, Makris N, Renshaw P, Lange N, Caviness V, Biederman J: Anatomic Brain Magnetic Resonance Imaging (MRI) in Pediatric Bipolar Disorder. Symposium. Scientific Proceedings: 48th Annual Meeting American Academy of Child and Adolescent Psychiatry, 2001; page 59.
- Frazier JA, Meyer MC, Biederman J, Wozniak J, Wilens T, Spencer T, Kim G, Shapiro S: Risperidone treatment for juvenile bipolar disorder: a retrospective chart review. Journal of the American Academy of Child and Adolescent Psychiatry; 1999; 38:960-965.
- Geller B, Cooper T, Sun K, Zimmerman B, Frazier J, Williams M, Heath J: Double-blind and placebocontrolled study of lithium for adolescent bipolar disorders with secondary substance dependency. J Am Acad Child Adolesc Psychiatry 1998;37:171– 178.
- 7. Geller B, Luby J: Child and adolescent bipolar disorder: a review of the past 10 years. J Am Acad Child Adolesc Psychiatry 1997; 36: 1168–1176.
- Kowatch RA, Suppes T, Carmody TJ, Bucci JP, Hume JH, Kromelis M, Emslie GJ, Weinberg WA, Rush AJ: Effect size of lithium, divalproex sodium, and carbamazepine in children and adolescents with bipolar disorder. J Am Acad Child Adolesc Psychiatry 2000;39:713–720.
- 9. McElroy S, et al: Phenomenology of adolescent and adult mania in hospitalized patients with bipolar disorder. Am J Psychiatry 1997; 154:44–49.
- Strober M, Schmidt-Lacker S, Freeman R, Bower S, Lampert C, DeAntonio M: Recovery and relapse in adolescents with bipolar affective illness: a fiveyear naturalistic, prospective follow-up. J Am Acad Child Adolesc Psychiatry 1995;34:714-73.
- 11. Wozniak J, Biederman J: Childhood mania exists (and coexists) with ADHD. Am Soc Clin Psychopharmacol Progr Notes 1995a;6:4-5.
- Wozniak J, Biederman J, Kiely K, Ablon S, Faraone S, Mundy E, Mennin D: Mania-like symptoms suggestive of childhood-onset bipolar disorder in clinically referred children. J Am Acad Child Adolesc Psychiatry 1995b;34:867–876.
- 13. Edwards J, McGorry P: Implementing Early Intervention For Psychosis: A Guide For Establishing Early Psychosis Foci. 2002.

- Frazier JA, Cohen LG, Jacobsen L, Grothe D, Flood J, Baldessarini RJ, Piscitelli S, Kim G, Rapoport JL: Clozapine serum concentrations in children and adolescents with childhood-onset schizophrenia. Journal of Clinical Psychopharmacology 2003; 23: 87–91.
- Frazier JA, Spencer T, Wilens T, Wozniak J, Biederman J: Childhood Onset Schizophrenia, the Prototypic Psychotic Disorder of Childhood. In: Dunner DL, Rosenbaum JF, Eds. The Psychiatric Clinics of North American: Annual of Drug Therapy. Philadelphia: W.B. Saunders Company, 1997 pp 167–193.
- Frazier JA, Giedd J, Kaysen D, Albus K, Alaghband-Rad J, Lenane M, Breier A, Rapoport J: Childhood onset schizophrenia: brain MRI rescan after two years of clozapine maintenance. The American Journal of Psychiatry 1996; 153: 564–566.

#### Lecture 14

Friday, October 31 10:00 a.m.-11:30 a.m.

#### DIAGNOSIS AND TREATMENT OF ANTISOCIAL PERSONALITY DISORDER

Glen O. Gabbard, M.D., Brown Foundation Chair of Psychoanalysis, and Professor of Psychiatry, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030

#### **EDUCATIONAL OBJECTIVES:**

The educational objectives are as follows: (1) to inform audience members about the diagnostic distinction between antisocial personality disorder and psychopathy, (2) to educate mental health professionals about the determination of treatability when encountering patients with antisocial histories, and (3) to teach mental health professionals about the common countertransference difficulties encountered with antisocial personality disorder patients.

#### **SUMMARY:**

The diagnostic category of antisocial personality disorder involves a spectrum of severity. One of the most important diagnostic distinctions is the presence or absence of true psychopathy. This distinction may have extremely important consequences for treatability and prognosis. The literature on etiology suggests there is a genetic predisposition to antisocial personality disorder with strong biological underpinnings for psychopathy. In addition, adverse environmental effects appear to be important in the development of the disorder. Certain positive prognostic factors suggest that some patients may be treatable under certain circumstances. The common countertransference difficulties encountered with such patients are reviewed in detail.

#### **REFERENCES:**

- 1. Gabbard GO: Psychodynamic Psychiatry in Clinical Practice: Third Edition. American Psychiatric Press, Washington, D.C., 2000.
- Meloy JR: Antisocial personality disorder, in Treatments of Psychiatric Disorders: Third Edition. Edited by Gabbard, GO. American Psychiatric Publishing, Inc., Washington, D.C., 2001.

Lecture 15

Friday, October 31 10:00 a.m.-11:30 a.m.

### USING EPIDEMIOLOGY TO TEST CAUSAL HYPOTHESES

APA's Marmor Award Lecture

Sir Michael Rutter, M.D., Professor of Developmental Psychopathology, Institute of Psychiatry, Kings College, University of London, and Deputy Chair, The Wellcome Trust, United Kingdom, DeCrispigny Park, Denmark Hill, London, United Kingdom SE5 8AF

#### **EDUCATIONAL OBJECTIVES:**

(1) To provide an appreciation of the different reasons why there might be a statistical association between a risk factor and some psychopathological outcome; (2) To provide an understanding of the research challenges that must be faced in testing hypotheses about environmental mediations of risk; (3) To delineate the range of strategies that may be used to test for environmental mediation; (4) To indicate the main conclusions on the importance of environmental risk factors on psychological and psychopathological outcomes.

#### **SUMMARY:**

The testing of hypotheses regarding the environmental mediation of risks for adverse psychological outcomes has to be preceded by a clear conceptualization of the postulated risk factor—as illustrated by findings on parent-child separation and the involvement of fathers in childrearing. The identification of the points on the dimension where the risks arise may help in that connection, as shown by findings on early child care, parental age at the child's birth, and physical punishment. The testing of environmental risk hypotheses ordinarily requires the use of designs that "pull apart" variables that usually go together; the measurement of withinindividual behavioral change in relation to timed and measured environmental change; the use of "natural experiments" that can differentiate between environmental and genetic risk mediation, as well as between person effects on the environment and environmental effects on the person; and the use of statistical techniques that can take account of measurement error. A range of examples that illustrate the success of these strategies will be described. The importance of taking account of gene-environment interaction will be considered in relation to both quantitative and molecular genetic evidence. Gene-environment correlation and a broader group of person effects on the environment will be discussed in relation to the origin of individual differences in environmental risk exposure. The huge individual differences in response to environmental risk will be noted, and finally, the need to put together findings into an overall causal model will be discussed.

#### **REFERENCES:**

- Rutter M: Psychosocial influences: critiques, findings, and research needs. Development and Psychopathology 2000; 12, 375–405.
- 2. Rutter M, Pickles A, Murray R, Eaves L: Testing hypotheses on specific environmental causal effects on behavior. Psychological Bulletin 2001; 127, 291–324.

Lecture 16

Friday, October 31 1:30 p.m.-3:00 p.m.

## FIREARMS AVAILABILITY AND MENTAL ILLNESS: STRATEGIES TO REDUCE GUN VIOLENCE

Khalid R. Pitts, M.P.H., State Director, The Educational Fund to Stop Gun Violence, 1023 15th Street, N.W., Washington, DC 2005

#### **EDUCATIONAL OBJECTIVES:**

Inform the audience on the ubiquity of firearm suicide and disparities among race and gender; classify highrisk groups; identify public health and public policy responses to gun violence; describe how illegal gun markets fuel gun homicide and suicide; identify public health and public policy interventions to reduce adverse risk.

#### **SUMMARY:**

This lecture will explore the association between firearm suicide and race, while examining the role the mental health community can play in reducing risks and respecting legitimate concerns of privacy for and stigmatization of the mentally ill. In 2000, 29,350 individuals took their lives—57% of these suicides involved a firearm. Overall, firearm suicides among African Americans continue to present themselves at rates far lower than the national average. A myriad of factors play a role in firearm suicides, including psychiatric, biological, familial, and environmental. One risk factor of particular interest is the association between suicide and firearm availability. Gun safety proponents have long advocated for stronger gun laws as a way to reduce gun violence, 46 LECTURES

including suicide. Historically, African Americans have lower gun ownership levels than their white counterparts and are stronger supporters of stricter gun laws. In addition, studies have shown that gun safety laws have reduced suicide rates among certain populations. As natural allies in the battle to reduce gun violence, mental health practitioners and gun safety advocates must continue to collaborate on policy approaches that address the issue of gun violence.

#### **REFERENCES:**

- 1. Wiebe DJ: Homicide and suicide risks associated with firearms in the home: a national case-control study. Annals of Emergency Medicine 2003; 41(6):771–82.
- Ludwig J, Cook PJ: Homicide and suicide rates associated with implementation of the Brady Handgun Violence Prevention Act. Journal of the American Medical Association 2000; 284:585-591.

Lecture 17

Friday, October 31 1:30 p.m.-3:00 p.m.

## MENTAL HEALTH CHECK-UPS FOR YOUTH: A POLICY AND ADVOCACY CAMPAIGN

Laurie M. Flynn, Director, Carmel Hill Center for Early Diagnosis and Treatment, Columbia University, 1775 Broadway, Suite 715, New York, NY 10019

#### **EDUCATIONAL OBJECTIVES:**

(1) Participants will understand the incidence, prevalence, and key risk factors for adolescent depression and suicide; (2) Participants will understand efficacy of various public health approaches to reducing suicide in teens; (3) Participants will learn about Columbia University's national program to implement early detection and treatment.

#### **SUMMARY:**

Science has enabled us to identify youth at risk for serious depressive illness and suicide. A public health approach to early identification focused on accurate assessment, diagnosis, and treatment. Based on many years of research, Columbia University has launched a national effort to screen all adolescents before they graduate from high school. The Columbia TeenScreen® Program is now active in 85 communities in 32 states and Guam. It includes site development and technical assistance, training and software and follow-up assistance. An aggressive outreach and advocacy strategy provides important support to the TeenScreen® Program. All program services are provided at no cost.

#### **REFERENCES:**

- Office of the Surgeon General: Report of the Surgeon General's Conference on Children's Mental Health. A National Action Agenda. Washington, DC, U.S. Government Printing Office, 2000.
- Shaffer D, Scott M, Wilcox H, Busner C, Parides M, Hicks R, Restifo K, Lucas C, Garfinkel R: Screening high-school students for suicide risk. Journal of the American Academy of Child and Adolescent Psychiatry, in press.

Lecture 18

Friday, October 31 3:30 p.m.-5:00 p.m.

A THERAPIST RETIRES: INTERESTING GROUP DYNAMICS OF CHRONICALLY MENTALLY ILL PERSONS' RESPONSES TO SEPARATION AND LOSS

Walter N. Stone, M.D., Professor Emeritus, University of Cincinnati College of Medicine, 23 DiSilva Island Drive, Mill Valley, CA 94941

#### **EDUCATIONAL OBJECTIVES:**

Upon completion of this presentation, participants will be able to (1) identify features of patients' expression of positive and negative affects associated with separation and loss; (2) identify aspects of the mutual impact and influence on both therapist and members of the termination process; (3) recognize the contribution of the therapist's behaviors on the termination process.

#### **SUMMARY:**

Group treatment for persons with chronic mental illness provides opportunities to address experiences of separation and loss. The central theme of this presentation will be exploration of members' efforts to address feelings of separation and loss with their therapist, who is retiring after leading the group for 15 years.

The group, organized with flexible boundaries, has been videotaped from its inception. These tapes provide the data to examine the process and the content of the separation experiences involving both the therapist and members.

The therapist's treatment orientation is influenced by self-psychology and recognizes the importance of the relationship within a traditional group-as-a-whole structure. The mutual impact of members on the therapist as well as the traditional "transference" will be elucidated with clinical vignettes highlighting the treatment relationship as distinct from interpretation as a pathway into helping members address their experiences of loss.

#### **REFERENCES:**

- Stone WN: Group Psychotherapy for Persons with Chronic Mental Illness. New York, Guilford, 1996.
- 2. Stone WN: Outpatient group treatment for persons with chronic mental illness. Directions in Psychiatry 2000; 20: 337–348.

#### Lecture 19

Saturday, November 1 8:00 a.m.-9:30 a.m.

#### READINGS

Elissa Ely, M.D., Psychiatrist, Tewksbury State Hospital, Writer, 'Op-Ed Pages,' The Boston Globe, and Commentator, "All Things Considered," National Public Radio, 365 East Street, Tewksbury, MA 01876

#### **EDUCATIONAL OBJECTIVES:**

To reflect on the many involving dilemmas of treating chronic patients, particularly the psychotic patients.

#### **SUMMARY:**

Though we are regularly too busy with paper-friendly, person-alien aspects of our business to remember, psychiatry is nothing if it is not witnessing. Even in these neurobiological times, stories—experienced as lives—wait to be verified, negated, condemned, supported, questioned, misread, and above all, seen and heard. The story waiting for its witness isn't always central to vision; sometimes it is best recognized from the corner of an eye. Brief readings will be shared on topics including diagnostic puzzles, ethical dilemmas, and (psychiatry being only human and highly personal) countertransferential moments.

#### **REFERENCES:**

- 1. Chekhov A: Stories. Translated by Richard Peavear and Larissa Volokhonsky. Bantam Books, 2000.
- 2. Murakami H: The Elephant Vanishes. Knopf, 1993.

Lecture 20

Saturday, November 1 8:00 a.m.-9:30 a.m.

### RECOVERY WITH SEVERE MENTAL ILLNESS

Mark Ragins, M.D., Medical Director, Village Integrated Services, 456 Elm Avenue, Long Beach, CA 90802-2426

#### **EDUCATIONAL OBJECTIVES:**

(1) To understand a four-stage developmental model of recovery analogous to Kubler-Ross' death and dying model, (2) to understand the practice and programatic implications of moving from a medical model to a recov-

ery model, and (3) to understand the personal growth and changes involved in becoming a recovery worker.

#### **SUMMARY:**

In this lecture I will describe a four-stage developmental model of recovery (hope, empowerment, selfresponsibility, and meaningful roles). A recovery model is being pushed in many places around the country, especially by consumer and rehabilitation groups. This lecture focuses on personal and practice changes psychiatrists and other clinicians can make to become a vital, integral part of recovery-oriented services.

I will be using lots of stories from my work as a psychiatrist at the Village, one of the foremost recovery-oriented programs in the country, to illustrate the recovery process. I will try to combine both the "inspiration" and the "perspiration" of recovery work. My focus will be on the personal aspects of the work (e.g., reducing professional distance, taking on multiple roles, being empowering, lowering boundaries, promoting risk taking) rather than the administrative aspects.

#### **REFERENCES:**

- 1. Deegan P: Recovery as a journey of the heart. Psych Rehab Journal 1996; 19(3).
- 2. Harding C, et al: The Vermont Longitudinal Study of Persons With Severe Mental Illness. Am J Psychiatry 1987,144:718–726.

#### Lecture 21

Saturday, November 1 10:00 a.m.-11:30 a.m.

### SPLIT TREATMENT: PROBLEMS AND OPPORTUNITIES

Michelle B. Riba, M.D., M.S., President-Elect, American Psychiatric Association, and Clinical Professor of Psychiatry, and Associate Chair for Education and Academic Affairs, Department of Psychiatry, University of Michigan, Room F-6236, MCHC/Box 0295, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0295

#### **EDUCATIONAL OBJECTIVES:**

(1) To identify problems and goals of split treatment as a treatment modality, (2) to determine the opportunities and problems of providing split treatment to patients, (3) to articulate suggestions for optimal communication with the non-MD therapist.

#### **SUMMARY:**

Psychiatrists have provided "split treatment—prescribing medication for patients who are in therapy with a non-physician therapist—for a long time. This practice has expanded enormously for many reasons, including the continuous pressure to reduce costs of mental health services as well as the important advances and break48 LECTURES

throughs in clinical psychopharmacology. Many complicated issues in split treatment need consideration, including understanding the relationship between the psychotherapist and the physician.

#### **REFERENCES:**

- Tasman A, Riba M, Silk K: The Doctor-Patient Relationship in Pharmacotherapy: Managing Split Treatment. The Guilford Press, 2000.
- 2. Riba M, Balon R, (eds): Psycopharmacology and Psychoatherapy: A Collaborative Approach. American Psychiatric Press, Inc., Washington, D.C., 1999.

#### Lecture 22

Saturday, November 1 10:00 a.m.-11:30 a.m.

## NEUROBEHAVIORAL COMPLICATIONS OF HIV INFECTION

Francisco Fernández, M.D., Professor and Chair, Department of Psychiatry and Behavioral Medicine, University of South Florida at Tampa, 3515 East Fletcher Avenue, MDC Box 14, Tampa, FL 33613

#### **EDUCATIONAL OBJECTIVES:**

(1) to understand the impact of HIV-1 infection of the central nervous system, (2) to review the neurophysiology of the progression of HIV-1 infection in the CNS and the periphery, (3) to appreciate the differential diagnosis and diagnostic work-up of HIV-1-associated cognitive-motor disorders (minor cognitive-motor disorder and HIV-1 associated dementia), (4) to list the medical and neuropsychiatric pharmacological treatment approaches to the management of HIV-1 associated cognitive-motor disorders, and (5) to list the non-pharmacological treatment approaches to the management of HIV-1-associated cognitive-motor disorders.

#### **SUMMARY:**

HIV-1 infection of the central nervous system can lead to a range of neurological and neuropsychiatric symptoms, including minor cognitive-motor disorder, HIV-associated dementia, primary CNS lymphoma, cerebrovascular accident, progressive multifocal leukoencephalopathy, chronic pain (associated with distal sensory polyneuropathy), delirium, and psychosis.

Despite advances in the highly active antiretroviral therapy (HAART) era, the neurological manifestations of HIV-1 infection are a continuing source of morbidity and mortality. The slowing of HIV-1 viral replication in the periphery, for example, will not necessarily coincide with a similar slowing of the viral replication in the brain.

This session will cover the complications of the central and peripheral nervous systems and address efficacious pharmacologic and non-pharmacologic interventions. It is vital for all psychiatrists to be involved in the diagnosis and treatment of HIV/AIDS patients. Understanding HIV-1-associated neuropsychiatric conditions (including HIV-1-associated dementia, minor cognitive-motor disorder), psychiatric comorbidity, as well as the psychodynamic aspects of HIV-1 infection and disease is critical. This session is intended for a group of medical providers, namely physicians and psychiatrists, and others with medical expertise.

#### **REFERENCES:**

- 1. Fernández F: Neuropsychiatric aspects of human immuno-deficiency virus (HIV) infection. CurrPsychiatry Rep 2002; 4(3): 228–31.
- Goodkin K, et al: Cognitive-motor impairment and disorder in HIV-1 Infection. Psych Annals 2001; 3 (1): 37–44.

#### Lecture 23

Saturday, November 1 10:00 a.m.-11:30 a.m.

# PURSUING PERFECTION IN DEPRESSION CARE: THE INSTITUTE OF MEDICINE'S QUALITY CHASM REPORT AS A MODEL FOR TRANSFORMING BEHAVIORAL HEALTH CARE

APA/AAPA Administrative Psychiatry Award Lecture

C. Edward Coffey, M.D., Vice President, Behavioral Health Services, and Professor and Chair, Department of Psychiatry, Henry Ford Health System, One Ford Place, 1-F, Detroit, MI 48098

#### **EDUCATIONAL OBJECTIVES:**

After this presentation, participants should be familiar with the IOM's Quality Chasm report, and understand how we at Henry Ford Health System are using it as a roadmap for transforming the care of persons with depression.

#### **SUMMARY:**

In 2001, the IOM's Committee on the Quality of Health Care in America issued it's second of two reports entitled "Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century." The report praised the unparalleled advances in medical science, but also indicted the health care system for not translating those strengths into meaningfully better care for each and every patient. To its great credit, the report also suggested a framework for closing this "quality chasm".

In this presentation, I will describe how Henry Ford Behavioral Health Services is using the "Chasm Report" as a roadmap for revolutionizing behavioral healthcare. Under the aegis of the Robert Wood Johnson Foundation's Pursuing Perfection Initiative, our goal is to develop a system of *perfect* depression care—care that is safe, effective, patient-centered, timely, efficient, and equitable. Our initial results are striking, with dramatic improvements in suicide rate and patient satisfaction with care.

#### **REFERENCES:**

1. Coffey CE: The Institute of Medicine's "Quality Chasm" report: implications for ECT care. The Journal of ECT 2003; 19:1–3.

Lecture 24

Saturday, November 1 1:30 p.m.-3:00 p.m.

## MEETING THE PUBLIC MENTAL HEALTH NEEDS OF NEW YORK CITY

Lloyd I. Sederer, M.D., Executive Deputy Commissioner for Mental Hygiene, City of New York, 93 Worth Street, New York, NY 10013

#### **EDUCATIONAL OBJECTIVES:**

To inform the audience about the many roles of the public mental health authority in New York City; educate the audience about the methods for gauging and improving mental health system quality; explain to the audience about public mental health authority's role in mental health disaster preparedness and planning.

#### **SUMMARY:**

This talk will present the Executive Deputy Commissioner's long-term as well as immediate goals and priorities for the N.Y.C. Department of Health and Mental Hygiene's Division of Mental Hygiene. Dr. Sederer will focus on his belief in the importance of data-driven planning and the need for attention to special populations. He will speak in detail about methods for measuring mental health service quality on a system-wide basis. He will also discuss the division's efforts to plan for mental health disaster preparedness and to build community resiliency in the aftermath of the September 11, 2001, terrorist attack in N.Y.C.

#### **REFERENCES:**

- IsHak WW, Burt T, Sederer LI: Outcome Measurement in Psychiatry: A Critical Review. APA Press, Washington D.C., 2002.
- 2. Dickey B, Sederer LI: Improving Mental Health Care: Commitment to Quality. APA Press, Washington, D.C., 2001.

Lecture 25

Saturday, November 1 1:30 p.m.-3:00 p.m.

#### THE BEST KEPT SECRET

Leston L. Havens, M.D., Professor of Psychiatry, Harvard University Medical School, and Cambridge Health Alliance, 1493 Cambridge Street, Cambridge, MA 02139-1047

#### **EDUCATIONAL OBJECTIVES:**

To indicate the centrality of the therapeutic alliance and to detail how it is established.

#### **SUMMARY:**

In short, I am suggesting systematic operations for creating and maintaining effective relationships. The first step of initiating the alliance can, in general, be done quickly. The second, dealing with differences, takes longer but proves even more than is the case with the first step, to constitute a significant part of the treatment and, by extension, of the outcome.

Today many medications act across diagnostic groups. Alliance effects also transcend specific psychotherapy methods. Both may be affecting profound psychopathological processes.

#### **REFERENCES:**

- Havens LL: Approaches to the Mind: Movement of the Psychiatric Schools from Sects toward Science, Boston, Little-Brown, 1973, 1987 (hardback & paperback).
- Havens LL: Participant Observation, New York, Jason Aronson, 1976. Reprinted 1983, 1993 (paperback).
- 3. Havens L: Making Contact: Uses of Language in Psychotherapy. Cambridge, Harvard University Press, 1986 (hardback & paperback).
- 4. Havens L: A Safe Place: Laying The Groundwork of Psychotherapy, Cambridge, Harvard University Press, 1989, 1991 & 1996 (paperbacks).
- 5. Havens L: Coming To Life. Cambridge, Harvard University Press, 1993.
- 6. Havens L: Learning to be Human. Reading, Mass, Addison-Wesley, 1994.
- Sabo, A and Havens, L: The Real World Guide to Psychotherapy Practice. Cambridge, Harvard University Press, 2000.

Lecture 26

Saturday, November 1 3:30 p.m.-5:00 p.m.

## THE PSYCHODYNAMICS OF MEDICATING

Harold I. Eist, M.D., Past President, American Psychiatric Association, Medical Director, Montgomery Child

50 LECTURES

and Family Health Services, Inc., and Clinical Professor of Psychiatry, George Washington University, 10436 Snow Point Drive, Bethesda, MD 20814

#### **EDUCATIONAL OBJECTIVES:**

(1) To define psychodynamics and describe their relevance to effective medicating; (2) to present a clinical model that increases patient active and responsible participation in the medicating process, a cooperation rather than a compliance model; (3) to establish the importance of a respectful doctor/patient relationship as essential to the effectiveness of psychotropic medications, and (4) to establish that high-quality medicating is not possible in the absence of an understanding of psychodynamics and the patients' inner world of being.

#### **SUMMARY:**

Proper medicating is a complex, biopsychosocial process involving close attention to both psychodynamic and biological factors and processes. The "compliance" literature has multiplied geometrically over the past decade, addressing primarily cost issues but also focusing to some extent on quality of care elements. The costs of noncompliance have been estimated to be in the billions of dollars per annum, possibly as high as \$100 billion dollars annually. This lecture will address factors essential to effective sustained medicating, focusing on a number of critical scientific and clinical wisdom issues, including: (1) careful listening; (2) attachment and therapeutic relationship building; (3) compliance vs. cooperation; (4) the doctor/patient relationship; (5) rhythmicity, state, mood, and medication dosages; (6) dosage regimens, and (7) prescription writing as treatment.

#### **REFERENCES:**

- 1. Beitman BD, Blinder BJ, Thase ME, Riba M, Safer DL: Integrating Psychotherapy and Pharmacotherapy. Norton, 2003.
- 2. Suchman AL, Markakis K, Beckman HB, Frankl R: A model of empathic communication in the medical interview, the patient-physician relationship. JAMA 1997; 277(8), 678.
- 3. Communicating With Patients About Their Medications, Sounding Board. NEJM 12(5):1991;1650–1652.

Lecture 27

Sunday, November 2 8:00 a.m.-9:30 a.m.

### IS THERE A PLACE FOR SPIRITUALITY IN THERAPY?

APA's Oskar Pfister Award Lecture

Abraham J. Twerski, M.D., Founder and Medical Director Emeritus, Gateway Rehabilitation Center, Moffett Run Road, Aliquippa, PA 15001

#### **EDUCATIONAL OBJECTIVES:**

Following this presentation, the audience should have an understanding of what comprises spirituality, the relationship of spirituality to religion, the awareness of a human being as body + spirit, the symptomatology of "spirituality deficiency syndrome," and the role of therapist in addressing spirituality issues.

#### **SUMMARY:**

Traditionally, psychotherapists have shied away from addressing spirituality issues, presumably because they see spirituality as synonymous with religion, and the latter is not in the psychotherapeutic domain. However, the identification of spirituality with religion is erroneous.

The human being is a composite creature, comprised of a body and "something else." The body is essentially an animal body, and the distinction of being human is in the "something else." The latter consists of all the traits that are unique to man and absent in animals. Among them are (1) greater intelligence, (2) ability to learn from history, (3) ability to contemplate on goal and purpose of life, (3) ability to volitionally improve oneself, (4) ability to delay gratification, (5) ability to foresee consequences of one's actions, and (5) ability to make moral and ethical decisions in defiance of bodily drives. The sum total of all the traits that are unique to man may be referred to as the *spirit*. Exercising these abilities is *spirituality*.

Failure to provide the spirit with its "essential nutrients" may result in a deficiency syndrome, which may present with psychological symptoms. Therapy that neglects the "spirituality deficiency syndrome" may fall short of success.

#### **REFERENCES:**

- Kurtz E: The Spirituality of Imperfection. Bantam-Doubleday, 1994.
- 2. Twerski A: The Spiritual Self. Twerski, Abraham, Hazelden, 2000.

Lecture 28

Sunday, November 2 10:00 a.m.-11:30 a.m.

#### SELF-REGULATORY CHANGES FOLLOWING PSYCHOLOGICAL TRAUMA AND THE EFFECTS OF SUCCESSFUL TREATMENT

Bessel A. van der Kolk, M.D., Medical Director, The Trauma Center, and Professor of Psychiatry, Boston University School of Medicine, 16 Braddock Park, Boston, MA 02116-5804

LECTURES 51

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this lecture the participant will appreciate an array of subcortical functions disturbed by traumatic experiences; and learn about a range of effective treatment approaches, and their effects on biological parameters.

#### **SUMMARY:**

The human response to psychological trauma is one of the most important public health problems in the world. Traumatic events such as family and social violence, rapes and assaults, disasters, wars, accidents, and predatory violence may temporarily or permanently alter the organism's response to its environment. The imprints of the traumatic experience consist of alterations in basic life regulatory mechanisms, disorganization of a host of psychosomatic functions, and of vague, over-general, fragmented, incomplete, and often disorganized personal narratives.

Exposure to events that overwhelm the organism's coping mechanisms can damage the self-regulatory systems necessary to restore the organism to its previous state. This involves a variety of "filtering" systems in

the CNS that help distinguish relevant from irrelevant stimuli. These involve the biological systems involved in arousal modulation and attention: the sympathetic and parasympathetic nervous systems, heart rate variability, the hypothalamic/pituitary/adrenal axis; various brain regions involved in information processing such as the amygdala, hippocampus, thalamus, anterior cingulate, medial frontal cortex, and dorsolateral prefrontal cortex; and alterations in the immune response.

With the help of videotaped interviews and the presentation of research outcome data, this lecture will present the current status of knowledge regarding these neurobiological alterations, and initial data on how effective therapies for PTSD seem to be able to reverse some of these changes.

#### **REFERENCES:**

- 1. van der Kolk BA: The psychobiology of post traumatic stress, in Textbook of Neurobiology. Edited by Panksepp J. Baltimore, Wiley, 2003.
- van der Kolk BA: The neurobiology of childhood trauma and abuse. Child Adolesc Psychiatric Clin N Am 2003; 12:293–317.

#### CHRONIC FATIGUE SYNDROME

Anthony L. Komaroff, M.D., Harvard Medical School, 10 Shattuck Street, #602, Boston, MA 02115

#### **EDUCATIONAL OBJECTIVES:**

To discuss the epidemiology, biology, diagnosis, treatment and prognosis of chronic fatigue syndrome (CFS). The talk will emphasize, in particular, psychiatric, neuropsychological, sleep, neuroimaging, and neuroendocrine studies in CFS, and will highlight distinctions between CFS and other more common conditions that cause chronic fatigue.

#### **SUMMARY:**

Many people experience unusual states of chronic fatigue, and seek medical care for this condition. Many well-recognized psychiatric and organic conditions cause states of chronic fatigue, with major depressive disorder being one of the more common causes. CFS is a relatively uncommon condition, with a prevalence among U.S. adults of one to four per 1,000. Although CFS is defined exclusively by a combination of symptoms, there are many objective biological abnormalities found more often in CFS than in healthy and disease comparison groups, including abnormalities that emerge from neuropsychological, sleep, neuroimaging, and neuroendocrine studies. There are no diagnostic laboratory tests, and no proven curative treatments. Cognitive-behavioral therapy and gradually increased aerobic exercise seem to offer some relief to many patients. CFS is a chronic illness, with only a minority of patients regaining full health.

#### **REFERENCES:**

- Komaroff AL: Chronic fatigue, in Office Practice of Medicne (4th ed.). Branch WT, Jr. Philadelphia, W.B. Saunders, Inc. 2003, pp. 957–966.
- 2. Komaroff AL: A 56-year-old woman with chronic fatigue syndrome. JAMA 1997;278:1179–1186.

Medical Update 2 Thursday, October 30 1:30 p.m.-3:00 p.m.

## NEW FINDINGS ON THE BENEFITS AND RISKS OF HORMONE REPLACEMENT THERAPY

JoAnn Manson, Dr.P.H., Chief, Division of Preventive Medicine, Brigham and Women's Hospital, and Elizabeth Brigham Professor of Women's Health, Harvard Medical School, 900 Commonwealth Avenue, Third Floor, Boston, MA 02215-1204

#### **EDUCATIONAL OBJECTIVES:**

At the end of the medical update, the participant should be able to (1) understand the rationale for the Women's Health Initiative, the first large-scale primary prevention randomized trial of postmenopausal hormone therapy; (2) discuss the balance of benefits and risks of combination estrogen plus progestin therapy; (3) identify women who are reasonable candidates for short-term therapy and those who are poor candidates for treatment.

#### **SUMMARY:**

Recent findings from randomized clinical trials have dramatically altered our understanding of the benefits and risks of postmenopausal hormone therapy. The decision about whether or not to take postmenopausal hormones is one of the most complex choices a woman faces. Factors to be weighed in this decision include the treatment's benefits and risks as well as the risk factor profile and personal preferences of the woman. The hormone replacement therapy (HRT) option should be discussed with all peri- and post-menopausal women, but treatment is not appropriate for many. New information that affects the balance of benefits and risks of hormone replacement therapy (HRT) becomes available on a nearly continuous basis. The state of knowledge about HRT includes documented benefits (reduction in menopausal symptoms and genitourinary disorders, improvement in bone density) but also potential serious risks (breast cancer, venous thrombosis, stroke, and an early increase in the risk of coronary heart disease). Moreover, there is tremendous uncertainty about the effect of these hormones on cognitive function and quality of life, as well as net effects on total mortality. Recent evidence suggests that, contrary to conventional wisdom, combination estrogen plus progestin may increase the risk of cognitive decline and dementia.

Although several lines of evidence suggest that estrogen may reduce the risk of coronary heart disease (CHD) in women, the recent Heart Estrogen/progestin Replacement Study (HERS trial) Estrogen Replacement Angiographic trial (ERA), Women's Health Initiative (WHI), and other trials cast doubt on this hypothesis. The Women's Health Initiative, a primary prevention trial of HRT, reported a RR of 1.29 (95% CI 1.02-1.63) for CHD after a mean of 5.2 years of estrogen plus progestin. A summary of the results of randomized clinical trials of HRT and CHD is presented in Table 1. The Nurses' Health Study and several other observational studies had suggested a nearly 50% lower risk of CHD among women who currently use HRT compared with nonusers. Observational studies of HRT, however, may have limitations, including potential selection biases and confounding by socioeconomic status, education, access to medical care, and lifestyle factors.

In terms of mechanisms, HRT has been demonstrated in randomized trials to have favorable effects on serum lipid profiles (10% to 15% increases in HDL cholesterol and comparable reductions in LDL cholesterol), endothelial function, prostacyclin production, and blood vessel tone, and may also have antioxidant and other beneficial properties. Despite these favorable effects on "intermediate" markers, HRT has complex actions, including prothrombotic effects in some patients; an adverse effect on hemostatic factors, triglycerides, and inflammatory markers (including C-reactive protein) has been demonstrated in several studies.

Given the increased risk of clinical CHD events with HRT in several randomized trials, it is clear that HRT should not be initiated or continued for the sole purpose of preventing CHD. However, short-term use of HRT (for less than five years) is not linked to an appreciable increase in risk of breast cancer, and may still be a viable option for women with significant hot flashes or other menopausal symptoms. The duration of hormone use must be taken into account, as many studies suggest that the risk of breast cancer increases with longer duration of HRT use (30% to 50% increase with greater than five years of use). The addition of a progestin, commonly given to protect the endometrium, may further increase the breast cancer risk and also attenuates the lipid benefits of estrogen. Recent clinical trials suggest that estrogen plus progestin should not be used long-term for prevention of chronic disease.

Conclusive answers about the balance of benefits and risks of unopposed estrogen will derive from the ongoing Women's Health Initiative. Moreover, other medications, including the selective estrogen receptor modulators (SERMs), new agents for osteoporosis, and lower doses of estrogen, provide additional treatment options for postmenopausal women. The comparative benefits and risks of HRT and one widely used SERM (raloxifene) are presented in Table 4. In combination, the epidemiologic studies and randomized clinical trials will provide important information to help women make informed choices about HRT and alternative options. In the interim, HRT appears to be a wise choice for only a limited subset of postmenopausal women.

#### **REFERENCES:**

- Manson JE, Martin KA: Clinical Practice. Postmenopausal hormone-replacement therapy. N Engl J Med 2001; 345(1):34–40.
- Hulley S, Grady D, Bush T, et al: Randomized trial of estrogen plus progestin for secondary prevention of coronary heart disease in postmenopausal women. Heart and Estrogen/progestin Replacement Study (HERS) Research Group. JAMA 1998;280:605–13.
- 3. Grodstein F, Manson JE, Colditz GA, et al: A prospective, observational study of postmenopausal hormone therapy and primary prevention of cardiovascular disease. Ann Intern Med 2000;133:933–41.

- 4. Writing Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results from the Women's Health Initiative Randomized Controlled Trial. JAMA 2002; 288:321– 333
- Hays J, Ockene J, Brunner R, et al: Effects of estrogen plus progestin on health-related quality of life. N Engl J Med 2003; 348:1839–1854.
- Shumaker SA, Legault C, Rapp SR, et al for the WHIMS Investigators: Estrogen plus progestin and the incidence of dementia and mild cognitive impairment in postmenopausal women. The Women's Health Initiative Memory Study: a randomized controlled trial. JAMA 2003; 289:2651–2662.
- Rapp SR, Espeland MA, Shumaker SA, et al for the WHIMS Investigators: Effect of estrogen plus progestin on global cognitive function in postmenopausal women. The Women's Health Initiative: a randomized controlled trial. JAMA 2003; 289:2663– 2672.

Medical Update 3 Thursday, October 30 3:30 p.m.-5:00 p.m.

#### THE HEALTH RISKS OF OBESITY

Ronald E. Kleinman, M.D., Massachusetts General Hospital, Vincent Burnham, #107, Boston, MA 02115

#### **EDUCATIONAL OBJECTIVES:**

To review the epidemiology, pathogenesis, health consequences, and potentially effective treatments of obesity in childhood.

#### **SUMMARY:**

Obesity beginning in childhood is an increasingly prevalent chronic disorder with very significant immediate and long-term health consequences. The imbalance between energy consumed and energy expended is a result of complex regulatory pathways that govern energy expenditure and appetite. These pathways and the molecular mechanisms that support them are subjects of intense investigation and significant advances have occurred in our understanding of the genetic basis of obesity since the discovery of leptin during the past decade. The current environment is clearly permissive for excessive energy storage. Opportunities for formal exercise and other forms of regular activity are often limited or mitigated by work-saving devices, television viewing, and other forms of sedentary behaviors. In addition, the price of food for most (although not all) in both developing and industrialized nations has diminished over the past 50 years, food is available to more families than in the past, portion sizes of foods have increased, and tremendous sums are spent on advertising high-calorie foods to children. The net result is a threefold increase in the prevalence of children with a body mass index > 95 percentile.

Obesity can obviously develop at any time of life. Those individuals who are obese as adolescents have an extremely high likelihood of being obese adults. The complications that accompany obesity include those related to the physical effects of overweight, such as bone, joint, and breathing disorders; those that are a consequence of the physiologic changes induced by obesity, including coronary vascular disease and diabetes; and the very significant psychosocial consequences that overweight and obese children face. Virtually no treatments for obesity have had significant long-term success. The most effective programs involve prolonged and multidisciplinary behavior modification programs that involve the entire family. Medications have no proven long-term benefit and may be harmful to a growing child. No specific diet by itself has any proven longterm benefit, with the exception of a protein-sparing modified fast that must be done under the supervision of an experienced health care provider. Surgery (intestinal bypass or gastric reduction) has shown longer-term benefit for selected extremely obese adults and may prove beneficial for certain adolescents at the extremes of body weight who are psychosocially intact, have failed traditional approaches, and have suffered significant medical consequences of their obesity.

#### **REFERENCES:**

- Troiano RP, Flegal KM: Overweight children and adolescents: description, epidemiology and demographics. Pediatrics 1998;101:497–504.
- Clement K, Ferre P: Genetics and pathophysiology of obesity. Pediatric Research 2003;53:5:721–725.

Medical Update 4

Friday, October 31 10:00 a.m.-11:30 a.m.

### ALTERNATIVE AND COMPLEMENTARY MEDICINE

Peter M. Wolsko, M.D., M.P.H., Instructor in Medicine, Harvard Medical School, Beth Israel Deaconess Medical Center, and the Harvard Osher Institute for Research and Education in Complementary and Integrative Medicine Therapies, 54 Oakley Road, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

Attendees will be given an update in the field of alternative and complementary medicine, including an overview of the field; review of herb/supplement issues including adverse events and drug interactions; review of major modalities such as acupuncture, chiropractic, massage, and naturopathy, and research results highlighting "pertinent positives" and "pertinent negatives" relevant to psychiatric and non-psychiatric medical conditions.

#### **SUMMARY:**

Attendees will be given an update in the field of alternative and complementary medicine. Included will be a brief overview of the field; review of herb/supplement issues including adverse events and drug interactions; review of major modalities such as acupuncture, chiropractic, massage, and naturopathy; intorduction to legal issues; and research results highlighting "pertinent positives" and "pertinent negatives" relevant to psychiatric and non-psychiatric medical conditions.

#### **REFERENCES:**

- 1. Cohen MH. Eisenberg DM: Potential physician malpractice liability associated with complementary and integrative medical therapies. Annals of Internal Medicine 2002; 136(8):596–603.
- Eisenberg DM, Davis RB, Ettner SL, AppelS, Wilkey S, Van Rompay M, Kessler RC: Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. JAMA 1998; 280(18):1569–75.

#### **POSTER SESSION 1**

#### Posters 1-51

#### PSYCHOPHARMACOLOGY OF SCHIZOPHRENIA

Poster 1

Thursday, October 30 3:00 p.m.-4:30 p.m.

## ZIPRASIDONE VERSUS RISPERIDONE IN SCHIZOPHRENIA: A 52 WEEKS' COMPARISON

Pfizer Inc.

Stephen R. Murray, M.D., Ph.D., Medical Director, Medical Studies, Pfizer Inc., 235 East 42nd Street, New York, NY 10017; Donald E. Addington, M.B.B.S.; Christos Pantelis, M.B.B.S.; Mary Dineen, M.D.; Steven J. Romano, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the findings of the reported eight-week, randomized, double-blind trial and subsequent 44-week, double-blind continuation study comparing the efficacy and tolerability of ziprasidone and risperidone in patients with schizophrenia or schizoaffective disorder.

#### **SUMMARY:**

Objective: To compare the efficacy and tolerability of ziprasidone 40–80 mg BID and risperidone 3–5 mg BID in acute exacerbation of schizophrenia or schizoaffective disorder.

Methods: In an eight-week, randomized, double-blind trial, primary efficacy evaluations were PANSS Total and CGI-S scores; secondary variables included PANSS Negative Subscale score, BPRSd Total and Core scores, and Global Assessment of Functioning (GAF). Primary efficacy analyses were based on evaluable patients (≥14 days of treatment). Completers could enter a 44-week, double-blind continuation study.

Results: On the basis of a predetermined equivalency criterion, evaluable ziprasidone (n=124) and risperidone (n=132) patients demonstrated equivalent efficacy improvements in primary and secondary measurements. Ziprasidone had a significantly lower mean Movement Disorder Burden Score (MDBS) and lower incidences of prolactin elevation and weight gain ≥7%. In the 44-week continuation, ziprasidone (n=59) and risperidone (n=76) groups exhibited comparable, sustained improvement in efficacy variables from baseline of the eightweek study. MDBS and incidences of prolactin elevation and weight gain ≥7% remained lower with ziprasidone.

Conclusion: Patients receiving 52 weeks of doubleblind ziprasidone or risperidone demonstrated comparable symptom improvement; patients on ziprasidone had a lower movement disorder burden and lower incidences of prolactin elevation and clinically significant weight gain.

The research for this Poster was supported by Pfizer Inc.

#### **REFERENCES:**

- Daniel DG, Zimbroff DL, Potkin SG, Reeves KR, Harrigan EP, Lakshminarayanan M, and the Ziprasidone Study Group: Ziprasidone 80 mg/day and 160 mg/day in the acute exacerbation of schizophrenia and schizoffective disorder: a six-week, placebo-controlled trial. Neuropsychopharmacology 1999; 20:491-505.
- Simpson G, Potkin S, Weiden P, O'Sullivan RL, Romano S: Benefits of ziprasidone in stable outpatients with schizophrenia switched from conventional antipsychotics, olanzapine, or risperidone. Presented at the 153<sup>rd</sup> annual meeting of the American Psychiatric Association, May 13–18, 2000; Chicago, Illinois.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 2

Thursday, October 30 3:00 p.m.-4:30 p.m.

## ZIPRASIDONE VERSUS HALOPERIDOL IN ACUTE SCHIZOPHRENIA: SUBJECTIVE TOLERABILITY

Pfizer Inc.

A. George Awad, M.D., Professor Emeritus and Chief of Psychiatry, Institute Medical School, University of Toronto, One Kings College Circle, Toronto, ON, Canada M5S 1A8; Lakshmi N.P. Voruganti, M.D.; Joan A. Mackell, Ph.D.; Cynthia O. Siu, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss reported findings of improved attitudes and feelings toward antipsychotic therapy among patients showing a clinical response to treatment with ziprasidone.

#### **SUMMARY:**

Objective: To assess how subjective tolerability to medication compares in patients taking ziprasidone or haloperidol for acute schizophrenia.

Methods: A six-week, parallel-group, open-label study randomly assigned 567 patients with acute schizophrenia to sequential IM/oral ziprasidone or haloperidol. A 10-question Drug Attitude Inventory (DAI) was administered at baseline, Days 1 to 3 (IM phase), Week

1 (oral phase), and Week 6 or endpoint. Primary outcome was DAI Total score by visit and change from baseline. Additional outcomes were DAI Subjective Positive score, Subjective Total score, and Attitudes/Values score. Factor loading and standardized discriminant coefficients were applied. Inferential analyses were based on main effects ANCOVA.

Results: Patients in the ziprasidone group exhibited statistically significant improvement in subjective tolerability over patients in the haloperidol group as measured by DAI Total score after Week 1 (P<0.01), Subjective Positive score after Week 1 (P<0.01), and Subjective Total scores after IM therapy (P<0.05) and Week 1 (P<0.001).

Conclusions: Patients with acute schizophrenia manifest better feelings about using ziprasidone than haloperidol, especially at treatment outset (IM phase through transition to oral dosing). These findings have implications for better patient management during acute exacerbations, smooth IM to oral transition, and improved compliance with long-term ziprasidone therapy.

This research was supported by Pfizer Inc.

#### **REFERENCES:**

- Awad AG, Hogan TP, Voruganti LN, Heslegrave RJ: Patients' subjective experiences on antipsychotic medications: implications for outcome and quality of life. Int Clin Psychopharmcol 1999; 10(suppl 3):123-132.
- Daniel DG, Weiden PJ, O'Sullivan RL: Improvement in indices of health status following a switch to ziprasidone from conventional and novel antipsychotics. Presented at the 153<sup>rd</sup> annual meeting of the American Psychiatric Association, May 13–18, 2000; Chicago, Illinois.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 3

Thursday, October 30 3:00 p.m.-4:30 p.m.

## META-ANALYSIS CONFIRMS IMPROVED OUTCOME WITH DIVALPROEX EXTENDED-RELEASE

Abbott Laboratories

Franca Centorrino, M.D., Director, Bipolar and Psychotic Disorders, Department of Psychiatry, Harvard Medical School, McLean Hospital, 115 Mill Street, Belmont, MA 02478; Michelle A. Collins, Ph.D., Research Scientist, Neuroscience Studies, Abbott Laboratories, 108 Downing Road, Buffalo Grove, IL 60089; Jeffrey A. Welge, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize which patients might benefit from an extended-release formulation of divalproex, and understand the appropriate method for either converting to or initiating this treatment regimen.

#### **SUMMARY:**

Divalproex sodium is an effective anticonvulsant, anti-manic, and migraine prophylaxis agent. Recently, an extended-release formulation of divalproex became available, which provides prolonged therapeutic serum levels, allowing for once daily dosing. This meta-analysis combined the results of four clinical trials, which evaluated the outcome of converting a total of 108 psychiatric patients from delayed-release to extended-release divalproex (Horne and Cunanan, 2003; Minirth and Neal, 2002; Longo, 2001; Centorrino, et al., 2003). The trials were identified by a review of MEDLINE and psychiatry abstract booklets. Analyses were conducted comparing change in clinical status, rates of reported side effects, and patients' treatment preferences after the conversion. Analyses indicate that the majority of patients exhibited either equal or improved clinical status (37/41, p=0.003) following conversion, and a large proportion reported either similar or improved tolerability (34/41, p=0.006). The majority of patients expressed a preference for extended-release divalproex (82/93). These results demonstrate that extended-release divalproex is equally or more effective than delayed-release divalproex in controlling psychiatric symptoms, and is significantly better tolerated. Although the results of this analysis are limited, they do demonstrate the improved tolerability and likely improved efficacy of extendedrelease divalproex as evaluated by several clinicians in a naturalistic setting.

This research is supported by Abbott Laboratories.

#### **REFERENCES:**

- Horne RL, Cunanan C: Safety and efficacy of switching psychiatric patients from a delayed-release to an extended-release formulation of divalproex sodium.
   J Clin Psychopharmacol 2003; 23(2) 1–6.
- 2. Centorrino F, et al: Open comparison of extendedrelease and standard divalproex during maintenance treatment of bipolar disorder patients. Am J Psychiatry, 2003; in press.

#### TARGET AUDIENCE:

Physicians, nurses, and mental health professionals treating patients with mood instability, siezures, or chronic migraine headaches.

Poster 4

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### LONG-TERM EFFECTS OF ARIPIPRAZOLE ON THE NEGATIVE SYMPTOMS OF SCHIZOPHRENIA

Bristol-Myers Squibb Company

David Crandall, Ph.D., Medical Science Manager, Bristol-Myers Squibb Company, 118 Fells Road, Essex Fells, NJ 07021

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to compare the long-term effects of aripiprazole and haloperidol on the control of negative symptoms associated with schizophrenia.

#### **SUMMARY:**

*Objective:* To compare direct long-term effects of aripiprazole and haloperidol on the control of negative symptoms associated with schizophrenia.

Methods: Changes in PANSS negative subscale scores were examined over the course of a 52-week, multicenter, double-blind clinical trial, which randomized patients with acute relapse of chronic schizophrenia to aripiprazole 30 mg/d (n=861) or haloperidol 10 mg/d (n=433). The direct effect on negative symptoms was estimated using a path analysis approach, by controlling for the effect on positive symptoms, depressive symptoms, and EPS.

Results: The overall mean reduction in PANSS negative score was significantly greater among patients treated with aripiprazole than among those treated with haloperidol (-4.57 vs -3.59, P=0.011). The direct effect on negative symptoms was also greater in the aripiprazole group than in the haloperidol group (P=0.033). Among patients with more pronounced negative symptoms (PANSS negative >24), the mean changes in PANSS negative score from baseline were -6.97 in the aripiprazole group and -5.25 in the haloperidol group (P=0.005). The reduction in negative symptoms following stabilization of acute symptoms was also greater with aripiprazole than with haloperidol (P=0.02).

Conclusion: Aripiprazole was significantly more effective than haloperidol for reduction in negative symptoms during long-term therapy of patients with schizophrenia.

Supported by Bristol-Myers Squibb Company.

#### **REFERENCES:**

1. Tollefson GD, Sanger TM: Negative symptoms: a path analytic approach to a double-blind, placebo-and haloperidol-dontrolled clinical trial with olanzapine. Am J Psych 1997; 154:466–474.

2. King DJ: Drug treatment of the negative symptoms of schizophrenia. Eur Neurpsychopharmacol 1998; 8(1):33–42.

#### TARGET AUDIENCE:

Psychiatrists and other clinicians who treat schizophrenia.

Poster 5

Thursday, October 30 3:00 p.m.-4:30 p.m.

## SUCCESSFUL SWITCHING OF PATIENTS FROM HALOPERIDOL TO QUETIAPINE

AstraZeneca Pharmaceuticals

André de Nayer, M.D., Department of Psychiatry, Hôpital Ste. Thérèse, Rue Trieu Kaisin 134, Montignies/Sambre, Belgium 6061

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the beneficial effects of switching to quetiapine in patients with schizophrenia inadequately responsive to or intolerant of haloperidol.

#### **SUMMARY:**

Introduction: In patients with schizophrenia, inadequate response or intolerance may necessitate switching from one antipsychotic to another. The effect of switching to quetiapine was evaluated in a subgroup of patients from the SPECTRUM trial who had inadequate response to or intolerance of haloperidol (up to 10 mg/day, mean 6.2 mg/day).

Methods: This multicentre, open-label trial comprised a one-week cross-titration period, when quetiapine was increased to 400 mg/day and previous therapies were withdrawn. Quetiapine was then dosed up to 750 mg/day for 11 weeks.

Results: Patients (n=43) received quetiapine at a mean modal dose of 501 mg/day. Significant decreases from baseline in PANSS total (-32.5), positive (-8.0), negative (-8.6), and general psychopathology (-15.7) scores were recorded. 71% and 66% patients had ≥20% and ≥30% improvements, respectively, in PANSS total score. 66% patients had a CGI score ≤3 and 70% demonstrated clinical benefit. Depressive symptoms improved (mean CDSS decrease -5.06). Parkinsonian and akathisia symptoms improved significantly (SAS score -4.8, BAS score -0.8). 18.6% patients withdrew, 4.7% due to AEs.

Conclusions: Patients switched from haloperidol to quetiapine, due to inadequate response or intolerance, demonstrated significant improvements in symptoms of schizophrenia. Quetiapine was well tolerated.

Supported by AstraZeneca Pharmaceuticals, Inc.

#### **REFERENCES:**

- Emsley RA, Raniwalla J, Bailey PJ, Jones AM, on behalf of the PRIZE Study Group: A comparison of the effects of quetiapine ('Seroquel') and haloperidol in schizophrenic patients with a history of and a demonstrated, partial response to conventional antipsychotic treatment. Int Clin Psychopharmacol 2000; 15:121-131.
- 2. Weiden PJ, Aquila R, Dalheim L, Standard JM: Switching antipsychotic medications. J Clin Psychiatry 1997; 58 (Suppl 10):63–72.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 6

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### INTRA-MUSCULAR ZIPRASIDONE: EFFECTIVENESS AND TOLERABILITY IN GENERAL HOSPITAL SETTINGS

Pfizer Inc.

Daniel A. Deutschman, M.D., Assistant Clinical Professor of Psychiatry, Case Western Reserve University, 18051 Jefferson Park Drive, Middleburg Heights, OH 44130; Douglas H. Deutschman, Ph.D., Associate Professor of Biology, San Diego State University, 550 Campanile Drive, PS-150-A, San Diego, CA 92182

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss the authors' review of experience with intramuscular ziprasidone in agitated, potentially violent patients in a general hospital emergency room, intensive care units, and psychiatric and addiction units.

#### **SUMMARY:**

Introduction: Intramuscular ziprasidone is currently indicated for treating acute agitation in patients with schizophrenia; the maximum recommended daily dose is 40 mg. Limited data are available on higher doses and on use in nonpsychiatric settings. We reviewed experience in agitated, potentially violent patients who received IM ziprasidone at dosages up to 80 mg/d in various general hospital settings.

*Methods:* Medical records were analyzed retrospectively capturing dose, demographics, rationale, previous agents, diagnoses, concurrent medications, response, and adverse events.

Results: Fifty-five patients with various diagnoses received IM ziprasidone in an emergency department, intensive care unit, or psychiatric and addition units. Dosages ranged from 10 to 80 mg/d. Patients who did not

respond promptly to initial doses received additional injections, to a maximum of four per day. Some patients had not responded to other IM agents, such as haloperidol and lorazepam. Clinician impression suggested rapid behavioral improvement compared with standard IM and IV treatments. Most patients were calmed within 30 to 45 minutes. No EPS or QTc abnormalities were noted. Clinician acceptance was high. Experience in additional patients will be reported.

Conclusion: IM ziprasidone at standard and high doses is effective and well tolerated in a wide variety of general hospital settings.

Funding source: Pfizer Inc.

#### **REFERENCES:**

- 1. Currier GW, Trenton A: Pharmacological treatment of psychotic agitation. CNS Drugs 2002; 16:219–228.
- Daniel DG, Potkin SG, Reeves KR, Swift RH, Harrigan EP: Intramuscular (IM) ziprasidone 20 mg is effective in reducing acute agitation associated with psychosis: a double-blind, randomized trial. Psychopharmacology 2001; 155:128–134.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 7

Thursday, October 30 3:00 p.m.-4:30 p.m.

## SWITCHING TO ZIPRASIDONE IN CORRECTIONAL INPATIENTS: EFFICACY AND SAFETY

Pfizer Inc.

Suzanne E. Ducate, M.D., Associate Medical Director of Mental Health, University of Connecticut, Community Mental Health Center, 263 Farmington Avenue, Farmington, CT 06030; Michael F. Pondrom, Pharm.D.; Susan Thivierge, PA-C; Hemantkumar S. Patel, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported findings on the efficacy and tolerability of ziprasidone in patients switched to the drug from other oral antipsychotics in a correctional health setting.

#### **SUMMARY:**

Objective: To evaluate efficacy and tolerability of ziprasidone in patients with chronic psychotic disorders in a correctional setting.

Methods: In this eight-week study, 21 randomly selected patients were switched from oral antipsychotics to ziprasidone (20 mg to 80 mg BID), with baseline measurements repeated at follow up. Primary efficacy

assessments were 24-item BPRS and CGI-S. Pretreatment workup included ECG, fasting lipid profile, vital signs, and weight. Measurements were analyzed with paired t tests.

Results: There were no significant changes from baseline in mean BPRS or CGI-S scores, indicating maintained clinical status. Weight decreased by a mean 5.2 lb (range -16 to +6, P<0.001); low-density lipoprotein cholesterol, by 14 mg/dL (range -84 to +24, P<0.05); and total cholesterol, by 20.5 mg/dL (range -76 to +13, P<0.01). Change in mean QTc interval was -2.95 msec (range -47 to +27, P=0.55). Mean QTc decreased in patients previously on typical antipsychotics (-10 msec) or combination typical-atypical agents (-7 msec), but increased 5.6 msec in patients switched from atypical agents.

Conclusion: Patients switched to ziprasidone from other antipsychotics exhibited continued symptom control, with decreased weight and improved lipid profile. Reduction in metabolic comorbidity is a potential advantage and may be clinically significant.

Funding source: Pfizer Inc.

#### **REFERENCES:**

- Daniel DG, Zimbroff DL, Potkin SG, Reeves KR, Harrigan EP, Lakshminarayanan M, and the Ziprasidone Study Group: Ziprasidone 80 mg/day and 160 mg/day in the acute exacerbation of schizophrenia and schizoffective disorder: A 6-week placebo-controlled trial. Neuropsychopharmacology 1999; 20:491-505.
- Simpson G, Potkin S, Weiden P, O'Sullivan RL, Romano S: Benefits of ziprasidone in stable outpatients with schizophrenia switched from conventional antipsychotics, olanzapine or risperidone. Presented at the 153<sup>rd</sup> annual meeting of the American Psychiatric Association, May 13–18, 2000; Chicago, Illinois.

#### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 8

Thursday, October 30 3:00 p.m.-4:30 p.m.

## MIRTAZAPINE VERSUS PAROXETINE IN ELDERLY PATIENTS WITH ANXIOUS DEPRESSION

Organon Inc.

William E. Falk, M.D., Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street, WAC-815, Boston, MA 02114; Maurizio Fava, M.D.; Alan F. Schatzberg, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss the design methods and results of this study and its implications for the clinical use of mirtagapine in elderly patients with anxious depression.

#### **SUMMARY:**

Purpose: Eight-week study of the efficacy and safety of mirtazapine vs. paroxetine in patients ≥65 with anxious MDD.

Methods: Subjects drawn from a larger sample of 255 outpatients ≥65 participating in an eight-week, double blind study comparing the efficacy and safety of mirtazapine (15–45 mg/day) with paroxetine (20–40 mg/day). Subjects met DSM-IV criteria for MDD and had a baseline HAM-D 17 score ≥18 and an MMSE score > lowest 25<sup>th</sup> percentile. Only patients who also met criteria for anxious depression (Ham-D 17 anxiety/somatization Factor I score > 6) were included. Assessments were obtained at baseline and Days 7, 14, 21, 28, 42, and 56.

Results: Mirtazapine-treated patients (n=86) demonstrated comparable baseline demographics to paroxetine-treated patients (n=78). Mirtazapine-treated patients experienced a significantly ( $P \le .05$ ) greater reduction in depressive symptoms than paroxetine-treated patients at Days 7, 14, and 21 as measured by mean Ham-D 17 total score. Remission rates were significantly ( $P \le .05$ ) higher among mirtazapine-treated patients at Day 14 (12.8% vs. 1.3%), but were not significantly different during the subsequent visits. Both treatments appeared to be well-tolerated with fewer discontinuations due to adverse events in the mirtazapine-treated group.

Conclusions: Both mirtazapine and paroxetine were shown to be effective and well-tolerated in elderly MDD patients with anxious depression, although mirtazapine was associated with a more rapid onset of efficacy compared with paroxetine.

This research was supported by funding from Organon Pharmaceuticals USA Inc.

#### **REFERENCES:**

- Schatzberg AF, Kremer CK, Rodrigues HE, Murphy GM: Double-blind, randomized comparison of mirtazapine and paroxetine in elderly depressed patients. AM J Geriatr Psychiatry 2002; 10:541-550.
- Schatzberg AF, Nemeroff CB (eds): Textbook of Psychopharmacology, 2nd Edition. Washington DC: Am Psych Press, 1998.

#### **TARGET AUDIENCE:**

Clinical and research psychiatrists

Poster 9

Thursday, October 30 3:00 p.m.-4:30 p.m.

## COGNITIVE, AFFECTIVE, PRO-SOCIAL IMPROVEMENT AFTER SWITCHING TO ZIPRASIDONE

Pfizer Inc.

Philip D. Harvey, Ph.D., Associate Professor of Psychiatry, Mount Sinai School of Medicine, 1425 Madison Avenue, New York, NY 10029; Antony D. Loebel, M.D.; Cynthia O. Siu, Ph.D.; Steven J. Romano, M.D.; Stephen R. Murray, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant will understand the reported findings on improvement in cognitive impairment, affective symptoms, and social engagement in patients with schizophrenia who were switched to ziprasidone from other antipsychotics due to suboptimal effectiveness or tolerability.

#### **SUMMARY:**

*Purpose:* We studied changes in cognition and affective symptoms, their interrelationships, and possible correlative improvement in social engagement in patients switched to ziprasidone.

Methods: In three six-week, open-label trials, outpatients were switched from conventional antipsychotics (n=108), olanzapine (n=104), or risperidone (n=58), to ziprasidone (40–160 mg/day) due to suboptimal efficacy or intolerability. Assessments included PANSS and a cognitive battery. Relationships between cognition and improvement in affective symptoms were explored using multiple regression and path analysis methods. The potential role of these variables as mediators of prosocial outcome was also assessed.

Results: All three groups improved significantly on a global score derived from factor analysis of the cognitive battery. On PANSS cognitive subscale and anxiety-depression cluster, patients switched from conventionals and risperidone demonstrated significant improvement from baseline (P<0.05 and P<0.001, respectively). All three groups improved significantly on the PANSS prosocial subscale, a measurement of social engagement (P<0.05 after switching from conventionals and olanzapine, and P<0.001 after switching from risperidone). Prosocial symptom improvement was related directly and significantly to changes in cognition (P<0.001) and affective symptoms (P<0.001).

Conclusion: Patients switched to ziprasidone from other antipsychotics demonstrated significant improvement in cognition and affective symptoms, which influenced prosocial outcome.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Davis JM, Chen N: The effects of olanzapine on the 5 dimensions of schizophrenia derived by factor analysis: combined results of North American and international trials. J Clin Psychiatry 2001; 62:757-771.
- Purnine DM, Carey KB, Maisto SA, Carey MP: Assessing positive and negative symptoms in outpatients with schizophrenia and mood disorders. J Nerv Ment Dis 2000; 188:653–661.

#### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 10

Thursday, October 30 3:00 p.m.-4:30 p.m.

## ZIPRASIDONE VERSUS OLANZAPINE IN SCHIZOPHRENIA: SIX-MONTH COGNITIVE DATA

Pfizer Inc.

Philip D. Harvey, Ph.D., Associate Professor of Psychiatry, Mount Sinai School of Medicine, 1425 Madison Avenue, New York, NY 10029; Cynthia O. Siu, Ph.D.; Steven J. Romano, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant will gain further insight into the long-term benefits of ziprasidone and olanzapine on cognitive performance.

#### **SUMMARY:**

Objective: To assess the long-term effects of flexible-doxe ziprasidone and olanzapine on cognitive functioning in patients with schizophrenia/schizoaffective disorder.

*Methods:* A six-month continuation study enrolled 126 patients who responded satisfactorily to ziprasidone or olanzapine in a six-week, double-blind, randomized trial. Attention, memory, executive-functioning, and verbal fluency domains were assessed.

Results: Significant (within group) mean improvements were seen with ziprasidone (n range, 23–33) and olanzapine (n range, 22–35) in all domains. Ziprasidone produced greater improvement vs olanzapine on most variables, particularly, Trail Making Test (TMT) Part A = -32.64 vs -10.17 (effect size [ES], 0.60 vs 0.63; both  $P \le 0.004$ ); RAVLT (sum 1–5) = 11.67 vs. 7.77 (ES, 0.97 vs. 0.70; both P < 0.001); Delayed Recall = 3.58 vs. 2.15 (ES, 1.06 vs 0.72; both P < 0.001); WCST perseverative errors= -9.09 vs -3.68 (ES, 0.66 vs 0.33; P = 0.004 vs P = 0.14); and Letter Fluency = 4.06 vs 3.53 (ES, 0.64 vs 0.36; P < 0.001 vs < P = 0.04). Olanzapine showed greater improvement than ziprasidone on TMT Part B,

Category Fluency, and CPTd'. MANOVA found no significant differences in cognitive performance between groups.

Conclusion: Cognitive performance significantly improved with both agents and was more pronounced with ziprasidone on most tested variables.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Keefe RS, Silva SG, Perkins DO, Lieberman JA: The effects of atypical antipsychotic drugs on neurocognitive impairment in schizophrenia: a review and meta-analysis. Schizophr Bull 1999; 25:201–222.
- 2. Meltzer HY, McGurk SR: The effects of clozapine, risperidone, and olanzapine on cognitive function in schizophrenia. Schizophr Bull 1999; 25:233–255.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 11

Thursday, October 30 3:00 p.m.-4:30 p.m.

## ARIPIPRAZOLE VERSUS PERPHENAZINE IN TREATMENT-RESISTANT SCHIZOPHRENIA

Bristol-Myers Squibb Company

John M. Kane, M.D., Department of Psychiatry, The Zucker Hillside Hospital, North Shore-Long Island Jewish Health System, 75-59 263rd Street, Glen Oaks, NY 11004-1150

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the efficacy and safety of aripiprazole compared with perphenazine in patients with treatment-resistant schizophrenia.

#### **SUMMARY:**

*Objective:* To assess the efficacy and safety of aripiprazole compared with perphenazine in treatment-resistant schizophrenia.

Methods: In a multicenter, double-blind study, eligible patients entered a four- to six-week, open-label, atypical antipsychotic treatment phase (olanzapine or risperidone) to confirm treatment resistance. Patients were then entered into a two- to ten-day, single-blind, placebo washout phase, then randomized to the six-week, double-blind, treatment phase of aripiprazole, 15 or 30 mg/d (n=154) or the typical neuroleptic, perphenazine, 8-64 mg/d (n=146). Assessments of PANSS, CGI, safety, and the quality of life scale (QLS) were done.

Results: Following failure on olanzapine or risperidone, patients treated with either aripiprazole or per-

phenazine showed improvement in PANSS Total (-9.8 and -10.5, respectively), negative and positive subscale scores, and CGI Improvement Scores. Overall, 27% and 25% of patients responded to aripiprazole and perphenazine, respectively, based on CGI-I Score of 1 or 2 or ≥30% decrease in PANSS Total. Aripiprazole-treated patients demonstrated more improvement in the QLS Total Score than perphenazine-treated patients but these differences were not statistically significant. Fewer aripiprazole-treated patients experienced EPS, ECG abnormalities, or elevations in plasma prolactin levels. There were no clinically significant differences in weight.

Conclusions: Aripiprazole and perphenazine produced significant improvement in schizophrenia patients resistant to olanzapine or risperidone.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- 1. Kane JM: Treatment-resistant schizophrenic patients. J Clin Psychiatry 1996; 57 Suppl 9:35–40.
- 2. Kane JM, Honigfeld G, Singer J, Meltzer H: Clozapine for the treatment-resistant schizophrenic. a double-blind comparison with chlorpromazine. Arch Gen Psychiatry 1988; 45:789–796.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 12

Thursday, October 30 3:00 p.m.-4:30 p.m.

## SUCCESSFUL SWITCHING OF PATIENTS FROM OLANZAPINE TO QUETIAPINE

AstraZeneca Pharmaceuticals

Ilkka Larmo, M.D., Senior Ward Psychiatrist, Department of Psychiatry, Aurora Hôpital, Keskinen Terveyskeskus, Auroran Psykiatrinen Osasto 15-3A, Helsingin Kaupunki, Finland 00099

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the beneficial effects of switching to quetiapine in patients with schizophrenia inadequately responsive to or intolerant of olanzapine.

#### **SUMMARY:**

Introduction: In patients with schizophrenia, intolerance or inadequate response to treatment may necessitate a change of antipsychotic therapy. The effect of switching to quetiapine was evaluated in a subgroup of patients from the SPECTRUM trial who had inadequate response to or intolerance of olanzapine.

Methods: This multicenter, open-label trial comprised a one-week cross-titration period, when quetiapine was increased to 400 mg/day and previous therapies withdrawn. Quetiapine was then dosed up to 750 mg/day for 11 weeks.

Results: Patients (n=66) received quetiapine at a mean modal dose of 470 mg/day. Significant decreases from baseline in PANSS total (-15.4), positive (-4.4), negative (-4.8), and general pathology (-6.4) scores were recorded 51% and 38% patients had ≥20% and ≥30% reductions, respectively, in PANSS total scores; 54% patients had improved CGI score and 66% achieved clinical benefit. Depressive symptoms improved significantly (CDSS decrease -2.45), particularly in 34 patients clinically depressed at baseline (CDSS decrease -4.3). Parkinsonian and akathisia symptoms improved significantly (SAS score -1.4, BAS score -0.4) 22.7% patients withdrew, only 3% due to AFs.

Conclusions: Patients with schizophrenia switched to quetiapine, because of a suboptimal response or intolerance to olanzapine, improved on all efficacy measures. Quetiapine was well tolerated.

Funding Source: Astiazeneca Pharmaceuticals, Inc.

#### **REFERENCES:**

- 1. Cutler AJ, Goldstein JM, Tumas JA: Dosing and switching strategies for quetiapine fumarate. Clin Ther 2002; 24:209–222.
- Weiden PJ, Aquila R, Dalheim L, Standard JM: Switching antipsychotic medications. J Clin Psychiatry 1997; 58 (Suppl 10):63-72.

#### **TARGET AUDIENCE:**

Psychiatrists.

Poster 13

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### ORALLY DISINTEGRATING OLANZAPINE AND IMPROVEMENT IN AGITATION AND MEDICATION ADHERENCE IN NON-COMPLIANT PATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

Hong Liu-Seifert, Ph.D., Senior Statistician, Neuroscience Medical Studies, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Angela Hill, Ph.D.; John P. Houston, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to understand the usefulness of Zyprex Zydis in reducing agitation and the relationship between clinical state and medication adherence in acutely ill schizophrenia spectrum patients.

#### **SUMMARY:**

Background: Rapid reduction of agitation and improved medication adherence were assessed in 85 acutely ill noncompliant patients with schizophrenia treated with orally disintegrating olanzapine tablets (Zyprexa Zydis).

Methods: Longitudinal effects of Zyprexa Zydis on agitation were assessed using Positive and Negative Symptom Scale-Excited Component (PANSS-EC). This post-hoc analysis of six-week olanzapine treatment examined medication adherence for correlation with clinical psychopathology ratings. Association between previously-derived PANSS factors and Rating of Medication Influences (ROMI)-compliance and ROMI-non-compliance subscores was investigated using a multiple regression analysis.

Results: Agitation, measured by PANSS-EC, was significantly reduced at one week and beyond (p<.001). Most ROMI improvement occurred within one week of treatment. A significant correlation between PANSS-EC and ROMI-compliance occurred at all time points during active treatment (p<.05). Regarding relative influence of different PANSS domains on compliance, one-week ROMI-compliance correlated most strongly with PANSS-hostility/impulsivity; ROMI-non-compliance, with PANSS-positive.

Conclusion: Zyprexa Zydis rapidly reduced agitation (PANSS-EC) in noncompliant patients with schizophrenia. Effective resolution of acute agitation was associated with greater patient acceptance of medication treatment that may help to establish a more enduring therapeutic alliance. Improvement in comorbid hostility and psychosis contributed to improved treatment attitude.

Source of Funding: Eli Lilly and Company

#### **REFERENCES:**

- Davis JM, Chen N: The effects of olanzapine on the five dimensions of schizophrenia derived by factor analysis: combined results of the North American and international trials. J Clin Psychiatry 2001; 62(10):757-71.
- Weiden P, Rapkin B, Mott T, Zygmunt A, Goldman D, Horvitz-Lennon M, Frances A: Rating of medication influences (ROMI) scale in schizophrenics. Schizophrenia Bulletin 1994; 20:297–310.

#### **TARGET AUDIENCE:**

Health care providers who treat patients with schizophrenia Poster 14

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### OVERVIEW OF ZIPRASIDONE TOLERABILITY IN OLDER PATIENTS

Pfizer Inc.

Antony D. Loebel, M.D., *Medical Director, Pfizer Inc.*, 235 East 42nd Street, 8th Floor, New York, NY 10017; Cynthia O. Siu, Ph.D.; Steven J. Romano, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported data from the ziprasidone clinical database on the general tolerability of ziprasidone in older patients with schizophrenia or schizoaffective disorder and on incidences of adverse events, laboratory abnormalities, and QTc prolongation.

#### **SUMMARY:**

*Objective:* To evaluate the tolerability of ziprasidone in patients ≥55 years.

Methods: The ziprasidone phase 2/3 clinical development program was reviewed for incidences of treatment-related AEs, clinically significant laboratory abnormalities, and QTc prolongation in subgroups of patients aged ≥55 and ≥65 years. Incidences were compared with those for all patients in the database and for patients of all ages treated with other antipsychotics.

Results: Among ziprasidone-treated patients, AEs were comparable for the ≥55 and all-patient populations (49% versus 49.9%). Discontinuations due to treatment-related AEs were comparable for both ziprasidone populations (14.6% versus 13.8%), as were incidences of clinically significant laboratory abnormalities (49% versus 56%). The incidence of moderate-to-marked QTc prolongation was comparable to previous data presented on all patients; no patient ≥55 exhibited QTc ≥500 msec or ≥25% increase over baseline. Similar results were observed in patients ≥65 years. Ziprasidone was associated with lower incidences of EPS, akathisia, and clinically significant laboratory abnormalities than risperidone or haloperidol.

Conclusion: Ziprasidone was well tolerated in older patients with schizophrenia or schizoaffective disorder. The incidence of overall AEs and clinically significant laboratory abnormalities was similar to that of the allpatients population, and comparable to or better than that seen with other antipsychotics.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

1. Gunasekara NS, Spencer CM, Keating GM: Ziprasidone: a review of its use in schizophrenia and schizoaffective disorder. Drugs 2002; 62:1217–1251.

Romano SJ: Cardiovascular safety profile of ziprasidone: review of clinical development data. Presented at the 154<sup>th</sup> annual meeting of the American Psychiatric Association, May 5–10, 2001; New Orleans, Louisiana, USA

#### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 15

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### HIGH-DOSE ZIPRASIDONE IS ASSOCIATED WITH MARGINAL ADDITIONAL OTC INCREASE

Pfizer Inc.

Jeffrey J. Miceli, Ph.D., Senior Associate Director, Central Nervous System Clinical Development, Pfizer Global Research and Development, 50 Pequot Avenue, MS 6025-B-2233, New London, CT 06320; Thomas M. Shiovitz, M.D.; Rachel H. Swift, M.D.; Richard J. Anziano, M.S.; Thomas Tensfldt, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported findings of a pharmacokinetic/pharmacodynamic study demonstrating that ziprasidone's effects on QTc prolongation at 320 mg/day, twice the maximum recommended daily dose, are slightly greater than those observed at a dosage of 160 mg/day.

#### **SUMMARY:**

Objective: To characterize the QTc effects of oral ziprasidone and haloperidol at three steady-state dose levels.

*Methods:* After tapering and washout of existing antipsychotic therapy, subjects with schizophrenia or schizoaffective disorder were randomized to escalating doses of ziprasidone (40, 160, and 320 mg/day) or haloperidol (2.5, 15, and 30 mg/day) administered over 16 days to attain steady-state dose levels. ECGs were collected at baseline (drug-free condition) and during study drug administration on steady-state days 4, 10, and 16, at estimated  $T_{max}$  and one hour before and after. Samples for pharmacokinetic measurements were collected at estimated  $T_{max}$ , and telemetry was performed throughout the high-dose period.

Results: Mean ziprasidone (n=25) concentrations increased ~6-fold across the 40–320 mg/day dosage range, reaching 327 ng/mL at the 320 mg/day dosage level. Mean  $\Delta QTc$  from baseline was 4.5 msec at 40 mg/day, 19.5 msec at 160 mg/day, and 22.5 msec at 320 mg/day. For haloperidol (n=23), mean  $\Delta QTc$  was -1.2, 6.6,

and 7.2 msec at the three respective dose levels. No abnormal telemetry findings or QTc ≥500 msec was observed.

Conclusions: At twice the recommended daily dose, oral ziprasidone showed marginal QTc increase from 160 mg/day, with no cardiovascular symptoms or QTc ≥500 msec.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Glassman AH, Bigger JT Jr: Antipsychotic drugs: prolonged QTc interval, torsade de pointes, and sudden death. Am J Psychiatry 2001; 158:1774–1782.
- Romano S: Cardiovascular safety profile of ziprasidone: review of clinical development data. Presented at the 41st annual meeting of the New Clinical Drugs Evaluation Unit, May 28-31, 2001; Phoenix, Arizona.

#### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 16

Thursday, October 30 3:00 p.m.-4:30 p.m.

# EFFECT OF ZIPRASIDONE DOSING ON DISCONTINUATION IN PATIENTS WITH SCHIZOPHRENIA

Pfizer Inc.

Daniel A. Ollendorf, M.P.H., Vice President, Analytic Services, PharMetrics, Inc., 150 Coolidge Avenue, Watertown, MA 02421; Joan A. Mackell, Ph.D., Director, Outcomes Research, Pfizer Inc., 235 East 42nd Street, New York, NY 10017; James M. Russell, M.D.; Antony D. Loebel, M.D.; Amie T. Joyce, M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand examination of the effects of optimal dosing on medication adherence using retrospective automated data.

#### **SUMMARY:**

Background: Optimal dosing is critical to ensure longterm medication adherence among patients with serious mental illness. We examined the characteristics of patients initiating ziprasidone therapy and the effects of initial dosing on discontinuation, using integrated medical and pharmacy claims data.

Methods: Patients with a diagnosis of schizophrenia and a ziprasidone claim between March 2001 - June 2002 who were continuously enrolled for at least six months before and three months after initiation of ziprasidone were stratified by initial daily dose (40 mg or less

vs. 80 mg or more). The risk of discontinuation was examined during the follow-up period using multiple logistic regression.

Results: The mean age was 36 years (n=921); 58% were female. The prevalence of medical comorbidities was high (31.4% with hypertension, 13.9% with diabetes). A reduced annualized rate of psychiatric hospitalization was observed after initiation of ziprasidone (1.19 vs. 0.79, p<.0001). Compared with doses of 80 mg/day or more, an initial dose of less than or equal to 40 mg/day was associated with a two- to five-fold increased risk of discontinuation in three of four monthly follow-up periods analyzed (p<.05), with a trend toward significance in month 5 (p=.0981).

Summary: Patients initiating ziprasidone therapy have a high degree of medical comorbidity, and an initial dose of at least 80mg/day appears to improve medication adherence.

Supported by an unrestricted grant from Pfizer Inc.

#### **REFERENCES:**

- 1. Citrome L, Volavka J: Optimal dosing of atypical antipsychotics in adults: a review of the current evidence. Harv Rev Psychiatry 2002; 10(5):280–291.
- Daniel DG, Zimbroff DL, Potkin SG, et al: Ziprasidone 80 mg/day and 160 mg/day in the acute exacerbation of schizophrenia and schizoaffective disorder: a 6-week placebo-controlled trial. Neuropsychopharmacol 1999; 20(5):491–505.

#### **TARGET AUDIENCE:**

Clinicians monitoring pharmacologic treatment of patients with schizophrenia.

Poster 17

Thursday, October 30 3:00 p.m.-4:30 p.m.

### ZIPRASIDONE AND FLUOXETINE IN CHRONIC SCHIZOPHRENIA

Yahya Siddiqui, M.D., Sri Siddhartha Medical College, Tumkur, India 572 101; N. Murthy

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate the effectiveness of ziprasidone and fluoxetine combination.

#### **SUMMARY:**

Objective: Ziprasidone, a novel antipsychotic, and fluoxetine, a SSRI, have a unique pharmacologic profile. This study was done to see the combined effect of ziprasidone and fluoxetine in outpatients with prominent negative symptoms of chronic schizophrenia.

Method: One hundred and fifty outpatients with chronic or subchronic schizophrenia (DSM-IV) partici-

pated in this clinical study comparing flexible-dose oral Ziprasidone, 80–160 mg/day with fluoxetine, 20–40 mg/day (N = 150), over 20 weeks. Patients were assessed using the Positive and Negative Syndrome Scale (PANSS), the Clinical Global Impressions-Severity of Illness scale, the Montgomery-Asberg Depression Rating Scale, the Barnes Akathisia Scale, and the Abnormal Involuntary Movement Scale.

Results: Modal doses at endpoint were 100 mg/day for ziprasidone and 30 mg/day for fluoxetine. Improvements in all mean efficacy variables with Ziprasidone and fluoxetine were observed. Significant number of patients were categorized as negative symptom responders (> or = 30% reduction in PANSS negative subscale score). Changes in body weight were negligible. No pattern of laboratory or cardiovascular changes and EPS was observed.

Conclusion: Ziprasidone and fluoxetine, when combined together, are effective in reducing overall psychopathology; Ziprasidone/fluoxetine demonstrated effective treatment of negative symptoms and were better tolerated and appear to offer an effective combination to long-term treatment of chronic schizophrenic patients.

#### **REFERENCES:**

- Spivac B, Alamy SS, Jarskog LF, Shietman BB, Lieberman JA: Ziprasidone alternative for olanzapine-induced hyperglycemia. Am J Psychiatry 2002; 159(9):1606.
- Arato M, O'Connor R, Meltzer HY: A 1-year, doubleblind, placebo-controlled trial of ziprasidone 40, 80 and 160 mg/day in chronic schizophrenia: the Ziprasidone Extended Use in Schizophrenia (ZEUS) study. Int Clin Psychopharmacol 2002; 17(5):207–15.

#### **TARGET AUDIENCE:**

Psychiatrists, Nurse Practitioners, PA

Poster 18

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### OPTIMAL OUTCOMES AMONG PATIENTS WITH SCHIZOPHRENIA TREATED WITH CLOZAPINE

Philip Simkowitz, M.D., Clinical Instructor, Department of Psychiatry, Cambridge Hospital, 322 Concord Avenue, Cambridge, MA 02138; James C. Beck, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the wide range of clinical outcomes among patients treated with atypical antipsychotics, particularly clozapine.

#### **SUMMARY:**

Objective: Characterize the outcomes range in patients with schizophrenia or schizoaffective disorder (SCHIZ) treated with clozapine, focusing on optimal outcomes.

Method: We studied 46 subjects with SCHIZ, taking clozapine (31) or olanzapine (15), outpatients and inpatients. All gave informed consent. We assessed psychopathology using the Positive and Negative Syndrome Scale. We assessed insight using a structured interview. We assessed the inpatients before discharge, close to their baseline.

Results: The distributions of a core summary insight score (INSIGHT) (1 to 5) and average positive symptom score (POSIT) (1 to 7) were clearly bimodal, producing optimal and suboptimal categories with cutoffs of 1 for INSIGHT and 1.5 for POSIT. A combined variable, COMBINE, also showed bimodality. Clozapine subjects were significantly more likely to have optimal insight as well as optimal COMBINE score (<2.5). Among clozapine subjects, 31% and 22% were assigned to the optimal groups for INSIGHT and COMBINE versus 15% and 0% for the olanzapine subjects, respectively.

Conclusions: Clozapine produces a wide range of outcomes values with apparent bimodality, not apparent for olanzapine, suggesting that clozapine may yield a distinct optimal subgroup that can be studied to determine whether it has characteristics that would allow clinicians to predict its membership.

#### **REFERENCES:**

- 1. Peralta V, Cuesta MJ: Psychometric properties of the positive and negative syndrome scale (PANSS) in schizophrenia. Psychiatry Research 1994; 53(1):31–40.
- 2. Pallanti S, Quercioli L, Pazzagli A: Effects of clozapine on awareness of illness and cognition in schizophrenia. Psychiatry Research 1999; 86(3):239–49.

#### **TARGET AUDIENCE:**

Patients, families, and providers of patients with schizophrenia

Poster 19

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### LONG-TERM EFFECTS OF ARIPIPRAZOLE ON AFFECTIVE SYMPTOMS OF SCHIZOPHRENIA

Bristol-Myers Squibb Company

Gwendolyn G. Stockton, Pharm.D., Medical Science Manager, Medical Sciences Studies, Bristol-Myers Squibb Company, 55555 Pine Road, South Bend, IN 46619

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the long-term impact of aripiprazole and haloperidol on the affective symptoms in patients with schizophrenia.

#### **SUMMARY:**

Objective: To compare long-term effects of aripiprazole and haloperidol on the affective symptoms of schizophrenia.

Methods: Data from a 52-week trial comparing aripiprazole with haloperidol for maintenance of response in 1,283 patients with acute exacerbation of chronic schizophrenia were used in the analyses. The affective symptoms were assessed using the PANSS depression item (G6), the depression/anxiety PANSS cluster derived by factor analysis, and the MADRS score.

Results: The improvements in PANSS depression item score and the PANSS depression/anxiety cluster score were greater in the aripiprazole group than in the haloperidol group at week 8. This effect was maintained through week 52; mean treatment difference was 0.14 (P=0.027) for the depression item and 0.52 (P=0.015) for the depression/anxiety cluster. The difference in the depression/anxiety cluster was particularly pronounced among patients in the upper tertile after stratification by baseline scores (treatment difference 1.10, P=0.02). Similar results were obtained for MADRS scores; among patients with pronounced depressive symptoms (MADRS>16), the reductions in MADRS score were 6.0 with aripiprazole and 3.5 with haloperidol (P=0.029).

Conclusion: Long-term therapy with aripiprazole is more effective than haloperidol for reduction of affective symptoms in patients with schizophrenia, as measured by changes in MADRS and relevant PANSS items scores.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- Azorin JM: Long-term treatment of mood disorders in schizophrenia. Acta Psychiatr Scand Suppl 1995; 388:20-23.
- Kikuchi T, Tottori K, Uwahodo Y, Hirose T, Oshiro Y, Morita S: 7-(4-((2,3-Dichlorophenyl)-1-piperazinyl]butyoxy)-3,4-dihydro-2 (1H)-quinolinone (OPC-14597), a new putative antipsychotic drug with both presynaptic and postsynaptic D<sub>2</sub> receptor antagonist activity. J Pharmacol Exp Ther 1995; 274:329.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia. Poster 20

Thursday, October 30 3:00 p.m.-4:30 p.m.

### BROAD EFFECTIVENESS TRIAL WITH ARIPIPRAZOLE

Bristol-Myers Squibb Company

Rajiv Tandon, M.D., Professor of Psychiatry and Director, Schizophrenia Program, University of Michigan Medical Center, 1500 East Medical Center Drive, UH 9C-9150, Ann Arbor, MI 48105-0120

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the efficacy of aripiprazole in a general psychiatric setting.

#### **SUMMARY:**

*Objective:* To demonstrate the overall effectiveness of aripiprazole in a general psychiatric setting.

Methods: A multicenter, open-label study of aripiprazole use was conducted in patients with schizophrenia or schizoaffective disorder for whom a switch or initiation of antipsychotic medication was indicated. Patients were randomized through a centralized system to aripiprazole or physician's choice of antipsychotic for eight weeks in a 4:1 ratio. The initial dose of aripiprazole was 15mg with an option to adjust within 10-30mg/day. The physician's choice of antipsychotic was not intended for direct comparison with aripiprazole and the investigator could choose any single antipsychotic agent that the patient had not previously received. Data on efficacy, safety, tolerability, and dosing were collected. The primary effectiveness measure was the CGI-Improvement scale; response rate was defined as CGH score of 2 (much improved) or 1 (very much improved) at study endpoint. The preference of medication scale (POMS) was also utilized. POMS is a five-point scale to compare a new medication with the prior medication a patient received. POMS was rated by both the patient and the caregiver.

Results: In this study, a total of 1599 patients were randomized to aripiprazole (n=1295) or physician's choice of antipsychotic (n=304). Sixty-five percent of patients in the aripiprazole group completed the eightweek study. The mean aripiprazole dose at endpoint was 19.9mg/day with 47% of patients on the 15mg dose. Approximately 55% of patients in the aripiprazole group responded to treatment (LOCF). Over 50% of aripiprazole-treated patients rated aripiprazole as much better than prior antipsychotic (score of 1) on the patient POMS. Similarly, 41% of caregivers rated aripiprazole as 1 (much better than prior antipsychotic treatment) on the caregiver POMS. The only adverse events reported at > 10% in the aripiprazole group were nausea (14%), and insomnia (20%).

Conclusions: Aripiprazole was effective for the treatment of schizophrenia and schizoaffective disorder in a general psychiatric setting. The majority of patients and caregiver rated aripiprazole as much better than prior antipsychotic treatment. Overall, aripiprazole was safe and well tolerated over the course of 8 weeks of treatment in this patient population.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- 1. Marder, SR et al. Aripiprazole in the treatment of schizophrenia: safety & tolerability in short-term, placebo-controlled trials. Schizophrenia Research 2003; 61:123–136.
- Casey PE, et al: Switching patients to aripiprazole from other antipsychotic agents: a multicenter, randomized study. Psychopharmacology 2003; 166:391–399.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 21

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### REDUCING VIOLENCE RISK IN PERSONS WITH SCHIZOPHRENIA: OLANZAPINE VERSUS RISPERIDONE

Eli Lilly and Company

Marvin S. Swartz, M.D., Professor of Psychiatry, Duke University Medical Center, DUMC-Box 3173, Erwin Road, Durham, NC 27710; Jeffrey W. Swanson, Ph.D., Associate Professor of Psychiatry, Duke University Medical Center, DUMC-Box 3173, Erwin Road, Durham, NC 27710; Richard Van Dorn, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should become familiar with new evidence for: (1) prevalence and risk factors for violence in persons with schizophrenia in community-based treatment, (2) effectiveness of treatment with olanzapine in reducing violent behavior among patients with schizophrenia, (3) role of improved adherence with medication in reducing risk factors for violence.

#### **SUMMARY:**

This study prospectively examined the effectiveness of treatment with olanzapine vs. risperidone in reducing violent behavior among patients with schizophrenia under "usual care" conditions in the community. Participants were 124 adults with schizophrenia-spectrum disorders receiving services in public-sector mental health

systems in North Carolina. Subjects were followed for three years in an observational study with interviews at six-month intervals to assess treatment, clinical outcomes, and violent behavior. Rates of violence were compared over time from periods of first initiation of (or switch to) olanzapine vs. periods following at least one year of treatment with olanzapine. The same analysis was conducted for subjects treated with risperidone. The study found that remaining on olanzapine for one year or more significantly lowered violence risk compared with first initiation period. No significant change in violence risk was found for subjects remaining on risperidone for one year or more. These results were obtained using multivariable time series analysis controlling for salient demographic and clinical covariates. Adherence with prescribed medication was found to mediate the association between olanzapine treatment and reduced violent behavior.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Swanson JW, Swartz MS, Elbogen E: Effectiveness of atypical antipsychotic medications in reducing violent behavior among persons with schizophrenia in community-based treatment. Schizophrenia Bulletin, in press.
- Gureje O, Miles W, Keks N, et al: Olanzapine vs risperidone in the management of schizophrenia: a randomized double-blind trial in Australia and New Zealand. Schizophrenia Research, in press.

#### **TARGET AUDIENCE:**

psychiatrists

Poster 22

Thursday, October 30 3:00 p.m.-4:30 p.m.

### SUCCESSFUL SWITCHING OF PATIENTS FROM RISPERIDONE TO QUETIAPINE

AstraZeneca Pharmaceuticals

Elmar Windhager, M.D., Psychiatrische Klinik Wels, Linzer Street 89, Nels, Austria A 4600

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the beneficial effects of switching to quetiapine in patients with schizophrenia inadequately responsive to or intolerant of risperidone.

#### **SUMMARY:**

Introduction: Intolerance or inadequate response to treatment in patients with schizophrenia often necessitates a change of antipsychotic therapy. The effect of switching to quetiapine was evaluated in a subgroup of patients from the SPECTRUM trial who had inadequate response to or intolerance of risperidone.

Methods: This multicenter, open-label trial comprised a one-week cross-titration period (quetiapine increased to 400 mg/day and previous therapies withdrawn). Quetiapine was then dosed up to 750 mg/day for 11 weeks.

Results: Patients (n=55) received quetiapine at a mean modal dose of 483 mg/day (67.3% patients completed study). Significant decreases from baseline in PANSS total (-18.5), positive (-2.9), negative (-5.8), and general psychopathology (-9.4) scores were recorded. 63% and 40% patients had  $\geq$ 20% and  $\geq$ 30% improvements, respectively, in PANSS total score. 65% patients had a CGI score of  $\leq$ 3 and 64% achieved clinical benefit. Depressive symptoms decreased significantly (CDSS score -2.88), particularly in 26 patients clinically depressed at baseline (-5.5). Parkinsonism and akathisia improved significantly (SAS score -2.8, BAS score -0.5). 9.1% patients withdrew due to AEs.

Conclusions: Patients switched to quetiapine after inadequate response or intolerance to risperidone demonstrated significant improvement in schizophrenia and associated symptoms. Quetiapine was well tolerated.

Funding Source: CestraZeneca Pharmaceuticals, Inc.

#### **REFERENCES:**

- 1. Cutler AJ, Goldstein JM, Tumas JA: Dosing and switching strategies for quetiapine fumarate. Clin Ther 2002; 24:209–222.
- 2. Weiden PJ, Aquila R, Dalheun L, Scandarri JM: Switching antipsychotic medications. J Clin Psychiatry 1997; 58 (Suppl 10):63–72.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 23

Thursday, October 30 3:00 p.m.-4:30 p.m.

# DOSING OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS FOR INPATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

Benjamin Gutiérrez, Ph.D., Senior Director, Pharmaceutical Research, Premier HealthCare, Inc., 2320 Cascade Point Boulevard, Charlotte, NC 28266; Zhongyun Zhao, Ph.D., Research Scientist, Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; Peter Feng Wang, M.D., Ph.D.; Barbara Gaylord, M.B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should be able to recognize current dosing strategies

and understand relative benefit and risk of high-dose usage across major atypical antipsychotics.

#### **SUMMARY:**

Objective: To systematically examine overall atypical antipsychotic dosing; extent, outcomes, and characteristics of patients receiving high-dose therapy, and dosing trends over three years.

Methods: Pharmacological therapy of about 33,000 inpatients with schizophrenia discharged from 01/1999 to 09/2001 was assessed using Premier's Perspective<sup>TM</sup> database, the largest U.S. hospital drug utilization database. Several dosing measures including average daily dose (ADD), starting dose, days to maximum dose, and outcomes variables (length of therapy, switch, and use of EPS drugs) were examined.

Results: From 1999 to 2001, quetiapine ADD increased 25.7% (from 261.9 to 329.2mg/d). Olanzapine and risperidone ADD increased slightly, from 16.8 to 17.8mg/d and from 4.9 to 5.3mg/d, respectively. Prevalence of high-dose prescribing was 38.2% for olanzapine (>20mg/d), 17.9% for quetiapine (>750mg/d), and 26.0% for risperidone (>8mg/d). Young age, white race, "treated by psychiatrists," and "located in northeast" predicted high-dose usage. High-dose use was associated with less switch and longer therapy. Only risperidone high-dose use was associated with increased EPS drug usage (OR=1.71, 95%CI=1.56–1.88). Olanzapine had the shortest time to maximum dose (<2 days) among atypical antipsychotics.

Conclusions: High-dose atypical antipsychotics were commonly prescribed for inpatients with schizophrenia. Effectiveness and safety issues relating to high-dose use vary across atypical antipsychotics.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Citrome L, Volavka J: Optimal dosing of atypical antipsychotics in adults: A review of the current evidence. Harvard Rev Psychiatry 2002; 10:280–291.
- Luchins DL, Klass D, Hanrahan P, Malan R, Harris J: Alteration in the recommended dosing schedule for risperidone. Am J Psychiatry 1998; 155:365–366.

Poster 24

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### ATYPICAL ANTIPSYCHOTIC TREATMENT ADHERENCE AND PERSISTENCE IN A STATE MEDICAID PROGRAM

Eli Lilly and Company

Zhongyun Zhao, Ph.D., Research Scientist, Outcomes Research, Eli Lilly and Company, Lilly Corporate Cen-

ter, DC-4025, Indianapolis, IN 46285; Robert M. Damler, F.S.A., Health Outcomes Affairs, Eli Lilly and Company, and Consultant, Milliman, USA, 111 Monument Circle, Suite 601, Indianapolis, IN 46204-5128; E. Anne Jackson, F.S.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should gain a better understanding of the differences in adherence and persistence among atypical antipsychotics in the treatment of schizophrenia.

#### **SUMMARY:**

Objectives: To assess one-year medication adherence and persistence among schizophrenia clients who initiated therapy with olanzapine, quetiapine or risperidone.

Methods: Indiana Medicaid Program enrollees were included in this analysis if they were diagnosed with schizophrenia (ICD9-295); initiated olanzapine (n=711), quetiapine (n=292) or risperidone (n=602) between 1/1/99 and 12/31/00; had not received the three atypicals in the year prior initiation; and non-institutionalized and continuously enrolled one year prior and one year post the initiation. Descriptive and multiple analyses were used to compare olanzapine, quetiapine, and risperidone groups on three outcome measures: adherence rates (percent days of medication possession); persistence (continuous treatment days); and the likelihood of switching/augmenting the other medications of interest, by controlling for demographics, comorbidities, and prior medication use patterns.

Results: Individuals initiated on olanzapine had a statistically significantly higher adherence rate (59.1%) than those receiving quetiapine (52.0%, p<0.007) or risperidone (54.4%, p<0.037), and a significantly longer persistence (153 days) than those treated with quetiapine (135 days, p<0.001) or risperidone (140 days, p<0.001). Olanzapine patients also were less likely to switch and/or augment (17.6%) than quetiapine patients (26.0%, p<0.032). Adherence, persistence, and likelihood of switch/augmentation didn't significantly differ between patients initiated on quetiapine and risperidone.

Conclusion: Compared with quetiapine or risperidone, olanzapine was associated with better adherence and persistence among individuals with schizophrenia. Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Santaflasci B, Messori A: Clinical trial response and dropout rates with olanzapine versus risperidone. The Annals of Pharmacotherapy 2003; 37:xxx.
- 2. Zhu B, Ascher-Svanum H, Faries D, Gibson PJ, Ernest F, Opolka JL, Swartz M, Swanson J: Differences among antipsychotics in the time to all-cause drug discontinuation: Results from a longitudinal natural-

istic study of schizophrenia. 2003, APA annual meeting, San Francisco, CA. 17–22.

Poster 25

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### COMPARISON OF OLANZAPINE VERSUS QUETIAPINE IN THE TREATMENT OF HOSPITALIZED PATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

Peter Feng Wang, M.D., Ph.D., Senior Consultant, Pharmaceutical Research, Premier HealthCare, Inc., 2320 Cascade Point Boulevard, Charlotte, NC 28266; Zhongyun Zhao, Ph.D., Research Scientist, Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should be able to recognize the relative cost and effectiveness of olanzapine versus quetiapine in the treatment of inpatients with schizophrenia.

#### **SUMMARY:**

Objective: To compare pharmacotherapy patterns and treatment outcomes for olanzapine- versus quetiapine-treated hospitalized patients with schizophrenia.

Methods: Hospitalized olanzapine- and quetiapine-treated patients discharged with schizophrenia (ICD9: 295.xx) between 01/1999 and 09/2001 were identified using Premier's Perspective<sup>TM</sup> database, the largest U.S. hospital drug utilization database. Outcome measures include use of other antipsychotics, mood stabilizers, antidepressants, anxiolytics, and hypnotics; length of stay (LOS) and total treatment costs were analyzed by regressions, controlling diagnoses, illness severity, and patient and institution characteristics.

Results: Of 9,433 patients (54.8% male, mean age 41.5 years), 6,699 were olanzapine-treated and 2,734 quetiapine-treated. After adjusting for confounding factors, olanzapine-treated patients used fewer psychotropic agents (-0.36, p<0.0001) and were less likely to switch to or augment with other atypical antipsychotics (odds ratio (OR)=0.71, 95% confidence interval (CI)= 0.62–0.81). Olanzapine-treated patients were less likely to be treated with typical antipsychotics (OR=0.77, CI= 0.70–0.85), mood-stabilizers (OR=0.84, CI=0.77–0.93), anxiolytics (OR=0.67, CI=0.60-0.74), or anti-Parkinsonian agents (OR=0.87, CI=0.79-0.96). There was no between-group difference in antidepressant or hypnotic use. Total costs for olanzapine-treated patients were lower (-\$678, p<0.0001) as the result of shorter LOS (-11.4%, p<0.0001).

Conclusions: Compared to quetiapine, olanzapine treatment for hospitalized patients with schizophrenia was associated with more favorable pharmacotherapy patterns, shorter LOS, and lower costs.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- Crown WH, Neslusan C, Russo PA, Holzer S, Ozminkowski R, Croghan T: Hospitalization and total medical costs for privately insured persons with schizophrenia. Administration & Policy in Mental Health 2001; 28(5):335-51.
- Carrasco JL, Gutierrez M, Gomez JC, Escobar R, Alvarez E, Canas F, Bobes J, Gascon J, Gibert J: Treatment of severely psychotic inpatients with schizophrenia: olanzapine versus other antipsychotic drugs. International Clin Psychopharmacology 2002; 17:287–295.

Poster 26

Thursday, October 30 3:00 p.m.-4:30 p.m.

### POLYPHARMACOTHERAPY OF INPATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

Zhongyun Zhao, Ph.D., Research Scientist, Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; Peter Feng Wang, M.D., Ph.D., Senior Consultant, Pharmaceutical Research, Premier HealthCare, Inc., 2320 Cascade Point Boulevard, Charlotte, NC 28266; Benjamin Gutiérrez, Ph.D.; Barbara Gaylord, M.B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should gain a better understanding how polypharmacotherapy is prescribed and identify factors associated with it for inpatients with schizophrenia.

#### **SUMMARY:**

Objective: To examine recent pharmacologic treatment patterns for hospitalized schizophrenia patients.

Methods: Premier's Perspective™ database, the largest U.S. hospital drug utilization database, was used to identify hospitalized schizophrenia patients discharged between 01/1999 and 09/2001. Treatment regimens for five classes of psychotropics were analyzed. Regressions examined relationships between polypharmacy patterns and diagnoses, illness severity, and patient and institution characteristics.

Results: Of 42,233 patients (55% male, mean age 42 years), 94.9% received antipsychotics; 74.4% atypicals, most commonly olanzapine (46.5%). Mood stabilizers were used by 40.9% of patients, antidepressants by

47.6%, anxiolytics by 66.8%, and hypnotics by 23.4%. Only 7.9% of patients received monotherapy. On average, patients received 3.67 psychotropics; 74.2% received ≥3 and 27.4% received ≥5 psychotropics. Most common regimens were antipsychotic and anxiolytic combinations (13.6%); this combination plus either antidepressants (12.2%), mood stabilizers (10.5%), or both (9.9%); and antipsychotics alone (9.6%). Greater severity, female, paranoid or schizoaffective diagnoses, nonteaching- and for-profit-hospitals were associated with increased polypharmacy use. Patients in public programs (Medicaid/Medicare) received less atypical antipsychotics but more polypharmacy compared with those in managed care and commercial programs. Atypical antipsychotic use increased and lithium use decreased from 1999-2001.

Conclusions: Polypharmacy is common among hospitalized schizophrenia patients. Patient and institution characteristics influenced treatment.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Stahl SM: Antipsychotic polypharmacy, part 1: therapeutic option or dirty little secret? J Clin Psychiatry 1999; 60:425–426.
- 2. Rittmannsberger H, Meise U, Schauflinger K, Horvath E, Donat H: Polypharmacy in psychiatric treatment. Patterns of psychotropic drug use in Austrian psychiatric clinics. Eur Psychiatry 1999; 14:33–40.

Poster 27

Thursday, October 30 3:00 p.m.-4:30 p.m.

### IMPAIRED GLUCOSE REGULATION IN PATIENTS WITH SCHIZOPHRENIA

Michael B. Sheikman, M.D., Ph.D., Department of Psychiatry, University of Massachusetts, Center for Mental Health Research at Worcester, P.O. Box 528, Shrewsbury, MA 01545-0528

#### **SUMMARY:**

Accumulating evidence in recent literature suggests that the prevalence of diabetes mellitus (DM) and weight gain in patients with schizophrenia is greater than expected in the general population and the hospitalized population is particularly at a greater risk. Some antipsychotic medications further increase the chance of developing hyperglycemia, along with weight gain that may cause a long-term medical morbidity. Hyperglycemia is not dose dependent and is reversible on cessation of treatment with clozapine or olanzapine. The mechanisms underlying this glucose dysregulation are not fully understood. It occurs with most atypical antipsychotic drugs, albeit at different degrees. According to the literature, clozapine and olanzapine are more likely to cause

these effects, while ziprazadone is least likely. In our study the incidence of DM in a group of hospitalized patients with scizophrenia treated with clozapine was found to be two of 38 (5.3%). Similarly, three of 42 patients (7.1%) with scizophrenia who were receiving olanzapine and three of 35 patients (8.6%) with schizophrenia receiving risperidone were also diagnosed with DM. This is higher than what is to be expected in the general population.

#### **REFERENCES:**

- Kornegay CJ, Vasilakis-Scaramozza C, Jick H: Incident diabetes associated with antipsychotic use in the United Kingdom. General practice research database. The Journal of Clinical Psychiatry 2002; 63:750–762.
- 2. Lindenmayer JP, Nathan AM, Smith RC: Hyperglycemia associated with the use of atypical antipsychotics. The Journal of Clinical Psychiatry 2001: 62. [Supplement 231]:30–38.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 28

Thursday, October 30 3:00 p.m.-4:30 p.m.

### COST OF USE PATTERNS FOR ATYPICAL ANTIPSYCHOTIC MEDICATIONS BY RACE

Janssen Pharmaceutica

David A. Sclar, Ph.D., Professor of Health Policy and Administration, Department of Pharmacology, Washington State University, P.O. Box 646510, Pullman, WA 99164-6510; Linda M. Robison, M.S.P.H.; Tracy L. Skaer, Pharm.D.; John S. Markowitz, Pharm.D.; C. Lindsay DeVane, Pharm.D.; W. Michael Dickson, Ph.D., Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the treatment patterns associated with the use of antipsychotic pharmacotherapy for the treatment of schizophrenia by race, (2) recognize the cost pattern associated with the use pattern for antipsychotic pharmacotherapy for the treatment of schizophrenia by race, (3) optimize the selection of antipsychotic pharmacotherapy for the treatment of schizophrenia.

#### **SUMMARY:**

Purpose: To discern the cost of observed pharmacologic treatment patterns for white and nonwhite Medicaid beneficiaries in South Carolina diagnosed with schizophrenia and prescribed an atypical antipsychotic.

Methods: Data were abstracted for the time frame 1995 through 2000. Patient-level records contained information six months prior to, and 12 months post-initiation of antipsychotic pharmacotherapy (n=11,138; white n=4,809; nonwhite n=6,329). Logistic regression was used to derive adjusted odds-ratios and 95% CIs for the likelihood of switching to another antipsychotic, augmenting with another antipsychotic, or both. General linear modeling was used to generate adjusted least square means [± SE] for 12 month post-period expenditures in total, and by service areas, across the treatment pattern.

Results: Use of risperidone resulted in a significantly lower probability of switching, augmentation, or both compared with clozapine, olanzapine, or quetiapine ( $p \le 0.05$ ) among whites and nonwhites. Twelve-month post-period expenditures in total for whites and nonwhites respectively were: No switch or augmentation \$2,025.38  $\pm$  42.79; \$2,196.14  $\pm$  40.74. Switch \$2,084.64  $\pm$  107.55; \$2,723.64  $\pm$  112.24. Augment \$2,652.21  $\pm$  270.73; 3,851.57  $\pm$  264.52. Both \$4,032.98  $\pm$  92.93; \$5,152.17  $\pm$  103.38. All 12 month post-period totals were significantly different ( $p \le 0.05$ ) within race.

Conclusion: Among white and nonwhite recipients of atypical antipsychotics the need for switching, augmentation, or both, resulted in significantly increased health service expenditures.

Source of funding: Janssen Pharmaceutica.

#### **REFERENCES:**

- 1. Chow JC, Jaffee K, Snowden L: Racial/ethnic disparities in the use of mental health services in poverty areas. Am J Public Health 2003; 93(5):792–797.
- 2. Berg MJ: Antipsychotic medications and ethnicity. J Gend Specif Med 1998; 1(2):16-17.

#### **TARGET AUDIENCE:**

Psychiatrists and stakeholders in public policy.

Poster 29

Thursday, October 30 3:00 p.m.-4:30 p.m.

### THE EFFICACY OF ARIPIPRAZOLE IN PATIENTS WITH SCHIZOAFFECTIVE DISORDER

Bristol-Myers Squibb Company

John Shepski, Pharm.D., BCPP, Medical Science Manager, Neuroscience Studies, Bristol-Myers Squibb Company, 4516 North Kenton Avenue, Chicago, IL 60630

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the role of aripiprazole in the treatment of patients with schizoaffective disorder.

#### **SUMMARY:**

Objective: To examine the efficacy of aripiprazole for treatment of patients with schizoaffective disorder.

Methods: The present analysis was performed on data from a subsample of patients with schizoaffective disorder who participated in two four-week, multicenter, double-blind studies comparing aripiprazole (n=117) with placebo (n = 54). Daily doses of aripiprazole ranged from 15 mg/d to 30 mg/d.

Results: The mean reduction in PANSS total score was significantly greater among patients treated with aripiprazole than among those randomized to placebo (-12.5 vs - 2.3, P = 0.016). These reductions were similar to those observed for patients with schizophrenia enrolled in the two trials. Reduction in PANSS positive score among patients with schizoaffective disorder was also significantly greater with aripiprazole than with placebo (-3.6 vs - 0.7, P = 0.017). The changes in Simpson Angus, Barnes Akathisia, and Abnormal Involuntary Movement scales scores in this patient population were comparable to those with placebo and the overall incidence of adverse events was similar in the two treatment groups.

Conclusion: In four-week trials, aripiprazole was effective, safe, and well tolerated for treatment of symptoms in patients with acute exacerbation of schizoaffective disorder.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- Kane JM, Carson WH, Saha AR, McQuade RD, Ingenito GC, Zimbroff DL, Ali MW: Efficacy and safety of aripiprazole and haloperidol versus placebo in patients with schizophrenia and schizoaffective disorder. J Clin Psychiatry 2002; 63:763-771.
- Burris KD, Molski TF, Xu C, Ryan E, Tottori K, Kikuchi T, Yocca FD, Molinoff PB: Aripiprazole, a novel antipsychotic, is a high affinity partial agonist at human dopamine D<sub>2</sub> receptors. J Pharmacol Exp Ther 2002; 302:381–389.

#### TARGET AUDIENCE:

Psychiatrists and other clinicians who treat schizophrenia.

Poster 30

Thursday, October 30 3:00 p.m.-4:30 p.m.

MEDICATION ADHERENCE AND LONG-TERM OUTCOMES IN THE TREATMENT OF SCHIZOPHRENIA: RESULTS FROM A THREE-YEAR OBSERVATIONAL STUDY

Eli Lilly and Company

Haya Ascher-Svanum, Ph.D., Research Scientist, Outcomes Research Studies, Eli Lilly and Company, One

Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Douglas Faries, Ph.D.; P. Joseph Gibson, Ph.D.; Baojin Zhu, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the importance of adherence to antipsychotic medication in the long-term care of schizophrenia patients.

#### **SUMMARY:**

Introduction/Objectives: Poor adherence to antipsychotic medication is associated with increased rates of relapse and psychiatric hospitalizations and remains a barrier to improved outcomes for many schizophrenia patients. The objective of this study was to assess the relationship between medication adherence and long-term functional, quality of life, and core symptom outcomes among schizophrenia patients.

Methods: Analyses included 1,677 patients from the Schizophrenia Care and Assessment Program, a three-year, prospective, observational study in the U.S. The relationship between adherence (measured by the medication possession ratio) during the first year of the study and outcomes over the following two-year period was analyzed using repeated measures models.

Results: Greater adherence during the first year was associated with improved outcomes during the following two years, including fewer legal problems and hospitalizations, as well as improved depressive symptoms, interpersonal relationships, overall mental health, and life satisfaction. Improvements on schizophrenia symptom measures, such as the PANSS, were not statistically related to medication adherence.

Conclusions: Adherence to antipsychotic medication was associated with fewer legal problems and hospitalizations, as well as improved depressive symptoms, interpersonal relationships, overall mental health, and life satisfaction during the following two years. Findings highlight the importance of adherence to antipsychotic medication in the long-term care of schizophrenia patients.

This research is supported by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Zhao Z: A retrospective economic evaluation of olanzapine versus risperidone in the treatment of schizophrenia. Managed Care Interface 2002; 15:75–81.
- 2. Zhao Z, Tunis SL, Lage M: Medication treatment patterns following initiation on olanzapine versus risperidone. Clin Drug Invest 2002; 22:741–49.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups.

Poster 31

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### POLYPHARMACY WITH ATYPICAL ANTIPSYCHOTIC MEDICATIONS: A COMPARISON OF PATIENTS TREATED WITH OLANZAPINE OR QUETIAPINE FOR SCHIZOPHRENIA

Eli Lilly and Company

Haya Ascher-Svanum, Ph.D., Research Scientist, Outcomes Research Studies, Eli Lilly and Company, One Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Douglas Faries, Ph.D.; Hsiao-Yun Hsu; Baojin Zhu, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to realize that atypical antipsychotics significantly differ in the prevalence of antipsychotic polypharmacy.

#### **SUMMARY:**

Objective: To compare schizophrenia patients who were treated with olanzapine or quetiapine on the utilization rates and duration on polypharmacy with other atypical antipsychotics.

Methods: Participants were new initiators on olanzapine (N=390) or quetiapine (N=133) in the Schizophrenia Care and Assessment Program (SCAP), a longitudinal, observational study of schizophrenia in the U.S. Outcome measures were (1) percent of patients with polypharmacy, defined as concurrent use of the target drug and at least one other atypical antipsychotic, (2) the total number of polypharmacy days, and (3) the ratio of polypharmacy days to the total number of days on the target drug.

Results: Compared with olanzapine-treated patients, those on quetiapine (1) were twice as likely to receive polypharmacy (75.2% vs. 36.7%, respectively, p<0.001), (2) were prescribed polypharmacy for twice the total number of days (84.5 days vs. 38.3 days, respectively, p<0.001), and (3) received polypharmacy for 39.5% of the time while on quetiapine, as compared with 16.1% of the time when treated with olanzapine (p<0.001).

Conclusions: Compared with olanzapine-treated patients, those on quetiapine were twice as likely to be prescribed one or more atypical antipsychotics. Quetiapine-treated patients were prescribed polypharmacy for a longer duration and for a substantial proportion of the total time on the target drug.

This research is supported by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Stahl SM: Antipsychotic polypharmacy, part I: therapeutic option or dirty little secret? [Brainstorms] J Clin Psychiatry 1999; 60:425–426.
- Duckworth K, Hanson A: Using a clinical and evidence-based strategy to preserve access to psychiatric medications. Psychiatric Services 2002; 53:1231– 1232.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups.

Poster 32

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### DIFFERENCES AMONG ANTIPSYCHOTIC MEDICATIONS IN THE TIME TO ALL-CAUSE DRUG DISCONTINUATION: RESULTS FROM A LONGITUDINAL, NATURALISTIC STUDY OF SCHIZOPHRENIA

Eli Lilly and Company

Baojin Zhu, Ph.D., Statistical Sciences, Health Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; Haya Ascher-Svanum, Ph.D., Research Scientist, Outcomes Research Studies, Eli Lilly and Company, One Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Douglas Faries, Ph.D.; P. Joseph Gibson, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that antipsychotics were found to significantly differ in the time to all-cause discontinuation such that olanzapine-treated patients evidenced the longest time to discontinuation, followed by risperidone, quetiapine, or haloperidol.

#### **SUMMARY:**

Background: Time to treatment discontinuation for any cause was previously identified as an important outcome parameter in the medication management of schizophrenia. This study compared four antipsychotics—olanzapine, risperidone, questiapine, and haloperidol—on the time to all-cause discontinuation.

Methods: Participants (N=964) were new initiators of olanzapine, risperidone, quetiapine, or haloperidol in the Schizophrenia Care and Assessment Program (SCAP), a three-year longitudinal, observational study of schizophrenia. Time to all-cause discontinuation of the antipsychotic during the one year following its initiation was measured by (1) the total number of days on the antipsychotic, and (2) the number of days of continuous treat-

ment up to the first gap of > 14 days. Analyses employed Generalized Linear Model, survival analysis, and Cox proportional hazard model. Results were further confirmed using a mixed model approach.

Results: Olanzapine-treated patients were on their medication significantly longer than patients receiving risperidone, quetiapine, or haloperidol. Compared with olanzapine, the likelihood of discontinuation was 26%, 54%, and 158% greater among patients receiving risperidone, quetiapine, or haloperidol, respectively.

Conclusion: Antipsychotics were found to significantly differ in the time to all-cause discontinuation, such that olanzapine-treated patients evidenced the longest time to discontinuation, followed by risperidone, quetiapine, or haloperidol.

This research is supported by Eli Lilly and Company.

#### **REFERENCES:**

- Valenstein M, Copeland LA, Blow FC, et al: Pharmacy data identify poorly adherent patients with schizophrenia at increased risk for admission. Medical Care 2002; 40:630–639.
- 2. Robinson DG, Woerner MG, Alvir JMJ, et al: Predictors of medication discontinuation by patients with first-episode schizophrenia and schizoaffective disorder. Schizophrenia Research 2002; 57(2–3):209–219.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups

Poster 33

Thursday, October 30 3:00 p.m.-4:30 p.m.

# A COMPARISON OF OLANZAPINE AND RISPERIDONE ON THE RISK OF PSYCHIATRIC HOSPITALIZATION IN THE TREATMENT OF PATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

Baojin Zhu, Ph.D., Statistical Sciences, Health Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; Haya Ascher-Svanum, Ph.D., Research Scientist, Outcomes Research Studies, Eli Lilly and Company, One Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Douglas Faries, Ph.D.; Frank R. Ernst, Pharm.D., M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that compared with risperidone, olanzapine-treated patients were hospitalized for significantly fewer days during the year following initiation on the medication, offering cost savings that would

more than offset the higher medication acquisition cost of olanzapine.

#### **SUMMARY:**

Objective: To compare schizophrenia patients treated with olanzapine or risperidone on the risk of psychiatric hospitalization.

Methods: This study examined data of newly initiated patients on olanzapine (N=159) or risperidone (N=112) who were participants in the Schizophrenia Care and Assessment Program (SCAP), a non-randomized, prospective, naturalistic study of schizophrenia. Participants did not receive olanzapine or risperidone in the 60 days prior to initiation, and continued on the target drug for at least one year. The primary outcome measure was the number of psychiatric hospitalization days during the year post initiation. Following log transformation of the skewed data for days hospitalized, analyses employed a general linear model with adjustments for demographic and clinical variables.

Results: Compared with risperidone, olanzapine-treated patients were hospitalized for significantly fewer days during the one-year following initiation (14.5 days vs. 9.9 days, respectively, p = 0.035). In term of economic cost, the mean annual group difference of 4.6 days translates to \$2,502 (at \$556 per day hospitalized) in cost savings per olanzapine-treated patient.

Conclusions: Compared with risperidone, olanzapinetreated patients were hospitalized for significantly fewer days during the year following initiation on the medication, offering cost savings that would more than offset the higher medication acquisition cost of olanzapine.

This research is supported by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Weiden PJ, Olfson M: Cost of relapse in schizophrenia. Schizoph Bull 1995; 21:491–529.
- 2. Rabinowitz J, Lichtenberg P, Kaplan Z, et al: Rehospitalization rates of chronically ill schizophrenic patients discharged on a regimen of risperidone, olanzapine, or conventional antipsychotics. American Journal of Psychiatry 2001; 158:266–69.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups

Poster 34

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### A COMPARISON OF ADHERENCE AND PERSISTENCE AMONG PATIENTS WITH SCHIZOPHRENIA TREATED WITH ATYPICAL ANTYPSYCHOTIC MEDICATIONS

Eli Lilly and Company

Baojin Zhu, Ph.D., Statistical Sciences, Health Outcomes Research, Eli Lilly and Company, Lilly Corporate

Center, DC-4025, Indianapolis, IN 46285; P. Joseph Gibson, Ph.D., Senior Research Scientist, Health Outcomes Studies, Eli Lilly and Company, One Lilly Corporate Center, Indianapolis, IN 46285; Haya Ascher-Svanum, Ph.D.; Jayme L. Opolka, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that levels of adherence and persistence were consistently and significantly higher for olanzapine-treated patients than for patients treated with risperidone or quetiapine.

#### **SUMMARY:**

Objective: To compare the three most frequently used atypical antipsychotics, olanzapine, risperidone, and quetiapine, on levels of adherence and persistence with the medication.

Methods: Participants (N=810) were new initiators of olanzapine (N=390), risperidone (N=287), or quetiapine (N=133) in the Schizophrenia Care and Assessment Program (SCAP), a non-randomized, three-year prospective, observational study of patients with schizophrenia in the U.S. Participants did not receive the target drug in the two months prior to initiation, and had at least one year of follow-up. Outcome measures were adherence (measured by the medication possession ratio) and persistence (defined as the time to the first gap of at least 15 days between the end of one prescription and the next). Sensitivity analyses were performed, setting the minimum gap to various values between one and 90 days. Data analyses were performed using Chi-square tests, F-tests, survival analysis, and multiple regression.

Results: The MPR for olanzapine (0.75) was significantly higher than that for risperidone (0.69) or quetiapine (0.61). Similarly, persistence for olanzapine-treated patients was significantly longer (259 days) than risperidone (237 days) or quetiapine-treated patients (212 days).

Conclusion: Levels of adherence and persistence were consistently and significantly higher for olanzapine-treated patients than for patients treated with risperidone or quetiapine.

This research is supported by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Pinikahana J, Happell B, Taylor M, et al.: Exploring the complexity of compliance in schizophrenia. Issues in Mental Health Nursing 2002; 23(5):513–528.
- Fenton WS, Blyler CR, Heinssen RK: Determinants of medication compliance in schizophrenia: empirical and clinical findings. Schizophrenia Bulletin 1997; 23(4):637–651.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups

Poster 35

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### ANTIPSYCHOTIC PARTIAL COMPLIANCE: IMPACT ON CLINICAL OUTCOMES IN SCHIZOPHRENIA

Janssen Pharmaceutica

John P. Docherty, M.D., Department of Psychiatry, New York Hospital, Cornell University Medical College, and President and Chief Executive Officer, Comprehensive Neuroscience, Inc., 21 Bloomingdale Road, White Plains, NY 10605; Ramy Mahmoud, M.D., Group Director, Central Nervous System Psychiatric Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Amy Grogg, Pharm.D.; Chris M. Kozma, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss the clinical impact and importance of continuous medication treatment for patients with schizophrenia.

#### **SUMMARY:**

Objective: To evaluate clinical implications of continuous medication treatment for patients with schizophrenia.

Methods: In a multicenter trial, 565 chronic schizophrenia patients in acute exacerbation were randomized to receive risperidone or best choice conventional antipsychotics. Symptoms (PANSS total scores) were assessed at baseline and follow-up and medication compliance (defined as days of medication possession/outpatient days × 100) was calculated from patient records.

Results: Partial compliance was typical in these patients: 94% received no antipsychotic drug for varying periods (mean 112 days) and almost 50% had medication compliance of 70% or less. A regression model accounting for over 25% of the variance in the PANSS score indicated a 20% drop in compliance predicts a 3.1-point increase in PANSS total scores (p < 0.001). Improvements in PANSS scores were significantly greater in patients with higher compliance scores (p < 0.001). Controlling for compliance, a regression model indicated a 4.7-point or approximately 30% greater improvement in PANSS scores with risperidone than conventional agents (p < 0.0026).

Conclusion: The finding of a direct correlation between degree of partial compliance and clinical outcome emphasizes the importance of treatment strategies that promote continuous medication treatment with an atypical antipsychotic.

Supported by Janssen Pharmaceutica Products, L.P.

#### REFERENCES:

- Herz MI, Glazer WM, Mostert MA, et al: Intermittent vs maintenance medication in schizophrenia: twoyear results. Arch Gen Psychiatry 1991; 48:333– 3390.
- 2. Jolley AG, Hirsch SR, McRink A, Manchanda R: Trial of brief intermittent neuroleptic prophylaxix for selected schizophrenic patients: clinical outcome at one year. Br J Psychiatry 1989; 298:985–990.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 36

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### BENEFITS OF LONG-ACTING RISPERIDONE ON QUALITY OF LIFE IN PREVIOUSLY STABLE PATIENTS WITH SCHIZOPHRENIA

Janssen Pharmaceutica

Julie Locklear, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica and Research Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Amy Grogg, Pharm.D.; Young Zhu, Ph.D.; Marcia F.T. Rupnow, Ph.D.; Robert A. Lasser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize and discuss the further QOL improvements that can be attained in stable patients with schizophrenia who are switched to long-acting risperidone from a conventional depot or oral risperidone.

#### **SUMMARY:**

Introduction: Although studies on the impact of atypical antipsychotics on health status in schizophrenia are limited, data suggest these agents offer such benefits. These and other benefits may be limited by the need for daily dosing. A long-acting atypical could offer further symptom improvement and functional gains. Treatment with long-acting risperidone was studied in this regard.

Methods: An open-label study assessed long-acting risperidone in 725 stable patients with schizophrenia/schizoaffective disorder. Patients were assigned by clinician's judgment to long-acting risperidone (25–75mg, every two weeks, 50 weeks). Efficacy was measured by PANSS and quality of life by SF-36. Data were stratified by prior antipsychotic use.

Results: At study entry, 336 (46.3%) patients were receiving oral risperidone and 188 (25.9%) conventional depots (27.8% received others). After receiving longacting risperidone, mean PANSS total scores improved throughout the 50 weeks (both groups; p<0.001). There

were improvements on SF-36 subscales for mental health, social functioning, and role emotional; these were significant for the prior risperidone group. Improvements in vitality and general health also occurred in both groups; these were significant for the prior depot group.

Conclusion: These results show substantial improvements with long-acting risperidone in functionality in patients previously stable with conventional depots or oral risperidone.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- Fleischhacker WW, Eerdekens M, Yang, X, et al: Long-term safety of long-acting risperidone microspheres. American College of Neuropsychopharmacology 40<sup>th</sup> Annual Meeting. Waikoloa, Hawaii, December 9-13, 2001. Scientific Abstract, page 398.
- 2. Ware and Sherbourne: The MOS 36-item Short Form Health Survey (SF-36). Conceptual framework and item selection. Med Care 1992; 30:473–483.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 37

Thursday, October 30 3:00 p.m.-4:30 p.m.

# PARTIAL COMPLIANCE AND POLYPHARMACY: RISK OF MEDICATION SWITCH OR AUGMENTATION

Janssen Pharmaceutica

Julie Locklear, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica and Research Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Amy Grogg, Pharm.D.; Chris M. Kozma, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that there is a higher risk of polypharmacy among patients who are only partially adherent to their antipsychotic treatment.

#### **SUMMARY:**

*Objective:* To assess the effect of partial compliance with initial antipsychotic treatment on the risk of polypharmacy.

Methods: California Medicaid data from 1999 through 2001 were used to identify schizophrenia patients with initial antipsychotic therapy. Patients were followed for one year or until a drug was discontinued, switched, or augmented. Survival analyses were conducted on time

between initiation of antipsychotic therapy and first medication switch or augmentation. Medication possession ratios were calculated to estimate compliance. Compliance with the first medication was used in the survival model to predict switch or augmentation. The survival model was based on switch or augmentation that occurred following 180 days. Age, gender, and race indicators were included in the survival models. Sensitivity analyses were evaluated.

Results: A total of 717 subjects met the study criteria. Of these 717 subjects, 143 (19.9%) experienced a switch or augmentation. Survival analyses indicated that patients that had medication possession ratios of less than 70% were approximately 1.5 times more likely to experience a switch or augmentation (p<0.01). The number of switches or augmentations in the noncompliant group was 24.5% versus 16.2% of the compliant group.

Conclusion: Partial compliance with initial antipsychotic therapy may result in polypharmacy.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Clark RE, Bartels SJ, Mellman TA, Peacock WJ: Recent trends in antipsychotic combination therapy of schizophrenia and schizoaffective disorder: implications for State mental health policy. Schizophrenia Bulletin 2002; 28(1):75–84.
- 2. Canales PL, Olsen J, Miller AL, Crismon ML: Role of antipsychotic polypharmacotherapy in the treatment of schizophrenia. CNS Drugs 1999; 12(3):170–188.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 38

Thursday, October 30 3:00 p.m.-4:30 p.m.

### MEDICATION COMPLIANCE AND HOSPITALIZATION IN SCHIZOPHRENIA

Janssen Pharmaceutica

Julie Locklear, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica and Research Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Chris M. Kozma, Ph.D.; Army Grogg, Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the relationship between medication compliance and hospitalization in schizophrenia.

#### **SUMMARY:**

Objective: To evaluate medication compliance and hospitalization in schizophrenia.

Methods: A 12-month retrospective study of schizophrenic Medicaid patients with at least two antipsychotic prescription events between 7/1/1999 and 12/31/1999. Compliance measures were medication possession ratios (MPR) (ambulatory days of medication / ambulatory days), consistence (days of therapy / days between initial and last events), persistence (days between initial and last events / days in study), and maximum therapy gap. Independent measures were Medicare eligibility, sex, and ethnicity.

Results: A total of 4,325 patients were evaluated. A 10% improvement in consistence, MPR, or persistence reduced the risk of hospitalization by 16%, 13%, and 10%, respectively (p<0.0001). Compared with no gaps in therapy, a one- to 10-day gap was associated with a 1.98 higher odds of hospitalization (p=0.0042), an 11-to 30-day gap with a 2.82 higher odds of hospitalization (p<0.0001), and a >30 day gap with a 3.96 higher odds of hospitalization (p<0.0001). Medicare eligible patients were 1.5 times more likely to be hospitalized than ineligible patients (p<0.0001). Sex did not predict hospitalization. Blacks had a 34% greater risk of hospitalization than whites

Conclusion: Decreased compliance is associated with an increased risk of hospitalization in schizophrenic patients.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Kozma CM, Kirchdoerfer LJ: Obtaining pharmacoeconomic data in health care organizations. Top Hosp Pharm Manage 1994; 13:23–30.
- 2. Weiden PJ, Olfson M: Cost of relapse in schizophrenia. Schizophr Bull 1995; 21:419–29.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 39

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### BENEFITS OF COMPLIANCE WITH LONG-ACTING RISPERIDONE IN SCHIZOPHRENIA

Janssen Pharmaceutica

Natalie C. Edwards, M.S., Assistant Director for Health Economics, ABT Associates, Inc., 55 Wheeler Drive, Cambridge, MA 02138; Marcia F.T. Rupnow, Ph.D., Assistant Director, Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125

Trenton-Harbourton Road, Titusville, NJ 08560; Ronald Poster 40 J. Diamond, M.D.; Chris L. Poshos, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand how decision analytic modeling techniques may be used to project the clinical outcomes associated with the use of various antipsychotics in the treatment of patients with schizophrenia.

#### **SUMMARY:**

Objectives: Consistent medication administration associated with long-acting risperidone is expected to translate into significant improvements in clinical outcomes for people with schizophrenia. We used modeling techniques to project the benefits of this product in terms of relapse prevention.

Methods: Published medical literature, unpublished databases, and a clinical expert panel were utilized to populate a decision-tree model comparing long-acting risperidone, oral risperidone (RIS), olanzapine (OLA), and haloperidol decanoate (HAL-DEC). The model captured outcomes related to different levels of compliance.

Results: The proportion of patients predicted by the model to experience a relapse requiring hospitalization in one year were 66% HAL-DEC, 41% RIS and OLA, 26% long-acting risperidone, while the proportion of patients with an exacerbation not requiring hospitalization were 61% HAL-DEC, 37% RIS and OLA, 24% long-acting risperidone. The mean number of days of relapse requiring hospitalization per patient per year were predicted to be 31 HAL-DEC, 20 RIS and OLA, 12 long-acting risperidone, while the mean number of days of exacerbation not requiring hospitalization were eight HAL-DEC, five RIS and OLA, three long-acting risperidone.

Conclusions: Predictive modeling suggests that longacting risperidone can potentially lead to substantially lower rates and fewer days of exacerbation and hospitalization compared to currently available treatments.

Study funded by Janssen Pharmaceutica Products, L.P.

#### REFERENCES:

- 1. Olfson M, Mechanic D, Hansell S, Boyer CA, Walkup J, Weiden PJ: Predicting medication noncompliance after hospital discharge among patients with schizophrenia. Psychiatric Services 2000; 51:216-222.
- 2. Glazer WM, Ereshefsky L: A pharmacoeconomic model of outpatient antipsychotic therapy in "revolving door" schizophrenic patients. J Clin Psychiatry 1996; 57:337-345.

#### TARGET AUDIENCE:

Health care providers interested in clinical outcomes possible with long-acting risperidone.

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### PSYCHOTROPIC POLYPHARMACY IN MEDICAID SUBJECTS WITH **SCHIZOPHRENIA**

Janssen Pharmaceutica

Marcia F.T. Rupnow, Ph.D., Assistant Director, Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Jeffrey S. Markowitz, Ph.D., President, Health Data Analytics, 35 Arnold Drive, Princetown Junction, NJ 08550

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the nature and extent to which polypharmacy rate may differ among the atypical antipsychotic agents, which have important cost implications.

#### **SUMMARY:**

Background: Polypharmacy in schizophrenia has been scrutinized as a costly practice with unknown benefits. This study characterized the polypharmacy in a sample of Medicaid subjects.

Methods: Retrospective, claims-based, cross-sectional study of California Medicaid subjects (18 years+) with schizophrenia. The index antipsychotic(IndexAP) was the first prescription claim for either risperidone, olanzapine, or quetiapine after 1/1/98. Polypharmacy was defined as the use of another antipsychotic(AP), antidepressant(AD), anxiolytic(AX), mood stabilizer(MS), or anticonvulsant(AC) during 30 days before or seven days after the IndexAP. Subjects were classified monotherapy(MONO), AP only polypharpsychotropic macy(POLY AP), or polypharmacy(AD,-AX,MS or AC, with or without AP) (POLY Psychotropic). Analyses included chi-square and logistic regression controlling for confounders.

Results: A total of 14,933 subjects were included: 5720(38%) on risperidone, 7979(53%) on olanzapine, and 1234(8%) on quetiapine. Mean age was 43.6 years(SD=14.1). A total of 3901 subjects(26%) were prescribed MONO, 1,952 (13.0%) POLY¥≪AP, and 9,080 (61%) POLYSSP Sychotropic. Quetiapine (AOR= 2.29; Cl 1.86-2.81) and olanzapine(AOR=1.31; CI 1.16-1.48) were more likely than risperidone to be on PO-LYSAP. Quetiapine(AOR=1.42; CI 1.22-1.67) and olanzapine(AOR=1.09, CI 1.01-1.18) were more likely than risperidone to be on POLY&Psychotropic. Results were similar when study period included 60 days before and 30 days after the IndexAP.

Conclusion: Quetiapine and olanzapine had higher rates of polypharmacy than risperidone, suggesting that relative cost of medication may further favor risperidone if polypharmacy is included in the economic analysis. Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Clark RE, Bartels SJ, Mellman TA, Peacock WJ: Recent trends in antipsychotic combination therapy of schizophrenia and schizoaffective disorder: implications for State mental health policy. Schizophrenia Bulletin, 2002; 28(1):75–84.
- 2. Canales PL, Olsen J, Miller AL, Crismon ML: Role of antipsychotic polypharmacotherapy in the treatment of schizophrenia. CNS Drugs 1999; 12(3):179–188.

#### **TARGET AUDIENCE:**

Psychiatrists, consulting pharmacists

Poster 41

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### LONG-ACTING RISPERIDONE ASSOCIATED WITH INCREASED CLINICAL REMISSION AND QUALITY OF LIFE

Janssen Pharmaceutica

Leslie Lenert, M.D., Staff Physician and Researcher, Health Services Research and Development, Veterans Administration San Diego Healthcare System, 3350 La Jolla Village Drive, MC 111 N 1, San Diego, CA 92161; Christine Elnitsky, Ph.D.; Marcia F.T. Rupnow, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that long-acting risperidone is associated with increased compliance, which therefore directly and positively affects symptom improvement and patient quality of life, and increased remission rates in patients with schizophrenia.

#### **SUMMARY:**

Background: Optimal clinical outcomes in the longterm management of schizophrenia are limited by partial compliance, associated with all oral antipsychotics. Long-acting injectable risperidone combines the advantages of an atypical antipsychotic and a depot medication formulation. This study assessed the impact of longacting risperidone on disease symptoms and quality of life.

Methods: A previously developed eight disease state model(state 1=mild; 8=extremely severe) and general population utility weights were applied to data from a 50-week, open-label, international study of long-acting risperidone in stable patients with schizophrenia. We

assessed changes in the proportion of patients achieving clinical remission(state 1), and changes in overall utility for patients completing 50 weeks of treatment with longacting risperidone(n=474).

Results: Patients completing treatment were more likely to be in the remission state at endpoint than at baseline(46.1% vs. 25.1%, p<0.001). When only efficacy was considered, utility values increased by 0.046. Inclusion of adjustments for adverse events further improved the gain in utility to 0.054, due to a decrease in adverse events during treatment with long-acting risperidone.

Conclusion: In a sample of stable patients, long-acting risperidone was associated with increased clinical remission and further improvement in utility/quality of life, suggesting that long-term outcomes can be improved beyond symptom control.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, DSM IV Washington, D.C., 1994.
- Fleischhacker WW, Eerdekens M, Xie Y, et. al. Long-term safety and efficacy of Risperdal Consta<sup>TM</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### **TARGET AUDIENCE:**

Psychiatrists, clinical pharmacists

Poster 42

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### OSTEOPENIA ASSOCIATED WITH INCREASED PROLACTIN AND AGING IN PSYCHIATRIC PATIENTS TREATED WITH PROLACTIN-ELEVATING ANTIPSYCHOTIC MEDICATIONS

Eli Lilly and Company

Susan Santos, M.S., Clinical Research Associate, Neuroscience Medical Studies, Eli Lilly and Company, One Fenno Way, Nahant, MA 01908; Bruce J. Kinon, M.D.; Hong Liu-Seifert, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of the presentation, the participant should be able to recognize that patients with elevated prolactin may be at risk for developing osteopenia when they are treated with prolactin-elevating antipsychotics.

#### **SUMMARY:**

Objective: To determine the prevalence of osteopenia in schizophrenia patients treated with prolactin (PRL)-elevating antipsychotics (APD), and to identify factors influencing bone density.

Methods: Schizophrenia patients (N=402) treated in the community with conventional APD or risperidone for at least three months, participated in a one-day trial to estimate hyperprolactinemia, and associated morbidity. Bone density (T-score) was determined by ultrasonography of the calcaneus; bone metabolism by serum osteocalcin (OCN) levels. Logistic regression analyzed the effect of age, length of APD treatment, and PRL on T-scores and OCN separately for males and females.

Results: The frequency of osteopenia (T-scores<-1) was 20.4% in females and 28.6% in males. Decreased T-scores were significantly associated with increased age for males (p=.007) and females (p=.0001). In males, but not females, age and decreased T-scores were significantly associated with increased PRL (p=.05). Increased OCN was significantly associated with increased PRL (p<.01) and increased age (p=.03) in females, but increased PRL (p=.05) and lower age (p<.01) in males.

Conclusions: Osteopenia was prevalent in a psychiatric population treated with PRL-elevating APDs. Risk factors appear to be increased age and increased PRL across gender. Bone demineralization may be a common comorbidity in psychiatric patients treated with PRL-elevating APDs

Source of Funding: Eli Lilly and Company.

#### **REFERENCES:**

- Dickson RA, Glazer WM: Neuroleptic-induced hyperprolactinemia. Schizophrenia Research 1999; 35:75S-86S.
- Halbreich U, Rojansky N, Palter S, Hreshchyshyn M, Kreeger J, Bakhai Y, Rosan R: Decreased bone mineral density in medicated psychiatric patients. Psychosom Med 1995; 57(5):485-91.

#### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat schizophrenia

Poster 43

Thursday, October 30 3:00 p.m.-4:30 p.m.

# THE NEGATIVE SYMPTOM EFFICACY OF ZIPRASIDONE: LONG-TERM DATA Pfizer Inc.

Steven J. Romano, M.D., Employee, Pfizer Inc., 235 East 42nd Street, New York, NY 10017; Nina R. Schooler, Ph.D.; Stephen R. Murray, M.D., Ph.D.; Cynthia O. Siu, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss results from ziprasidone clinical trials showing its long-term efficacy in controlling the negative symptoms of schizophrenia.

#### **SUMMARY:**

Objective: We reviewed ziprasidone's efficacy in controlling negative symptoms in long-term, double-blind trials and extension studies of patients switched to ziprasidone.

Methods: PANSS Negative Subscale scores were evaluated in four randomized, double-blind studies of ziprasidone versus placebo (52 weeks), haloperidol (28 weeks), olanzapine (>6 months), or risperidone (52 weeks), using ANCOVA. In extensions ( $\geq$ 215 days) of three open-label studies evaluating improvement following switch to ziprasidone from conventional agents, olanzapine, or risperidone, changes in PANSS Negative Subscale scores were analyzed using paired t tests.

Results: Ziprasidone was superior to placebo (LOCF, P<0.05) in improving negative symptoms. Ziprasidone was associated with significantly (P<0.05) higher percentage of PANSS Negative symptom responders ( $\geq 20\%$  decrease) than haloperidol, despite no significantly greater change in PANSS Negative Subscale score. Ziprasidone's treatment effect was comparable to olanzapine's (95% CI -2.3 to 2.8) and risperidone's (95% CI -3.2 to 2.4). Sustained improvement in PANSS Negative Subscale score was observed in patients switched from conventional antipsychotics (P<0.01), olanzapine (P<0.05), and risperidone (P<0.001).

Conclusions: Ziprasidone showed efficacy superior to placebo's and comparable to olanzapine's and risperidone's in controlling negative symptoms, and a responder rate higher than haloperidol's. Ziprasidone was associated with significant negative symptom improvement in patients switched from other antipsychotics.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Arató M, O'Connor R, Meltzer HY: A 1-year, double-blind, placebo-controlled trial of ziprasidone 40, 80, and 160 mg/day in chronic schizophrenia: the Ziprasidone Extended Use in Schizophrenia (ZEUS) study. Int Clin Psychopharmacol 2002; 17:207–215.
- 2. Ho B-C, Nopoulos P, Flaum M, Arndt S, Andreasen NC: Two-year outcome in first-episode schizophrenia: predictive value of symptoms for quality of life. Am J Psychiatry 1998; 155:1196–1201.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 44

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### CLINICAL IMPROVEMENT WITH LONG-ACTING RISPERIDONE IN PATIENTS PREVIOUSLY RECEIVING ORAL OLANZAPINE

Janssen Pharmaceutica

Natalie Ciliberto, Pharm.D., Central Nervous System Clinical Development, Janssen Pharmaceutica and Research Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Robert A. Lasser, M.D., Director, Central Nervous System Clinical Development, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Robert Jones; Cynthia A. Bossie, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss clinical improvements with long-acting risperidone in patients previously receiving oral olanzapine.

#### **SUMMARY:**

Introduction: Although atypical antipsychotics have advanced the management of schizophrenia, currently available agents require daily dosing, commonly associated with limitations on adherence, response, and functional outcomes. This analysis examined long-acting risperidone for symptom control and quality of life in patients previously receiving the oral atypical, olanzapine.

Methods: A 12-week, placebo-controlled, multicenter, double-blind study assessed patients receiving long-acting risperidone (25, 50, or 75 mg) every two weeks (n=370). Patients receiving prior therapy with oral olanzapine were analyzed (n=16, placebo; n=42 long-acting risperidone).

Results: Baseline PANSS-Total scores and mean prior olanzapine doses were comparable between placebo and long-acting risperidone groups (83.3±9.7, 83.1±2.4; 15.3±1.9 mg/d, 16.0±0.83 mg/day, respectively). At endpoint, PANSS-Total scores worsened in placebo group, while improving significantly from prior olanzapine treatment (p=0.027) in the long-acting risperidone group (+4.4 and -6.9, respectively; p=0.05 between groups). Significant improvement (p<0.05) from prior olanzapine treatment was present in the long-acting risperidone group across Positive, Negative and Mood/Anxiety domains. Improvement from prior olanzapine treatment was present in the SF-36 domain social functioning (p=0.053) and the mental health index (p=0.041) following treatment with long-acting risperidone.

Conclusions: These data support potential improvements in symptoms and quality of life with long-acting risperidone in patients previously receiving oral olanzapine.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- Kane J, Eerdekens M, Keith S, et al: Efficacy and safety of a novel long-acting risperidone microspheres formulation. Presented at the 11th Biennial Winter Workshop on Schizophrenia, February 24— March 1, 2002, Davos, Switzerland.
- Fleischhacker WW, Eerdekens M, Xie Y, et al: Longterm safety and efficacy of Risperdal Consta<sup>TM</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### TARGET AUDIENCE:

**Psychiatrists** 

Poster 45

Thursday, October 30 3:00 p.m.-4:30 p.m.

# SUBOPTIMAL PHARMACOTHERAPY AND PARTIAL COMPLIANCE: BARRIERS TO CONTINUED IMPROVEMENT

Janssen Pharmaceutica

Judith Kando, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Young Zhu, Ph.D.; Cynthia A. Bossie, Ph.D.; Robert A. Lasser, M.D.; Georges Gharabawi, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the effects of the antipsychotics olanzapine and risperidone on body weight and adiposity in a placebo-controlled trial of normal dogs.

#### **SUMMARY:**

Introduction: Stepwise improvements in schizophrenia management were realized with the introduction of oral conventional antipsychotics, followed by long-acting conventionals, and, more recently, oral atypicals. A long-acting atypical agent, offering stable blood levels and assured medication delivery—the foundation of symptom improvement, remission, and functional gains—could provide further benefits. This analysis examined the effects of long-acting risperidone, the first long-acting atypical, in patients judged clinically stable by the study investigators.

Method: Data were derived from an open-label, 50-week study of long-acting risperidone (25, 50, or 75 mg every two weeks) in 725 patients with schizophrenia or

schizoaffective disorder. The effect of treatment was examined in patients receiving oral or depot antipsychotics at study entry.

Results: Oral risperidone was being received by 336 patients, conventional depots by 188, and conventional oral antipsychotics by 46. After treatment with long-acting risperidone, mean PANSS total scores improved significantly throughout the 50 weeks and at endpoint in all groups (p<0.001). The greatest improvement was observed in the group that had previously received oral conventional antipsychotics.

Conclusion: Results show significant symptom improvement with long-acting risperidone in stable patients, supporting the concept that improved pharmacotherapy and more assured delivery contribute to the benefits of a long-acting atypical.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Kane J, Eerdekens M, Lindenmayer J-P, et al: Longacting injectable risperidone: efficacy and safety of the first long-acting atypical antipsychotic. Am J Psychiatry 2003; 160:1125–1132.
- Fleischhacker WW, Eerdekens M, Xie Y, et al: Longterm safety and efficacy of Risperdal Consta<sup>™</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 46

Thursday, October 30 3:00 p.m.-4:30 p.m.

# CORE SYMPTOM REMISSION IN PATIENTS WITH SCHIZOPHRENIA RECEIVING LONG-ACTING RISPERIDONE

Janssen Pharmaceutica

Jay Sherr, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Robert A. Lasser, M.D.; Georges Gharabawi, M.D.; Stephen C. Rodriguez, M.A.; John M. Kane, M.D.; Cynthia A. Bossie, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the effects of long-acting risperidone on the core signs and symptoms of schizophrenia and on disease remission.

#### **SUMMARY:**

Introduction: DSM-IV defines the essential features of schizophrenia as the presence and persistence of several characteristic signs and symptoms. The objective of this analysis was to assess the effects of long-acting risperidone on these core disease features, exploring the concept of disease remission.

Method: Expert-defined essential disease features (via the Positive and Negative Syndrome Scale) were delusions, conceptual disorganization, hallucinations, suspiciousness, blunted affect, emotional withdrawal, and conceptual disorganization. Remission was defined as a score of ≤3 (mild or less) on all seven core symptoms simultaneously. Data were derived from an open-label, 50-week study of long-acting risperidone in stable patients with schizophrenia.

Results: Although patients were clinically stable at study entry, 366 (63%) did not meet remission criteria at baseline. During treatment, 133 (36%) of the 366 met remission criteria for 12 or more weeks. Mean PANSS total scores decreased significantly in these patients (baseline 68.1, endpoint 51.3; P<0.001). Remission criteria were met by 212 (37%) of the patients at baseline and was maintained by 193 (91%) at endpoint.

Conclusion: A substantial number of patients treated with long-acting risperidone reached the defined level of remission, supporting the need for further attention to the symptomatic and functional definition of remission in schizophrenia.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, DSM IV. Washington D.C., 1994.
- Fleischhacker WW, Eerdekens M, Xie Y, et al: Long-term safety and efficacy of Risperdal Consta<sup>™</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 47

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### LONG-ACTING RISPERIDONE IN HOSPITAL INPATIENTS WITH SCHIZOPHRENIA

Janssen Pharmaceutica

Natalie Ciliberto, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica and Re-

search Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Stephen C. Rodríguez, M.A.; Cynthia A. Bossie, Ph.D.; Robert A. Lasser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize and discuss the benefits of using long-acting risperidone in hospital inpatients with schizophrenia.

#### **SUMMARY:**

Introduction: Medication adherence in schizophrenia is vital to optimal response and outcome. Daily dosing regimens are frequently associated with partial compliance, which can contribute to poor symptom control, relapse, and hospitalization. This analysis looked at the effect of treatment with long-acting risperidone in hospital inpatients.

*Methods:* Data were derived from a 12-week, multicenter, double-blind study of placebo or long-acting risperidone (25 mg, 50 mg, or 75 mg every two weeks).

Results: Subjects were hospital inpatients at study entry (n= 151 long-acting risperidone, n=51 placebo). Mean number of previous hospitalizations:  $8.9\pm14.3$  in the long-acting risperidone group,  $8.1\pm9.2$  in the placebo group. Mean PANSS total scores improved with long-acting risperidone and worsened with placebo (-6.6 and +4.5, respectively, p<0.001). Response rates for >= 20%, 40%, or 60% reduction in PANSS total scores at endpoint were significantly (p<0.05) higher with long-acting risperidone (43.1%, 20.5%, 8.6%, respectively) than placebo (17.7%, 0%, 0%, respectively). Severity of EPS was mild at baseline and throughout the trial in both groups. Injection-site pain was rated as low by the patients, consistent with the investigators' ratings of the injection site.

Conclusions: These data show that long-acting risperidone can be used in hospital inpatients to provide significant clinical benefits.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Kane J, Eerdekens M, Keith S, et al: Efficacy and safety of a novel long-acting risperidone microspheres formulation. Presented at the 11th Biennial Winter Workshop on Schizophrenia, February 24-March 1, 2002, Davos, Switzerland.
- 2. Fleischhacker WW, Eerdekens M, Xie Y, et al: Long-term safety and efficacy of Risperdal Consta<sup>TM</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### TARGET AUDIENCE:

**Psychiatrists** 

Poster 48

Thursday, October 30 3:00 p.m.-4:30 p.m.

### REDUCED SERUM PROLACTIN LEVELS FOLLOWING TREATMENT WITH LONG-ACTING RISPERIDONE

Janssen Pharmaceutica

Carla M. Canuso, M.D., Associate Director, Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Cynthia A. Bossie, Ph.D., Central Nervous System Outcomes Research Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Robert A. Lasser, M.D.; Georges Gharabawi, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that long-acting risperidone is associated with decreased prolactin levels in patients with schizophrenia because of its reduced peak-trough fluctuation of active drug.

#### **SUMMARY:**

Introduction: Prolactin elevation observed with antipsychotic medication use results from pituitary dopamine D<sub>2</sub> receptor antagonism. The magnitude and duration of such elevations may vary owing to dosing regimens, patient characteristics, and collection bias. Long-acting risperidone, with its reduced peak-trough fluctuations of active drug, may offer insight into some factors contributing to the reported variance of prolactin levels.

Method: Data were derived from a 12-week, randomized, double-blind study in which 276 patients with schizophrenia received 25 mg, 50 mg, or 75 mg of longacting risperidone and 257 received oral risperidone.

Results: Prolactin levels were significantly reduced at endpoint in each of the long-acting risperidone groups: -6.0 ng/ml in the 25-mg group (P<0.001); -4.4 ng/ml in the 50-mg group (P<0.01); and -4.4 ng/ml in the 75-mg group (P<0.01). In the oral risperidone group, mean prolactin levels were unchanged at endpoint (P = 0.3).

Conclusion: In this analysis, long-acting risperidone, with its reduced peak-trough fluctuations of active drug, was associated with significantly decreased prolactin levels.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

 Fleischhacker et al: Antipsychotic treatment and the risk for osteopenia/osteoporosis. ACNP Scientific Abstracts 41<sup>st</sup> Annual Meeting, Dec 2002: 367. 2. Ramstack et al: Risperdal CONSTA: prolong-release injectable delivery of ripseridone using Medisorb microsphere technology. APNA October 2002.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 49

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### LONG-ACTING RISPERIDONE REDUCES SYMPTOMS OF DEPRESSION AND ANXIETY IN PATIENTS WITH SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER

Janssen Pharmaceutica

Carla M. Canuso, M.D., Associate Director, Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Cynthia A. Bossie, Ph.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Young Zhu, Ph.D.; Robert A. Lasser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to assess the effects of risperidone on symptoms of anxiety and depression in patients with schizophrenia and schizoaffective disorder.

#### **SUMMARY:**

Introduction: The effects of long-acting risperidone on symptoms of anxiety and depression were assessed in patients with schizophrenia and schizoaffective disorder.

Methods: Data were derived from an open-label 50-week study of 725 patients received 25, 50, or 75 mg of long-acting risperidone every two weeks. According to the four-item anxiety/depression cluster (anxiety, guilt feelings, tension, depression) of the Positive and Negative Syndrome Scale, patients were rated as having moderate-high (one item score of ≥4) or mild (<4 on each item and >4 on total cluster score) baseline symptoms.

Results: Data were available for 704 patients. Among the 242 (34.4%) patients with moderate-high symptoms at baseline, cluster scores were reduced significantly at all time points in all dose groups (from  $12.0\pm2.8$  to  $9.3\pm3.7$  at endpoint, p<0.001). Among the 386 (54.8%) patients with mild baseline symptoms, the cluster score was reduced significantly in patients receiving 25 mg of long-acting risperidone (from  $7.4\pm1.9$  to  $6.6\pm2.6$  at endpoint; p<0.001). No significant changes were seen in the 50-mg and 75-mg groups.

Conclusion: These data suggest that long-acting risperidone reduces anxiety/depression in these patients and that low doses of long-acting risperidone are efficacious regardless of symptom severity.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- Marder SR, Davis JM, Chouinard G: The effects of risperidone on the five dimensions of schizophrenia derived by factor analysis: combined results of the North American trials. J Clin Psychiatry 1997; 58:538-546.
- 2. Kane JM, Eerdekens M, Lindenmayer J-P, et al: Long-acting injectable risperidone: efficacy and safety of the first long-acting atypical antipsychotic. Am J Psychiatry 2003; 160:1125-1132.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 50

Thursday, October 30 3:00 p.m.-4:30 p.m.

# LONG-ACTING RISPERIDONE IN STABLE PATIENTS WITH SCHIZOAFFECTIVE DISORDER

Janssen Pharmaceutica

Jay Sherr, Pharm.D., Central Nervous System Clinical Development, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Young Zhu, Ph.D.; Cynthia A. Bossie, Ph.D.; Georges Gharabawi, M.D.; Robert A. Lasser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that further symptom improvement can be attained with the use of long acting risperidone in patients with schizoaffective disorder, otherwise considered to be stable on their current antipsychotic treatment.

#### **SUMMARY:**

Objective: Evaluate efficacy and safety of long-acting injectable risperidone in stable patients with schizoaffective disorder.

Methods: After a two-week run-in period with 1-6 mg of oral risperidone, patients received 25, 50, or 75 mg of long-acting risperidone every two weeks for 50 weeks.

Results: Schizoaffective disorder was diagnosed in 110 of the 725 patients receiving treatment in the study (RIS-INT-57). Mean Positive and Negative Syndrome Scale (PANSS) total scores improved significantly from baseline  $(62.1\pm1.7)$  to endpoint (-7.9, P<0.001). Signif-

icant reductions (P<0.01) were also seen in mean PANSS factor scores (positive symptoms, negative symptoms, anxiety/depression, and disorganized thoughts). A ≥20% reduction in PANSS total scores was seen in 56% of patients at endpoint. The proportion of patients rated not ill to mild (Clinical Global Impressions) at baseline increased by 22% at endpoint. Significant improvements (P<0.001) in mean Extrapyramidal Symptom Rating Scale scores at endpoint were noted on the overall subjective rating and parkinsonism exam. The incidence of other adverse events was reduced substantially from treatment months one to three to months 10–12.

Conclusions: Stable schizoaffective disorder patients can be safely and effectively switched from current treatment to long-acting risperidone.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Kane JM, Eerdekens M, Lindenmayer J-P, et al: Long-acting injectable risperidone: efficacy and safety of the first long-acting atypical antipsychotic. Am J Psychiatry 2003; 160:1125–1132.
- Fleischhacker WW, Eerdekens M, Xie Y, et al: Long-term safety and efficacy of Risperdal Consta<sup>™</sup>, a long-acting injection formulation of risperidone. Presented at the American College of Neuropsychopharmacology 40th Annual Meeting, December 9–13, 2001, Waikoloa, Hawaii.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 51

Thursday, October 30 3:00 p.m.-4:30 p.m.

#### AN ASSESSMENT OF DYSKINESIA IN HIGH-RISK PATIENTS RECEIVING LONG-ACTING RISPERIDONE

Janssen Pharmaceutica

Natalie Ciliberto, Pharm.D., Central Nervous System Outcomes Research, Janssen Pharmaceutica and Research Foundation, 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Young Zhu, Ph.D.; Cynthia A. Bossie, Ph.D.; Georges Gharabawi, M.D.; Marielle Eerdekens, M.D., M.B.A.; Robert A. Lasser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that treatment with longacting risperidone in elderly patients, including highrisk elderly females, is safe and has a lower occurrence of new or aggravation of preexisting cases of TD.

#### **SUMMARY:**

Background: Female sex and advancing age are significant risk factors for the development of tardive dyskinesia (TD). This analysis assessed emergent TD and the effect of treatment on preexisting symptoms of dyskinesia in elderly patients treated with long-acting risperidone.

Method: Elderly (mean age 71 years) patients with schizophrenia or schizoaffective disorder received long-acting risperidone (25, 50, or 75 mg) every two weeks for 50 weeks in an open-label trial (RIS-INT-57). TD was assessed using the Extrapyramidal Symptom Rating Scale dyskinetic movement subscale.

Results: Of the 57 elderly patients, 30 were women. ESRS data were available for 55 patients. No cases of persistent emergent TD were seen in the 42 patients without dyskinesia at baseline. Among the 13 patients with dyskinesia at baseline, the mean ESRS dyskinetic score improved at endpoint (-2.4).

Conclusion: These data suggest that long-acting risperidone does not cause new or aggravate preexisting TD and can be safely used in this patient population, including high-risk elderly women.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- 1. Jeste DV, Okamoto A, Napolitano J, et al: Low incidence of persistent tardive dyskinesia in elderly patients with dementia treated with risperidone. Am J Psychiatry 2000; 157:1150–1155.
- 2. Davidson M: Long-term safety of risperidone. J Clin Psychiatry 2001; 62 Suppl 21:26–28.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

#### POSTER SESSION 2

**Posters 52–102** 

TREATMENT ISSUES IN SEVERE MENTAL ILLNESS

Poster 52

Friday, October 31 9:30 a.m.-11:00 a.m.

### LONG-TERM WEIGHT REDUCTION WITH TOPIRAMATE

Ortho-McNeil Parmaceuticals. Inc.

Faruk S. Abuzzahab, Sr., M.D., Clinical Professor, Department of Psychiatry, University of Minnesota Medical School, 2601 East Lake Isles Parkway, Minneapolis, MN 55408-1052; Victoria L. Brown, B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should recognize that the use of topiramate concomitantly with antidepressants and neuroleptics can be used to help obese patients lose weight.

#### **SUMMARY:**

Background: Obesity in depressed and schizophrenic outpatients has been attributed to the use of selective serotonin reuptake inhibitors and the atypical neuroleptics. Topiramate, a novel anticonvulsant with a unique fructopyranose structure, has been reported to promote weight loss. It was added concomitantly to antidepressants and neuroleptics in outpatients to explore its long-term benefit in weight reduction.

Methods: Twenty-two outpatients, 17 females and five males, between the ages of 64 and 21 with an average age of 42.33 +/- 11.36 years received topiramate for over a year concomitantly with their current medications, which were kept constant. The average length of treatment in this study was between 25 and 12 months, with an average of 15.41 +/- 4.19 months. Patients were started on a dose of 15 mg or 25 mg, which was gradually increased as tolerated.

Results: The weights of the 22 patients at pretreatment were between 52.27 kg and 129.55 kg with an average weight of 93.97 +/- 16.77 kg. The dosages that they reached were between 50 mg and 1200 mg, with an average dose of 375 +/- 276.78 mg. After treatment the weights of the patients were between 51.36 kg and 120.91 kg, with an average weight of 85.56 +/- 17.90 kg. With a 95% confidence level, the weight loss that was attained was 8.40 +/- 4.22 kg, t(1,21)=4.14, p<0.01.

Conclusion: There was no exacerbation of underlying psychiatric disorders when topiramate was used concomitantly with psychoactive medications in depressed and schizophrenic patients. Although the exact mechanism of topiramate's action is unknown, this preliminary report indicates that topiramate is effective in promoting weight reduction in outpatients when used concomitantly with antidepressants and neuroleptics.

Supported in part by psychopharmacology and pharmopsychiatry funds, Mn. Medical Foundation.

#### **REFERENCES:**

- 1. Perucca E: A pharmacological and clinical review on topiramate, a new antiepileptic drug. Pharmacological Research (Pavia, Italy) 1997; 35:4, 242–243.
- 2. Marcotte D: Use of topiramate, a new antiepileptic as a mood stabilizer. Journal of Affective Disorders 1998; 50, 245–251.

#### **TARGET AUDIENCE:**

Psychiatrists who treat depressed and schizophrenic patients

Poster 53

Friday, October 31 9:30 a.m.-11:00 a.m.

### THE EFFECT OF QUETIAPINE ON COGNITIVE FUNCTIONS AND NEGATIVE SYMPTOMS

AstraZeneca Pharmaceuticals

Jiří Horáček, M.D., Ph.D., Associate Professor, Department of Psychiatry, Psychiatric Clinic, Ustauni 91, Prague 8, Czechoslovakia 18103; Lubus Janu, Ph.D.; Dagmar Seifertova, C.Sc.

#### **EDUCATIONAL OBJECTIVES:**

Measurement of cognitive deficit in schizophrenia and evaluation of effectiveness of the pharmacological treatment

#### **SUMMARY:**

Quetiapine is an atypical dibenzothiazepine antipsychotic. The receptor profile of quetiapine ( $\alpha 1, H1, 5HT2$ , and D2) is the promising factor in the treatment of negative symptoms and cognitive deficit in schizophrenia.

In the open, randomized, six-month study, we compared the effect of quetiapine on negative symptoms and cognition. We studied a group of schizophrenic patients using typical antipsychotics (N=51), 26 subjects who continued in the previous treatment, and 25 patients who were switched to quetiapine flexibly dosed from 150mg/day to 750mg/day. Before and at the end of the trial, patients were tested by a battery of cognitive tests focused on attention (CPT II, Stroop test), executive functions (WCST), verbal memory (AVLT), and visuomotor performance (CFT).

The analysis was performed as the change in study parameters form the baseline within both groups. Quetiapine-treated patients in comparison with the control group improved in negative symptoms, attention (p=0.05), executive functions (p=0.05), and visuomotor performance (p=0.05). The body weight decreased in quetiapine-treated patients (-1.8 kg). We found no differences in the change of positive symptoms, EPS scales, and vital signs.

Our data indicate that quetiapine is effective in the treatment of negative symptoms and some dimensions of cognitive deficit in schizophrenia.

Supported by a grant from AstraZeneca Pharmaceuticals.

Poster 54

Friday, October 31 9:30 a.m.-11:00 a.m.

with aggressive and antisocial behavior. Psychiatry Research 1997, 69:71–77.

#### COMT GENE POLYMORPHISM AND BRAIN METABOLISM (18 FDG PET) IN SCHIZOPHRENIA

AstraZeneca Pharmaceuticals

Jiří Horáček, M.D., Ph.D., Associate Professor, Department of Psychiatry, Psychiatric Clinic, Ustauni 91, Prague 8, Czechoslovakia 18103; Milan Kopecek, M.D., Department of Psychiatry, Psychiatric Clinic, Ustauni 91, Prague 8, Czechoslovakia 18103; Martin Beranek, M.D.; Cyril Hoschl, M.D.

#### **EDUCATIONAL OBJECTIVES:**

Demonstration of COMT polymorphism and <sup>18</sup>FDG PET investigation and its role for etiology and treatment of schizophrenia.

#### **SUMMARY:**

Dopamine, the crucial metabolite in schizophrenia, is postsynaptically broken down by catechol-O-methyl transferase (COMT). The genetic polymorphism at codon 158 of COMT gene (22q11.2) influences COMT catalytic activity. COMT Val/Val genotype inactivates released dopamine more rapidly comparing with the Met/Met genotype. The influence of COMT polymorphism is more important in prefrontal cortex (PFC) than in striatum. Decreased prefrontal glucose metabolism is connected with negative symptoms and cognitive dysfunction of schizophrenia. The goal of this study was to determine the role of COMT polymorphism and dopamine action in the prefrontal metabolism and information processing. We tested the hypothesis whether COMT polymorphism (detected by polymerase chain reaction) regulates the prefrontal metabolism (<sup>18</sup>F-deoxyglucose positron emission tomography) and if it is involved in cognitive outcome in schizophrenia (n=42).

In Met/Met homozygotes, we found a higher glucose metabolism in PFC bilaterally (Inferior Frontal Gyrus, Brodmann area 9 and 47, p = 0.001) comparing with the Val/Val subgroup. The outcome in attention was influenced by the COMT polymorphism. Our data confirm the hypothesis that a higher dopamine level (Met/Met) is connected with a higher metabolism in prefrontal cortex and with a better cognitive outcome in schizophrenia.

This research was supported by a grant from Astra-Zeneca Pharmaceuticals.

#### **REFERENCES:**

1. Strous RD, Bark N, Parsia SS, et al: Analysis of a functional catechol-O-methyltransferase gene polymorphism in schizophrenia: evidence for association

Poster 55

Friday, October 31 9:30 a.m.-11:00 a.m.

# PERSONALITY DISORDER AND MENTAL RETARDATION: ASPECTS OF MANAGEMENT

Regi T. Alexander, M.R.C., Consultant, Department of Psychiatry, St. Johns Hospital, Lion Road Palgrave, Diss Norfolk, United Kingdom 22 IBA; Satheesh K. Gangadharan, M.R.C.Psych.; Meraj Tajuddin, M.R.C.Psych.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the principles involved in the diagnosis and treatment of personality disorders in those with mental retardation.

#### **SUMMARY:**

Introduction: The management of people with personality disorders and mental retardation is a challenging task. This study maps out the management of this group within the county of Leicestershire, U.K.

Method: Patients with a clinical diagnosis of personality disorder were identified from the patient lists of two consultant psychiatrists who were providing a service for a population of 445,000. ICD-10 research criteria were then applied to confirm the diagnosis. Information on therapeutic interventions, in particular the use of psychotropic medication, was collected.

Findings: In a caseload of 430, 29 had a diagnosis of personality disorder. 52% of these were antisocial, 45% borderline and 3% both. 31% had mental illness comorbidity, but 93% were on psychotropic medication. 76% needed inpatient treatment for between two to nine months. 90% of these admissions were due to severe aggression. When in the community, they needed significant input from psychologists, intensive outreach workers, and community nurses.

Discussion: The psychotropic drugs used for this group are selected more in relation to the predominant symptom profile than a particular syndromal diagnosis. Although these patients can be managed in the community most of the time, inpatient facilities are still needed in crisis situations.

#### **REFERENCES:**

1. Alexander R, Cooray S: Diagnosis of personality disorders in learning disability. Br J Psychiatry 2003; 182 (suppl 44):S28–S31.

2. Flynn A, Mathews H, Hollins S: Validity of the diagnosis of personality disorders in adults with learning disability. Br J Psychiatry 2002; 180:543–546.

#### **TARGET AUDIENCE:**

Professionals working with people with mental retardation and/or personality disorders.

Poster 56

Friday, October 31 9:30 a.m.-11:00 a.m.

### MEDICATION REVIEWS IN AN URBAN EMERGENCY PSYCHIATRIC SERVICE

Cynthia L. Arfken, Ph.D., Assistant Professor of Psychiatry and Behavioral Neurosciences, Addiction Research Institute, Wayne State University School of Medicine, 2761 East Jefferson Avenue, Detroit, MI 48207; Lori Zeman, Ph.D., Interim Chief Operating Officer, Clinical Affairs, Psychiatry and Behavioral Medicine Professionals, Wayne State University, 2751 East Jefferson, Suite 500, Detroit, MI 48207

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss cost-effective changes to emergency psychiatric service and barriers to their implementation.

#### **SUMMARY:**

Introduction: Over-reliance on emergency psychiatric services can be costly to the system, burdensome to staff, and detrimental to patients. Our previous work identified needing medications as a risk factor for high utilization. The option of medication reviews only instead of comprehensive emergency services might address over-reliance and reduce costs.

Purpose: Evaluate impact of medication reviews.

Methods: Survey of emergency psychiatric service and outpatient clinics' staff. Survey of 80 patients receiving medication reviews and examination of their utilization patterns.

Results: Patients reported a high level of satisfaction. Those patients expressing dissatisfaction wanted more time in the service (not with the physician). The emergency psychiatric service staff reported moderate satisfaction along with improvements in workload and patient care. In contrast, the outpatient clinics' staffs were mostly unaware of the change but those aware reported lower satisfaction and increased workload. They did not discern any change in patient care. Emergency psychiatric service utilization for the 80 patients increased after the medication reviews without any increase in hospitalization.

Conclusion: The results reflect patients' preferences and the need to examine the impact to the larger system.

Change affecting multiple institutions may face lingering obstacles.

Funding source: Flinn Foundation

#### **REFERENCES:**

- Arfken CL, Zeman LL, Yeager L, Mischel E, Amirsadri A: Frequent visitors to psychiatric emergency services: staff attitudes and temporal patterns. Journal of Behavioral Health Services and Research 2002; 29:490-496.
- Breslow RE, Erickson BJ, Cavanaugh KC: The psychiatric emergency service: where we've been and where we're going. Psychiatric Quarterly 2000; 71:101-111.

#### **TARGET AUDIENCE:**

Emergency psychiatry, policy.

Poster 57

Friday, October 31 9:30 a.m.-11:00 a.m.

#### PLACEBO-RELATED WEIGHT GAIN ASSOCIATED WITH IMPROVEMENT IN PSYCHOPATHOLOGY

Eli Lilly and Company

Haya Ascher-Svanum, Ph.D., Research Scientist, Outcomes Research Studies, Eli Lilly and Company, One Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Michael Stensland, M.S., Consultant, Outcomes Research, Eli Lilly and Company, One Lilly Corporate Center, DC 4025, Indianapolis, IN 46285; Bruce J. Kinon, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the potential for a non-pharmacological link between weight gain and clinical improvement in the treatment of patients with schizo-phrenia.

#### **SUMMARY:**

Objective: To investigate whether the link between treatment-related weight gain and better therapeutic response may not necessarily have a pharmacological basis.

Methods: We used data from the acute phase (six weeks) of a randomized, double-blind trial comparing olanzapine (N=187) and placebo (N=61) in the treatment of patients with schizophrenia. Within each treatment group, patients who improved were contrasted on absolute weight change with patients who deteriorated. Improvement was defined as decreased BPRS total score by at least 20%. Deterioration was defined as any increase in BPRS total score. The associations between weight

change and therapeutic response were measured with the BPRS total score, CGI-Severity score, and the PGI-Improvement score.

Results: Weight gain was statistically, consistently, and similarly associated with better therapeutic response for the olanzapine and for the placebo-treated patients (correlations ranged from -0.27 to -0.35, p<0.05). Patients with improved therapeutic response gained significantly more weight than patients who deteriorated (4.6kg vs. -0.63kg; 0.40kg vs. -1.74kg for the olanzapine and placebo treatment groups, respectively, p<0.01).

Conclusions: The robust association between improved clinical response and treatment-related weight gain extends beyond pharmacologic treatments to placebo effects. Weight gain, regardless of treatment, may be an epiphenomenon of improving psychopathology.

Funding provided by Eli Lilly and Company

#### **REFERENCES:**

- Meltzer HY, Perry E, Jayathilake K: Clozapine-induced weight gain predicts improvement in psychopathology. Schizophr Res 2002; 59:19–27.
- Czobor P, Volavka J, Sheitman B, Lindenmaer JP, et al: Antipsychotic-induced weight gain and therapeutic response: a differential association. J Clin Psychopharm 2002; 22:244–251.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policy makers, consumers, and advocacy groups

Poster 58

Friday, October 31 9:30 a.m.-11:00 a.m.

#### DIABETES INCIDENCE AND USE OF ANTIPSYCHOTIC MEDICATIONS IN THE CENTRAL TEXAS VETERANS ADMINISTRATION

Eli Lilly and Company

Jamie C. Barner, Ph.D., Assistant Professor, Department of Pharmacy, University of Texas, One University Station, A-1930, Austin, TX 78712; Jason Worchel, M.D.; Min Yang, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to better understand factors associated with new-onset diabetes and use of antipsychotic agents.

#### **SUMMARY:**

Objectives: To determine: (1) whether new-onset diabetes differs between atypicals and typicals and among atypicals; and (2) what factors (antipsychotic agent, body mass index, hyperlipidemia, hypertension, persistence,

mental health comorbidities, and demographics) are related to new onset diabetes.

Methods: Data from the Central Texas Veterans Health Care System were extracted from September 1995 to November 2002 for continuously enrolled adult patients who had no previous (six-months) antipsychotic use and no previous (one year) history of diabetes.

Results: Among those who met the inclusion criteria (n=3,916), chi-square analyses revealed that there was no significant difference in the incidence of diabetes between typicals and atypicals (p=.2907) or among atypicals (p=.5463). Multivariate logistic regression (n=1587) revealed that increasing age (OR=1.213, 95%CI=1.016-1.447, p=.0324), nonwhite (OR=1.761, 95%CI=1.174-2.640, p=.0062), and hyperlipidemia (OR=1.606, 95%CI=1.064-2.425, p=.0242) were significantly related to new-onset diabetes.

Conclusions: This study showed that among veterans taking antipsychotic agents, there was no difference in the incidence of diabetes and use of typicals or atypicals. After controlling for demographic and clinical variables, there was still no significant difference among the agents. The main factors (increasing age, nonwhite, and hyperlipidemia) related to new-onset diabetes were those that are typically associated with the disease.

Funding source: This study was funded by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Sernyak MJ, Leslie DL, Alarcon RD, et al: Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. Am J Psychiatry 2002; 159:561–6.
- Koro CE, Fedder DO, L'Italien GJ, et al: Assessment of independent effect of olanzapine and risperidone on risk of diabetes among patients with schizophrenia: population based nested case-control study. BMJ 2002; 325:243-247.

#### **TARGET AUDIENCE:**

Mental health care providers who prescribe antipsychotic agents and formulary decisionmakers.

Poster 59

Friday, October 31 9:30 a.m.-11:00 a.m.

#### METABOLIC SYNDROME COMPARISON BETWEEN OLANZAPINE, ARIPIPRAZOLE, AND PLACEBO

Bristol-Myers Squibb Company

Gilbert L'Italien, Ph.D., Psychiatric Research and Psychopharmacology, Mental Health Division, VA Medical Center at Portland, 3710 Southwest, U.S. Veterans Hospital Road, Portland, OR 97201; Daniel E. Casey, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the risk of metabolic syndrome with aripiprazole, olanzapine or placebo therapy.

#### **SUMMARY:**

Objective: Metabolic syndrome constitutes a set of risk factors for diabetes and heart disease. We compared its incidence in two schizophrenia treatment trials after 26 weeks.

*Methods:* Criteria for metabolic syndrome was based on clinically relevant changes in and levels of constituent risk factors, consistent with national guidelines. Survival analysis was performed on individual and pooled studies (N = 314 and N = 306 for trials 1 and 2, respectively).

Results: The cumulative metabolic syndrome incidence for the pooled analysis ( $\pm$  SE) was 19.2%  $\pm$  4.0% (olanzapine), 12.8%  $\pm$  4.5% (placebo), and 7.6%  $\pm$  2.3% (aripiprazole) (log-rank p=0.003). The cumulative incidence for aripiprazole in the two trials were not different (6.8%  $\pm$  2.8% versus 8.3%  $\pm$  3.7% p=0.88). Log-rank p-values for olanzapine vs aripiprazole incidence were p=0.007 in trial 1 and p=0.23 for aripiprazole vs placebo in trial 2. The hazard ratio (95%Cl) for aripiprazole vs placebo was 0.53 (0.18; 1.54) and 0.31 (0.12; 0.77) for aripiprazole vs olanzapine (69% relative risk reduction).

Conclusion: The findings suggest increased risk for metabolic syndrome among olanzapine patients, and comparable risk among aripiprazole patients versus placebo. The cardiovascular consequences of antipsychotic therapy warrant consideration by physicians.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (2001)
   Executive summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III), 285:2486–2497.
- 2. Gianfresco FD, Grogg AL, Mahmoud, RA, Wang R, Nasrallah HA: Differential effects of risperidone, planzapine, and clozapine, and conventional antipsychotics on type 2 diabetes: Findings from a large health plan database. J Clin Psychiatr 2002; 63:920-930.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia. Poster 60

Friday, October 31 9:30 a.m.-11:00 a.m.

# EFFECTIVENESS OF ASSERTIVE COMMUNITY TREATMENT FOR HOMELESS MENTAL ILLNESS

Craig M. Coldwell, M.D., Instructor, Department of Psychiatry, Dartmouth Medical School, VA Medical Center, 215 North Main Street, 11-Q, White River Junction, VT 05009; William Bender, M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the design and implementation of a systematic review and communicate the treatment advantages of ACT over other community treatments for the homeless mentally ill.

#### **SUMMARY:**

Background: The care of persons with severe mental illness is a tremendous challenge for public mental health systems. Evidence supports the effectiveness of Assertive Community Treatment (ACT) for this population; however, there is some controversy regarding its effectiveness in particularly challenging subpopulations. This study reports the results of a systematic review comparing ACT to other community treatments for homeless persons with severe mental illness.

Hypothesis: ACT will outperform traditional treatment models in reducing homelessness and severity of psychiatric symptoms.

Methods: A structured literature search of Medline, PsycINFO, and the Cochrane Collaborative databases was performed. Two reviewers completed standardized data abstraction. Mean changes in homelessness and symptom severity were compared. When not provided by the studies, p-values were calculated using t-tests.

Results: Seven of 26 studies (27%) met inclusion criteria, including four randomized controlled trials and three observational studies. Compared with other treatments, ACT produced a significant reduction in homelessness in six of seven studies (*p*-values <.05 to <.0001) and significant improvement in psychiatric symptoms in five of seven studies (*p*-values <.01 to <.0001).

Conclusions: Current evidence supports a moderate advantage in housing and psychiatric outcomes for ACT over other models for the homeless mentally ill.

#### **REFERENCES:**

- 1. Lam JA, Rosenheck R: Street outreach for homeless persons with severe mental illness: is it effective? Medical Care 1999; 37(9):894–907.
- 2. Lehman AF, et al: A randomized trial of assertive community treatment for homeless persons with se-

54(11):1038-1043.

#### **TARGET AUDIENCE:**

CMHC program directors and clinicians treating the homeless

Poster 61

Friday, October 31 9:30 a.m.-11:00 a.m.

#### OUTCOME OF ASSISTED OUTPATIENT TREATMENT

Virginia Contreras, M.D., Director, HIV/Psychiatry Department, Bronx Lebanon Hospital Center, Albert Einstein College of Medicine, 6902 Polk Street, Guttenberg, NJ 07093

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to recognize the value of a treatment modality that improves an individuals functioning within the community, facilitates reintegration, reduces risk, and increases safety.

#### **SUMMARY:**

On November 8, 1999, New York State passed a law that provides assisted outpatient treatment (AOT) for mentally ill people who, due to their prior treatment history and circumstances, are not likely to survive safely in the community without supervision. A court order must be obtained for the individual who is to receive the outpatient treatment. Evidence and a treatment plan must be presented at the court hearing, as well as testimony from the physician who examined the patient. An order is issued requiring the AOT director to provide those services described in the treatment plan. If the patient fails to comply with the court-ordered treatment, the law establishes a procedure for admission to an inpatient setting. This cohort study done in an innercity hospital in the Bronx, New York, will report the outcome of patients on AOT, one year retrospectively and one year prospectively. The study addresses variables such as quality of life, number of admissions, readmissions, and medication compliance. Assisted outpatient treatment has been shown to be significantly more effective in reducing violence, increasing treatment compliance, and improving outcomes for severely mentally ill individuals than routine outpatient care without AOT.

#### **REFERENCES:**

1. Ranney MR: Assisted outpatient treatment. Mental Health World 2000; 8:4.

vere mental illness. Arch Gen Psych 1997; 2. Torrey E.F: Out of the Shadows. Confronting America's Mental Illness Crisis. New York, New York, Wiley and Sons, 1997.

#### **TARGET AUDIENCE:**

Psychiatrists, residents, psychologists, and other allied professionals.

Poster 62

Friday, October 31 9:30 a.m.-11:00 a.m.

THE RISK OF DIABETES, HYPERLIPIDEMIA, AND HYPERTENSION AND THE USE OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN SCHIZOPHRENIA: EVIDENCE FROM A STATE MEDICAID POPULATION

Eli Lilly and Company

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should gain a better understanding of the relative risk of diabetes, hyperlipidemia, and hypertension associated with atypical antipsychotic treatment in schizophrenia.

#### **SUMMARY:**

Objectives: To compare the incidence rates of diabetes, hyperlipidemia, and hypertension in individuals with schizophrenia initiating treatment with olanzapine, quetiapine, or risperidone.

Methods: The integrated medical and pharmacy claims from the Indiana Medicaid Program were used to compare one-year incidence rates of diabetes, hyperlipidemia, and hypertension in clients with schizophrenia after initiating olanzapine, quetiapine, or risperidone mono-atypical therapy between 1/1/99 and 12/31/00. Logistic regressions controlling for client demographics, comorbidities, and prior medication use were used to compare odds ratios of incidence.

Results: A total of 1,133 clients were included in the study: 523 received olanzapine, 190 received quetiapine, and 420 received risperidone. No significant differences in incidence of diabetes, hyperlipidemia, or hypertension were found in any pair-wise group comparison (olanzapine vs. risperidone (O/R), olanzapine vs. quetiapine (O/ O), or quetiapine vs. risperidone (O/R)). The adjusted odds ratios and 95% confidence intervals for incidence of diabetes were O/R: 0.87 (0.46–1.63); O/Q: 0.74 (0.34–1.62); Q/R: 1.17 (0.53–2.57). For incidence of hyperlipidemia, the results were O/R: 1.14 (0.66–1.96); O/Q: 1.51 (0.72–3.18); Q/R: 0.76 (0.35–1.65). Finally, the results for the incidence of hypertension were O/R: 0.83 (0.50–1.38); O/Q: 0.91 (0.47–1.77); Q/R: 0.91 (0.46–1.77).

Conclusion: Within the Indiana Medicaid Program, the risk of diabetes, hyperlipidemia, and hypertension were similar for individuals with schizophrenia receiving treatment with olanzapine, quetiapine, or risperidone.

Funded by Eli Lilly and Company.

#### **REFERENCES:**

- Lund BC, Perry PJ, Brooks JM, Arndt S: Clozapine use in patients with schizophrenia and the risk of diabetes, hyperlipidemia, and hypertension. A claims-based approach. Archives of General Psychiatry 2001; 58:1172–1176.
- Buse JB, Cavazzoni P, Hornbuckle K, Hutchins D, Breier A, Jovanovic L: A retrospective cohort study of diabetes mellitus and antipsychotic treatment in the United States. Journal of Clinical Epidemiology 2003; 56:164–170.

Poster 63

Friday, October 31 9:30 a.m.-11:00 a.m.

# IMMUNOLOGICAL MEASURES IN WOMEN OUTPATIENTS WITH MAJOR DEPRESSION DISORDER

FAPESP, Brazil

Andrea H. Marqués Deak, M.D., Ph.D., Medical Assistance, Department of Psychiatry, University of Sao Paulo, 2401 Calvert Street, N.W., Washington, DC 20008; Francisco Lotufo Neto, M.D., Ph.D., Department of Psychiatry, University of Sao Paulo, Rua Simao Alvares 765, Apt. 7-J, Sao Paulo, Brazil 05417030; Ana Cristina Solis, D.D.S.; Euthymia Brandaj Prado, M.D., Ph.D.

#### **SUMMARY:**

Introduction: Major depressive disorder (MDD) may be associated with several immunological alterations. This study has investigated immunological measures and the activity of hypothalamic-pituitary-adrenal axis (HPA) in women outpatients with different subtypes of MDD (melancholic or atypical; acute or chronic; severe or moderate; unique or recurrent episode) before and after treatment and in a control group.

Hypotesis: Different immunological patterns should discriminate subtypes of MDD.

Methods: 46 women and 41 volunteers from the department of psychiatry, University of São Paulo were

enrolled. Diagnosis was made with SCID (DSM-IV) and Halmiton Depression Scales (HDRS, 21). The patients were medicated with sertraline or imipramine. The following laboratory evaluations were performed: IL-1 beta, IL-6, IFN-gama, serum cortisol, leukocytes, monocytes, neutrophilis, lymphocyte, CD3+, CD4+, CD8+, acute phase proteins, complement components, and immunoglobulins.

Results: Significant differences were not found between the patients group before treatment and the control group. The patients group after treatment had significant increases of cytokines levels, but not in other immunological parameters.

Conclusion: Women outpatients with MDD (in all subtypes) had no immunological and HPA axis activation. The antidepressant action can be related to the rise of cytokines after treatment.

#### **REFERENCES:**

- 1. Zorilla et al: The relationship of depression.... Brain, Behavioral on Immunity 2001;15:199.
- 2. Rothermundt, et al: Arch Psych Medicine 2001; 60:283-289.

#### **TARGET AUDIENCE:**

Psychiatry research in psychoneuroimmunology

Poster 64

Friday, October 31 9:30 a.m.-11:00 a.m.

# ANTIPSYCHOTICS AND MEDICATION CO-ADMINISTRATION: COST IMPLICATIONS

John R. DeQuardo, M.D., Division Chief Psychiatrist, Institute for Forensic Psychiatry, Colorado Mental Health Institute at Pueblo, 1600 West 24th Street, Pueblo, CO 81003

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the attendee should understand the frequency of required medication cotherapy associated with individual atypical antipsychotics.

#### **SUMMARY:**

Atypical antipsychotics are first-line agents in the treatment of psychotic disorders. They have clear efficacy and adverse effect benefits over older drugs, but are costlier and have serious potential side effects of their own. Adverse effects on glucose and lipid metabolism can compromise health and will raise the cost of care for patients with psychotic disorders. The aim of this study was to examine the relationship between primary antipsychotic medication and number of co-administered

agents, including these used to manage glucose intolerance and dyslipidemia. The medication records for all patients in a state forensic hospital (N = 268) for one day in December 2002 were examined. Primary antipsychotic was defined objectively, prevalence of co-administration of nine other medication categories was tabulated for all patients. Demographic data included age, gender, and length of stay and diagnoses. The frequency of co-administration of each medication category by primary antipsychotic was examined via chi square analysis. Individual antipsychotics were significantly different when comparing medication co-administration overall, but not specifically for glucose or lipid treatments. The percentage of patients receiving treatment for metabolic problems was high for all antipsychotics (~25%). The cost-benefit analysis for a given atypical antipsychotic must take into account overall effectiveness and costs associated with medication side effects, in addition to acquisition cost.

#### **REFERENCES:**

- Lindenmayer JP, Czobor P, Volavka J, Citrome L, Sheitman B, McEvoy JP, Cooper TB, Chakes M, Lieberman JA: Changes in glucose and cholesterol levels in patients with schizophrenia treated with typical or atypical antipsychotics. American Journal of Psychiatry 2003; 160: 290–296.
- Hedenmalm K, Hagg S, Stahl M, Mortimer O, Spigset O: Glucose intolerance with atypical antipsychotics. Drug Safety 2002; 25: 1107–1116.

#### **TARGET AUDIENCE:**

Community and state hospital psychiatrists

Poster 65

Friday, October 31 9:30 a.m.-11:00 a.m.

#### HIGH-DOSE ZIPRASIDONE: EFFECTIVENESS AND TOLERABILITY IN CLINICAL PRACTICE

Pfizer Inc.

Daniel A. Deutschman, M.D., Assistant Clinical Professor of Psychiatry, Case Western Reserve University, 18051 Jefferson Park Drive, Middleburg Heights, OH 44130; Douglas H. Deutschman, Ph.D., Associate Professor of Biology, San Diego State University, 550 Campanile Drive, PS-150-A, San Diego, CA 92182

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss the authors' clinical experience with high-dose ziprasidone in patients with treatmentresistant psychotic and affective spectrum disorder diagnoses.

#### **SUMMARY:**

Introduction: The ziprasidone clinical development program evaluated the safety and tolerability of the anti-psychotic at dosages up to 200 mg/d. Limited data are available on higher dosages. We review ongoing clinical experience at dosages up to 320 mg/d.

Methods: Patients offered ziprasidone 240 mg/d met the following criteria: (1) history of treatment resistance, (2) robust but incomplete response to ziprasidone at 160 mg/d, (3) minimal side effects. Similar criteria were applied to patients advanced from 240 mg/d to 320 mg/d. An electronic medical record, Behavior 2003, allowed analysis of dosages, demographics, diagnoses, efficacy, and adverse events.

Results: Thirty-three patients received ≥240 mg/d (ages 15 to 82 years); five patients were ≥60 years old. Of these, 20 (ages 17 to 55) were advanced to 320 mg/d. Most patients improved in severity of primary illness (as rated by clinicians using a Likert scale). Improvements in negative, depressive, and anxiety symptoms were particularly noteworthy. Treatment was well tolerated; no patients discontinued due to adverse events. No clinically significant ECG changes were observed. Experience with additional patients will be reported.

Conclusion: Treatment-resistant patients who partially respond to ziprasidone at 160 mg/d may benefit from dosages as high as 320 mg/d, with good tolerability.

Funding source: Pfizer Inc.

#### **REFERENCES:**

- FDA Psychopharmacological Drugs Advisory Committee Briefing Document for Zeldox Capsules (Ziprasidone HCl), Pfizer Inc, New York, NY, July 19, 2000. http://www.fda.gov/OHRMS/DOCKETS/AC/00/backgrd/3619b1. htm.
- Murray S, Siu C, Romano S: Optimal dosing of oral ziprasidone: analysis of clinical trial data. Presented at the 156<sup>th</sup> Annual Meeting of the American Psychiatric Association, May 17–22, 2003, San Francisco, California.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 66

Friday, October 31 9:30 a.m.-11:00 a.m.

#### BARRIERS TO CARE OF PERSONS WITH DUAL DIAGNOSIS IN A REGION IN ALBERTA, CANADA

Charl Els, M.B., Clinical Fellow, Department of Addiction Medicine, Centre for Addiction and Mental Health, University of Toronto, 1612 Bearspaw Drive, West, Edmonton, AB, Canada T6J 5H8; Munira Lalji, M.H.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize and critically appraise the different categories of barriers to service delivery to the mentally ill addicted population, and also appraise the recommendations for a service delivery model.

#### **SUMMARY:**

Introduction: In Alberta, mental health services and addiction services have separate organizational and funding structures. This study aimed to explore barriers in the care of those individuals with concurrent disorders, and to enhance insight into social, emotional, and experiential phenomena in care.

Method: A situational assessment (participatory action approach) with both qualitative and quantitative methodology was performed in the Crossroads Region, Alberta. Ethics approval: Alberta Heritage Foundation for Medical Research. With consent, three investigators administered a structured survey instrument incorporating related topics, with Likert-type and multiple-choice items. Focus groups and individual interviews were conducted with treatment-seeking outpatients (n=24), family members (n=8), service providers, and involved agencies (physicians, nurses, ambulance staff, law enforcement officials, and mental health and addiction workers) [n=98]. Triangulation was used to validate results.

Results: Key barriers and issues identified included deficits in: (1) availability, accessibility, integration, and funding of appropriate levels of care, (2) assessment and treatment protocols, (3) cross-training and education, (4) coordination, continuity, comprehensiveness, and flexibility of existing services.

Conclusions: Significant systemic barriers to care exist, and are considered to be as intractable as the illnesses themselves. Knowledge of the nature of the barriers enhanced the conceptualization of, and recommendations for an appropriate and credible treatment model.

#### **REFERENCES:**

- Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, Judd LL, Goodwin FK: Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study. JAMA 1990; 264(19):2511-8.
- Ridgely S, Goldman HH, Willenbring M: Barriers to the care of persons with dual diagnoses: Organizational and financing issues. Schizophrenia Bulletin 1990; 16(1):123-132.

#### **TARGET AUDIENCE:**

Alberta Health and Wellness, Alberta Medical Association. Primary health care workers.

Poster 67

Friday, October 31 9:30 a.m.-11:00 a.m.

# PROJECT OUTREACH: INNOVATIVE TREATMENT FOR HOMELESS MENTALLY ILL INDIVIDUALS

Timothy F. Florence, M.D., Clinical Instructor of Psychiatry, University of Michigan, and 2001–2002 APIRE/Janssen Fellow, 1500 East Medical Center Drive, Box 0116, Ann Arbor, MI 48109; Mona L. Goldman, Ph.D., Research Investigator, Department of Psychiatry, University of Michigan, 1500 East Medical Center Drive, Box 0120, Ann Arbor, MI 48109; Mark C. Holter, Ph.D.; Meghan A. Rohling, M.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) describe the components of Project Outreach, and (2) understand the process of implementing a community-based treatment program for persons who are homeless and mentally ill.

#### **SUMMARY:**

Homelessness is a pervasive social problem in the United States. Data suggest approximately one third of the estimated 600,000 persons who are homeless on any given night have a severe and persistent mental illness. This combination creates unique challenges in the provision of community-based mental health services to these individuals

The Project Outreach Team (PORT) is a multidisciplinary team designed to engage untreated homeless mentally ill persons and transition clients after psychiatric stabilization into the public mental health system. PORT combines elements of two service delivery models that have shown promise with this population, Assertive Community Treatment and Critical Time Intervention.

Program objectives are to improve access to care and clinical and functional outcomes and to shift the provision of services from acute care settings to community-based sites. Clinical and functional status, quality of life, and client satisfaction outcomes were assessed at baseline and every three months over an 18 month period. Forty-six subjects with primary psychotic and major mood disorders were enrolled, with a refusal rate of 33%. Preliminary results indicate the PORT intervention is successful at reducing client symptomatology and homelessness. Further evaluation using Hierarchical Linear Modeling is under way.

#### **REFERENCES:**

1. Lehman AF, Dixon LB, et al: A randomized trial of assertive community treatment of homeless persons with severe mental illness. Arch Gen Psychiatry 1997; 54:1038–1043.

2. Susser F, et al: Preventing recurrent homelessness among mentally ill men: a "critical time" intervention after discharge from a shelter. Am J Public Health 1997; 87:256–262.

Poster 68

Friday, October 31 9:30 a.m.-11:00 a.m.

### FREQUENCY OF DIABETES IN PATIENTS TAKING ATYPICAL ANTIPSYCHOTIC MEDICATIONS

AstraZeneca Pharmaceuticals

Frank D. Gianfrancesco, Ph.D., President, HECON Associates, Inc., 9833 Whetstone Drive, Montgomery Village, MD 20886

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to describe the incidence of type 2 diabetes, identified through medical or prescription claims, among patients treated with quetiapine, risperidone, or olanzapine for schizophrenia or bipolar disorder, and to recognize the association between treatment duration and risk of diabetes.

#### **SUMMARY:**

Objective: To evaluate the association of antipsychotic treatment with type 2 diabetes in a health plan database.

Methods: Claims data for patients with bipolar disorder or schizophrenia in health plans totaling 25 million members were analyzed for the incidence of type 2 diabetes and treatment with quetiapine, risperidone, or olanzapine. Diabetes was identified through medical and/or prescription claims, with or without screening for preexisting diabetes (based on claims for diabetes within 90 days of beginning antipsychotic treatment). Diabetes was identified by three groupings of these criteria: (1) medical or prescription claims with no screening, (2) prescription claims without prescreening, and (3) prescription claims with prescreening.

Results: Among 3,484 episodes of treatment with quetiapine, 7,075 with risperidone, and 8,296 with olanzapine, the respective frequencies of type 2 diabetes by the three groupings were (1) 0.089, 0.093, and 0.094; (2) 0.060, 0.067, and 0.074; and (3) 0.018, 0.025, and 0.035. Frequencies increased with treatment duration; the relationship was strongest for olanzapine, weakest for quetiapine.

Conclusions: This analysis suggests that the occurrence of type 2 diabetes was highest with olanzapine and lowest with quetiapine. These findings are part of an ongoing study.

Funding Source: Supported by AstraZeneca Pharmaceuticals, L.P.

#### **REFERENCES:**

- Buse JB, Cavazzoni P, Hornbuckle K, Hutchins D, Breier A, Jovanovic L: A retrospective cohort study of diabetes mellitus and antipsychotic treatment in the United States. J Clin Epidemiol 2003; 56:164–170.
- Lindenmayer JP, Czobor P, Volavka J, Citrome L, Sheitman B, McEvoy JP, Cooper TB, Chakos M, Lieberman JA: Changes in glucose and cholesterol levels in patients with schizophrenia treated with typical or atypical antipsychotics. Am J Psychiatry 2003; 160:290–296.

#### **TARGET AUDIENCE:**

Meeting attendees

Poster 69

Friday, October 31 9:30 a.m.-11:00 a.m.

### EVIDENCE OF PUBLICATION BIAS IN ESTIMATES OF NEUROLEPTIC MALIGNANT SYNDROME INCIDENCE

Ronald J. Gurrera, M.D., Assistant Professor, Department of Psychiatry, Harvard Medical School, VA Medical Center, 940 Belmont Street, Brockton, MA 02301; John C. Simpson, Ph.D.; Ming T. Tsuang, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to cite evidence of publication bias in published estimates of neuroleptic malignant syndrome incidence, and indentify several methodological factors associated with increased risk of publication bias.

#### **SUMMARY:**

Introduction: Published estimates of the incidence rate for neuroleptic malignant syndrome (NMS) are notoriously variable, ranging from 0% to 3.23%. This dramatic variation has been attributed to the combined effects of a real decline in incidence over time and the low reliability of earlier studies, most of which used a retrospective methodology and inconsistent diagnostic criteria. Inconsistent estimates of NMS incidence estimates have hindered risk factor identification and evaluations of prevention strategies. This study examined published reports of NMS incidence for sources of experimental bias and time-related trends that might account for this excessive variability.

Methods: A National Library of Medicine computerized search was conducted to identify potentially eligible studies, supplemented by a manual search of one of the author's (RJG) own library of NMS publications.

Twenty-two previously reported estimates were identified as candidates for analysis. The relationship of estimated NMS incidence (I) to time, study size (N), and case ascertainment (C) was examined using standard graphical and statistical methods.

Results: No NMS incidence trend over time was found (|Spearman's rhol ≤.269, p≥.226). Log(I) was significantly linearly related to log(N) (beta=-.823,  $R^2$ =.677, p=.000) for all studies, as well as in a select subgroup (N=13) of studies that satisfied minimum methodology requirements (beta=-.739,  $R^2$ =.546, p=.004). Mean weighted incidence rate was significantly lower in the select subgroup of studies (4.70 vs. 9.32 cases per thousand,  $\chi^2$ =57.75, df=1, p=.000). These findings indicate a substantial publication bias effect in the NMS incidence literature. Among studies that met minimum design standards, the best estimate of NMS incidence is ~0.1%. This estimate is based exclusively upon psychiatric inpatients, so NMS incidence in the population of all patients receiving antipsychotic medication is likely to be much lower.

Poster 70

Friday, October 31 9:30 a.m.-11:00 a.m.

#### LONGITUDINAL EFFECT OF OLANZAPINE ON FASTING SERUM LIPIDS: A RANDOMIZED, PROSPECTIVE, FOUR-MONTH STUDY

Eli Lilly and Company

Hong Liu-Seifert, Ph.D., Senior Statistician, Neuroscience Medical Studies, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Bruce J. Kinon, M.D.; Gary Hadley, Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be more familiar with the chronic effects of antipsychotics on fasting serum lipids, and how lipid levels may transiently change upon switching medications.

#### **SUMMARY:**

Objective: To compare lipid profiles of clinically stable schizophrenic patients treated with conventional antipsychotics or risperidone to those of patients switched to olanzapine.

Methods: Fasting serum lipids were measured in subjects participating in a study of the effect of switching antipsychotic medications on serum prolactin. Patients were randomized to remain on current conventional antipsychotic or risperidone therapy (N=27) or switch to olanzapine (OLZ) 5–20 mg/day, (N=27). Total cholesterol, high density lipoproteins (HDL), low density lipo-

proteins (LDL), and triglycerides were collected monthly.

Results: All mean baseline serum lipids were at, or exceeded, the upper limit of normal except for HDL. In patients switched to olanzapine, there was no significant within-group change baseline to endpoint in total cholesterol (p=0.69) or triglycerides (p=0.81). These changes were comparable to those in patients continuing on conventional antipsychotics or risperidone (between-group: cholesterol, p=0.69; triglycerides, p=0.28). Visit-wise cholesterol and triglyceride levels increased within the first month of olanzapine treatment and returned to baseline levels by months 2 and 3, respectively.

Conclusion: Longitudinal measures reveal that patients switched to olanzapine may experience an initial rise in fasting serum lipids that returns to pretreatment levels, which are not significantly different from those in patients on conventional antipsychotics or risperidone.

Source of Funding: Eli Lilly and Company

#### **REFERENCES:**

- 1. Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). NIH Publication No. 01-3670, May 2001.
- 2. Boston PF, Dursun SM, Reveley MA: Cholesterol and mental disorder. British Journal of Psychiatry 1996; 169(6):682–689.

#### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat schizophrenia

Poster 71

Friday, October 31 9:30 a.m.-11:00 a.m.

#### SUICIDEAL IDEATION CHANGES IN OLANZAPINE- OR HALOPERIDOL-TREATED PATIENTS WITH SCHIZOPHRENIA

Eli Lilly and Company

John P. Houston, M.D., Ph.D., Senior Clinical Research Physician, Neuroscience Medical Division, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Christopher Kaiser, Ph.D.; Elisabeth Degenhardt, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to understand the clinical factors that determine suicidal ideation in schizophrenic patients and the pattern of symptom reduction with olanzapine vs. haloperidol treatment.

#### **SUMMARY:**

Background: We examined underlying factors potentially associated with the 2.5 times greater rate of suicide attempts during haloperidol (HAL) vs. olanzapine (OLZ) treatment (5–20 mg/d) in patients with schizophrenia, schizoaffective, or schizophreniform disorders in a large, randomized, double-blind study. We examined a subset of 935 patients with baseline suicidal ideation for underlying clinical factors affecting suicidal ideation.

Methods: Montgomery-Asberg Depression Rating Scale suicide Item 10 (MADRS-10) correlated at >.20 with seven of 40 MADRS and Positive and Negative Syndrome Scale (PANSS) items used for factor analysis. We evaluated change from baseline (LOCF) for MADRS-10 and associated factors, testing for a difference between treatments.

Results: Significantly lower MADRS-10 scores were observed in OLZ-treated (.73, N=490) vs. HAL-treated (1.00, N=194) patients (p=.001) at up to six weeks. Two factors accounted for 62% of the variance, with MADRS-10 loading on one factor (associated with sadness, inner tension, and depression) with a .37 coefficient and the other factor (associated with pessimism and guilt) with a .44 coefficient. Both factors significantly improved with OLZ vs. HAL (p<.001).

Conclusion: Suicidal ideation and related factors were reduced further with OLZ compared with HAL in patients with schizophrenia.

Source of Funding: Eli Lilly and Company.

#### **REFERENCES:**

- Tollefson GD, Beasley CM Jr, Tran PV, Street JS, Krueger JA, Tamura RN, Graffeo KA, Thieme ME: Olanzapine versus haloperidol in the treatment of schizophrenia and schizoaffective and schizophreniform disorders: results of an international collaborative trial. Am J Psychiatry 1997: 154:457–465.
- Montgomery SA and Asberg M: A New Depression Scale Designed to Be Sensitive to Change. Br J Psychiatry 1979; 134:382–389.

#### **TARGET AUDIENCE:**

Clinicians involved in the medical treatment of schizophrenia

Poster 72

Friday, October 31 9:30 a.m.-11:00 a.m.

SUICIDAL IDEATION CHANGES IN PATIENTS WITH BIPOLAR I DEPRESSION USING OLANZAPINE-FLUOXETINE COMBINATION

Eli Lilly and Company

John P. Houston, M.D., Ph.D., Senior Clinical Research Physician, Neuroscience Medical Division, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Christopher Kaiser, Ph.D.; Elisabeth Degenhardt, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to understand the clinical features that determine suicidality in depressed bipolar I patients and how they are treated with olanzapine.

#### **SUMMARY:**

Background: Correlation between non-zero baseline suicidal ideation (mean=2.21) and other clinical symptom severity measures was assessed post-hoc in olanzapine-fluoxetine combination (OFC), olanzapine (OLZ), and placebo-treated depressed patients with bipolar I disorder (N=688). Primary objective was determining the reduction in suicidality and associated measures by OFC (6–12/25–50mg/d) vs. OLZ (5–20mg/d).

Methods: Suicidal ideation was measured with Montgomery-Asberg Depression Rating Scale<sup>2</sup> suicide item 10 (MADRS-10). Five of 21 Young Mania Rating Scale and MADRS items had a correlation coefficient >.20 with MADRS-10: apparent sadness, reported sadness, inner tension, pessimism, and suicidality (MADRS-1,2,3,9,10).

Results: Significant reduction in suicidality, measured by MADRS-10, occurred by Week 1 in patients receiving OFC (N=70) vs. OLZ (N=285;p=.002) and placebo (N=298;p<.001); by Week 3 in patients receiving OLZ (N=243) vs. placebo (N=259;p=.020). Significantly greater improvement on all five items was achieved by Week 1 with OFC vs. placebo. OLZ patients showed significantly greater improvement vs. placebo in apparent and reported sadness at Week 1, inner tension and suicidal thoughts at Week 3, pessimism at Week 6.

Conclusion: Treatment with OFC and OLZ reduced suicidal ideation in depressed bipolar patients in part by reducing dysphoria, pessimism, and inner tension.

Source of Funding: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Tohen M, Vieta E, Calabrese J, Ketter T, Sachs G, Bowden C, Mitchell P, Centorrino F, Risser R, Baker R, Evans A, Beymer K, Dube S, Toffefson G, Breier A: Efficacy of olanzapine and olanzapine/fluoxetine combination in the treatment of bipolar I depression. Archives of General Psychiatry 2003, in press.
- 2. Montgomery SA, Asberg M: A new depression scale designed to be sensitive to change. Br J Psychiatry 1979; 134:382–389.

#### **TARGET AUDIENCE:**

Clinicians treating patients with bipolar disorder

Poster 73

Friday, October 31 9:30 a.m.-11:00 a.m.

#### IS THERE A LINK BETWEEN ANTIPSYCHOTIC MEDICATIONS AND LOW-BONE MINERAL DENSITY?

Oliver D. Howes, Clinical Lecturer, Institute of Psychiatry, Box 63 De Crespigny Park, London, United Kingdom 3E5 8AF; Shubulade Smith, Clinical Lecturer, Institute of Psychiatry, Box 63 De Crespigny Park, London, United Kingdom 3E5 8AF

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that patients taking antipsychotics may be at increased risk of osteoporosis/ osteopenia.

#### **SUMMARY:**

Introduction: To determine whether antipsychotics are associated with low bone mineral density secondary to hyperprolactinaemia. Hyperprolactinaemia due to pituitary pathology is linked to osteoporosis. It is established that most antipsychotics can cause chronic hyperprolactinaemia, although some have little effect on prolactin secretion (clozapine, quetiapine, olanzapine).

Method: The study used a case-control design. Subjects were consecutive clinic attendees taking an antipsychotic for >2 years, and controls were a local population reference sample. Main outcome measures were DX absorptiometry (DXA) scan of lumbar spine, and prolactin levels. DXA scans are reported as t-scores.

Results: A total of 101 subjects were assessed (mean age 46y, SD±13.06, 54% male, mean medication dose 279mg chlorpromazine equivalent, SD±360.1). Mean spinal t-score: -0.65 (SD±1.4) was significantly lower than the control population (p<0.0001). Mean prolactin was elevated at 725mU/L (SD±1127, upper limit of reference range 450mU/L). Controlling for confounding factors did not alter the significance of the reduced bone mineral density. 37.8% of subjects showed spinal osteoporosis or osteopenia. Mean spinal t-score was lower in patients taking prolactin-sparing antipsychotics.

Conclusions: The data indicate that spinal bone mineral density is significantly lower in subjects than the controls. This supports an association between antipsychotic treatment and reduced trabecular bone mineral density (the pattern of bone change associated with hyperprolactinaemia associated with pituitary pathology). Patients taking antipsychotics may be at increased risk of osteoporosis or osteopenia.

#### REFERENCES:

1. Schlechte JA, Sherman B, Martin R: Bone density in amenorrheic women with and without hyperprolac-

- tinemia. J Clin Endocrinol Metab 1983; 56:1120-1123
- 2. Petty RG: Prolactin and antipsychotic medications: mechanism of action. Schizophr Res 1999; 35 Suppl:S67–S73.

#### **TARGET AUDIENCE:**

General psychiatrists, psychopharmacologists

Poster 74

Friday, October 31 9:30 a.m.-11:00 a.m.

#### A NATURALISTIC STUDY OF SERIOUS SIDE EFFECTS OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS

Marcela V. Horvitz-Lennon, M.D., M.P.H., Instructor in Psychiatry and Lecturer in Health Care Policy, Harvard Medical School, and Psychiatrist, Cambridge Hospital, 26 Central Street, Somerville, MA 02143; Larry Zaborski, M.S.; Sharon-Lise T. Normand, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate knowledge of (1) the conflicting nature of the evidence regarding serious side effects associated with atypical (versus conventional) antipsychotic and (2) the new evidence generated by our study, whose design and methodology represent an improvement relative to previous investigations.

#### **SUMMARY:**

Background: Conflicting evidence remains on the relative risk of metabolic and nutritional side effects for atypical versus conventional antipsychotic medications.

Methods: 1994 to 2001 Florida Medicaid claims data were used to create a schizophrenic cohort aged 18–65 years, treated with antipsychotics for at least three months (one month for clozapine), and enrolled for at least six months pre-treatment. Incidence was defined as new onset of diabetes, hyperlipidemia, or obesity during a 12-month period following antipsychotic exposure. We adjusted for demographic confounders using the Cochrane Mantel-Haenszel (CHM) statistic.

Results: Atypicals accounted for 47% of the 10,515 episodes (9,206 patients). Despite demographic comparability, more white patients were prescribed atypicals (46% vs. 36%). Unadjusted incidence rates (%) of diabetes/hyperlipidemia/obesity for atypicals versus conventionals were 16/32/12 and 16/31/9. Of note, diabetes risk was lower for conventional-treated minorities. Some drug-specific incidences are worthy of further investigation (e.g., relatively low diabetes risk for trifluoperazine). After adjustment, risk of obesity remained higher for atypicals (CMH statistic = 1.12, 95% CI 1.06–1.19).

Conclusion: Our study provided preliminary evidence of a higher incidence of obesity, but not of diabetes or hyperlipidemia, for atypical antipsychotics.

Funding Source: NIMH (R01-MH61434).

#### **REFERENCES:**

- 1. Lund BC, Perry PJ, Brooks JM, Arndt S: Clozapine use in patients with schizophrenia and the risk of diabetes, hyperlipidemia, and hypertension. Arch Gen Psychiatry 2001; 58:1172.
- 2. Wang PS, Glynn RJ, Ganz DA, Schneeweiss S, Levin R, Avorn J: Clozapine use and risk of diabetes mellitus. J Clin Psychopharmacol 2002; 22:236–243.

#### **TARGET AUDIENCE:**

Consumers and advocates, prescribing and non-prescribing clinicians, clinical researchers, service researchers, pharmacists

Poster 75

Friday, October 31 9:30 a.m.-11:00 a.m.

#### IMPACT OF USE OF DIFFERENT ATYPICAL ANTIPSYCHOTIC MEDICATIONS ON NURSING HOME COSTS

Shyam D. Karki, Ph.D., Associate Clinical Professor, Department of Pharmacy, State University of New York at Buffalo, 435 East Henrietta Road, Rochester, NY 14620; William B. Patterson, B.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize factors that impact on the cost of antipsychotic therapy.

#### **SUMMARY:**

*Purpose:* To evaluate impact of the use of three atypical antipsychotics (risperidone, olanzapine, and quetiapine) on nursing home costs.

Method: Charts of nursing home residents stabilized on fixed doses of risperidone (R), olanzapine (O), and quetiapine (Q) for at least six months were reviewed for dosage and dosage frequency. Time taken in dispensing and administration was determined by monitoring at three different occasions and their costs were calculated.

Results: There were 50 residents on R, 30 on O, and 60 on Q. Mean daily dose was  $1.2 \pm 0.9$  mg for R,  $4.2 \pm 2.3$  for O and  $240 \pm 135$  for Q. Dosage frequency was  $1.6 \pm 0.5$  for R, 1.0 for O, and  $2.5 \pm 0.7$  for Q. Nursing costs were \$682 for R, \$426 for O, and \$1,065 for Q. Pharmacy cost was \$139 for R, \$87 for O and \$217 for O.

Discussion: NY State Medicaid program provides additional reimbursement for atypical antipsychotics. However, pharmacy (P) and nursing (N) costs may vary significantly.

Conclusion: P & N costs per therapy year were \$821 for R, \$513 for O, and \$1,282 for Q, indicating O as the most cost effective atypical antipsychotic in the management of agitation in residents with dementia in N.Y. State nursing homes.

#### **REFERENCES:**

- 1. Karki SD: Cost effectiveness of atypical antipsychotic drugs for schizophrenia. Drug Benefit Trends 2001; 13 (Suppl.D.):16–18.
- Glazer WB, Johnston BM: Pharmacoeconomic evaluation of antipsychotic therapy for schizophrenia. Journal Clinical Psychiatry 1997; 58 (Suppl 10):50–54.

#### TARGET AUDIENCE:

Psychiatrists and psychiatry - pharmacists

Poster 76

Friday, October 31 9:30 a.m.-11:00 a.m.

# FAMILY THERAPY AND FAMILY FUNCTIONING IN PATIENTS WITH MOOD DISORDERS

Gabor I. Keitner, M.D., Department of Psychiatry, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903; Christine E. Ryan, Ph.D.; Joan E. Kelley

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the value of adjunctive family interventions in the treatment of mood disorders.

#### **SUMMARY:**

Objective: We examined the impact of adjunctive family therapy on the functioning of families of patients with major depression and with bipolar disorders.

Method: Data are presented from two treatment studies (1) 92 patients with bipolar disorder were randomly assigned to three treatment conditions: pharmacotherap alone (PT), PT + family therapy; PT + multifamily psychoeducational group therapy, and (2) 121 depressed inpatients were randomly assigned to follow-up care in four treatment conditions: medication + clinical management (MCM), cognitive therapy (CT) + MCM, family therapy (FT) + MCM, and CT + FT + MCM. Family therapy and subjective and objective measures of family functioning were based on the McMaster Model of Family Functioning.

Results: Bipolar patients with poor family functioning at index episode significantly improved their family functioning in all but one dimension by month 28. Even patients with good family functioning at index episode significantly improved their family functioning in three dimensions. Improvement in family functioning was not related to symptom reduction ( $x^2(1)=.191,NS$ ) whether measured by a priori (Bech-Rafaelson and Hamilton Depression Rating) or post hoc (median split) definitions. Improvement was related to receiving family treatment. Depressed patients with poor family functioning significantly improved their family functioning by six months and were able to sustain the improvement through 18 months. Patients with good family functioning also improved by six months but then lost some of the gains. Improvement in family functioning was not related to improvement in symptoms (t(86.0)=-1.10,NS)based on a 50% reduction in Hamilton Depression Rating Scores. Improvement in family functioning (by number of family dimensions that improved significantly and by level of significance) was related to receiving family therapy.

Conclusions: Despite improvement in mood symptoms, pharmacotherapy alone does not lead to improvement in family functioning in patients with mood disorders. Adjunctive psychosocial (especially family) interventions were related to significant improvement in family functioning, particularly in families experiencing the greatest distress.

#### **REFERENCES:**

- 1. Clarkin J, Carpenter D, Hull J, Wilner P, Glick I: Effects of psychoeducational intervention for married patients with bipolar disorder and their spouses. Psychiatric Services 1998; 19:531–533.
- 2. Miklowitz D, Simoneau T, Georege E, Richards J, Kalbag A, et al: Family-focused treatment of bipolar disorder 1-year effects of a psychoeducational program in conjunction with pharmacotherapy. Biological Psychiatry 2000; 48:582–592.

Poster 77

Friday, October 31 9:30 a.m.-11:00 a.m.

## A NOVEL METHOD OF DISSEMINATING PSYCHOSOCIAL TREATMENT: PRELIMINARY REPORT

Eli Lilly and Company

Anna Marie Toto, Ed.M., University Behavioral Health Care Program, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical Center, 151 Centennial Avenue, Piscataway, NJ 08854; Edward Kim, M.D.; Elizabeth Vreeland, M.S.N.; Shula Minsky, Ed.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand effective implementation strategies for psychosocial treatments.

#### **SUMMARY:**

We describe the Partners for Excellence in Psychiatry (PEP) program, a novel collaboration between the University of Medicine and Dentistry of New Jersey University Behavioral HealthCare (UMDNJ-UBHC) and Eli Lilly and Company. The program goal is to improve care in mental health agencies through the dissemination of the Neuroscience Treatment Team Partners (NTTP) program, a set of psychoeducational materials designed to improve disease self-management in patients with severe mental illness. The PEP program, which will competitively enroll 70 agencies in calendar year 2003, consists of three components: (1) training four staff from each agency in the use of the NTTP materials and program implementation methods at our central New Jersey training facility; (2) regular telephonic follow-up for one year to facilitate implementation of the NTTP program at the trainee agency; (3) a site visit to the trainee agency by a PEP trainer within three months of training to provide additional consultation and support in implementation. By June 1, 2003, the PEP program had trained 28 agencies. Ninety percent of agencies implemented their target of pilot implementation of one NTTP workbook within two months. These preliminary data suggest that the PEP program is an effective model for dissemination of psychoeducational treatment strategies to mental health agencies.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Psych Serv 2001; 52(12): 1598–1606.
- 2. J Nerv Ment Dis 2001; 189(12): 812-821.

#### **TARGET AUDIENCE:**

Psychiatrists, social workers, nurses, administrators

Poster 78

Friday, October 31 9:30 a.m.-11:00 a.m.

## MANHATTAN'S ASSISTED OUTPATIENT TREATMENT PROGRAM AND HOSPITAL RECIDIVISM

Andrew M. Kleiman, M.D., Deputy Director, Manhattan's Assisted Outpatient Treatment Program, Department of Psychiatry, New York State University, 462 First Avenue, 21 West, New York, NY 10016 Gary R. Collins, M.D.; Angela Solimo, M.A.; Joel Sneed, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate a basic understanding of the Manhattan Assisted Outpatient Treatment Program, and recognize its possible benefits to the severely mentally ill person in terms of a decreased number of hospitalizations and a decreased total number of inpatient hospital days.

#### **SUMMARY:**

Objective: To evaluate the effectiveness of an Assisted Outpatient Treatment (AOT) court order, with its concurrent increased number and intensity of psychiatric services, in reducing number of hospital admissions, and total number of inpatient hospital days in New York City's severely mentally ill population.

Method: The authors examined the first 56 cases evaluated and treated in Manhattan under AOT. Of these, we analyzed 42 cases for which complete demographic and clinical data were available for the year prior to the initial AOT order and the year following the order.

Results: AOT clients were significantly less likely to be hospitalized (0.67 admissions v. 1.93 admissions) and were hospitalized for significantly fewer days (16.4 days v. 76.79 days) in the year following AOT enrollment compared with the year prior to AOT enrollment.

Conclusions: Although previous outpatient commitment laws have been studied, Manhattan AOT is unique because of its specific criteria and population. This initial study suggests that the court ordered AOT program was clinically beneficial to its clients, as evidenced by a decreased number of hospital admissions and total hospital inpatient days in the year following the entry into the program compared with the prior year.

#### **REFERENCES:**

- Swanson JW, Swartz MS, Borum R, et al: Involuntary outpatient commitment and reduction of violent behavior in persons with severe mental illness. British Journal of Psychiatry 2000; 176:324–331.
- Swartz MS, Swanson JW, Wagner HR, et al: Can involuntary outpatient commitment reduce hospital recidivism: findings from a randomized trial with severely mentally ill individuals. Am J Psychiatry 1999; 156:1968–1975.

Poster 79

Friday, October 31 9:30 a.m.-11:00 a.m.

## FORENSIC ASSERTIVE COMMUNITY TREATMENT: AN EMERGING MODEL OF CARE

J. Steven Lamberti, M.D., Associate Professor of Psychiatry, Strong Ties Community Support Program, Univer-

sity of Rochester, and Director of Project Link, 300 Crittenden Boulevard, Rochester, NY 14642; Robert L. Weisman, D.O.; Dara Faden, B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion, participants should be able to describe an emerging service delivery model for preventing recidivism among severely mentally ill adults involved in the criminal justice system.

#### **SUMMARY:**

Objective: A national survey was conducted to identify assertive community treatment (ACT) programs that have been modified to prevent incarceration of severely mentally ill adults involved in the criminal justice system. Programs were identified that met three inclusion criteria: (1) having client history of criminal justice system involvement as an admission requirement, (2) having a criminal justice agency as the primary source of referrals, and (3) working in close partnership with a criminal justice agency to perform jail diversion.

Methods: National Association of County Behavioral Health Directors (NACBHD) members were surveyed to identify potential programs. Senior representatives of each potential program were subsequently interviewed to gather information about program design and operation.

Results: Eighty-six percent (271 of 314) of NACBHD members responded to the survey. Nineteen programs were identified currently operating in nine states. Only two had published outcome data regarding program effectiveness.

Conclusions: Forensic assertive community treatment is an emerging model for preventing arrest and incarceration of severely mentally ill adults with substantial histories of criminal justice system involvement. Further research is needed to examine the structure, function and effectiveness of this new model of service delivery.

#### **REFERENCES:**

- Lamberti JS, Weisman RL: Preventing incarceration of adults with severe mental illness: Project Link, in Serving Mentally Ill Offenders. Edited by Landsberg G, Rock M, Berg L. Springer Press, New York, NY, pp. 133–143, 2002.
- Lamberti JS, Weisman RJ, Schwarzkopf SB, Mundondo-Ashton R, Price N, Trompeter I: The mentally ill in jails and prisons: towards an integrated model of prevention. Psychiatric Quarterly 2001; 72:63–77.

#### **TARGET AUDIENCE:**

Mental health service providers, administrators, and researchers.

Poster 80

Friday, October 31 9:30 a.m.-11:00 a.m.

#### LONG-TERM WEIGHT EFFECTS OF ARIPIPRAZOLE VERSUS OLANZAPINE

Bristol-Myers Squibb Company

Mary Kujawa, M.D., Senior Director, U.S. Medical Operations, Bristol-Myers Squibb Company, 777 Scudders Mill Road, Plainsboro, NJ 08536

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the weight effects of aripiprazole compared with olanzapine in patients with acute relapse of schizophrenia.

#### **SUMMARY:**

*Objective:* To compare long-term weight effects of aripiprazole and olanzapine in patients with acute relapse of schizophrenia.

Methods: In this double-blind, multicenter study, 317 patients were randomized to aripiprazole (15–30 mg/day) or olanzapine (10–20 mg/day) for 26 weeks. The primary outcome measure was the proportion of patients experiencing significant weight gain (≥7%) from baseline to endpoint.

Results: In patients remaining on therapy, more olan-zapine-treated patients experienced  $\geq 7\%$  weight gain than aripiprazole-treated patients throughout the study. Significant differences in mean weight change were observed at weeks 6 and 26; at week 26, there was a mean weight increase of 4.23kg with olanzapine and a mean weight loss of 1.37kg with aripiprazole (P < 0.001). Differences favoring aripiprazole were also seen for total cholesterol, HDL, and triglycerides. There was no difference in the rate of clinical response between aripiprazole and olanzapine, either acutely (week 6) or in number of patients remaining in response and on therapy at week 26.

Conclusion: While clinical response was comparable, the incidence of weight gain and dyslipidemias were significantly lower with aripiprazole than with olanzapine. These effects on weight and lipids may lead to more advantageous long-term metabolic profile in patients treated with aripiprazole compared with olanzapine.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- 1. Baptista T: Body weight gain induced by antipsychotic drugs: mechanisms and management. Acta Psychiatr Scand 1999; 100(1):3–16.
- 2. Allison DB, Mentore JL, Heo M, Chandler LP, Cappelleri JC, Infante MC, Welden PJ: Antipsychotic-induced weight gain: a comprehensive research synthesis. Am J Psychiatry 1999; 156:1686–1696.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 81

Friday, October 31 9:30 a.m.-11:00 a.m.

#### FACTORS INFLUENCING CHOICE OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN TREATING SCHIZOPHRENIA: EVIDENCE FROM A MEDICAID POPULATION

Eli Lilly and Company

Gordon G. Liu, Ph.D., Associate Professor, Pharmaceutical Policy Department, University of North Carolina at Chapel Hill, CB #7360 Beard Hall, Chapel Hill, NC 27599; Dale Christensen, Ph.D., Professor and Chair, Pharmaceutical Policy Department, University of North Carolina at Chapel Hill, CB#7360 Beard Hall, Chapel Hill, NC 27599; Shawn X. Sun, Ph.D.; Zhongyun Zhao, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should gain a better understanding of how some patient demographics and prior medical resource utilization influence prescribing atypical antipsychotics.

#### **SUMMARY:**

Objectives: To assess the impact of patient demographics and resource utilization on the treatment choice of atypical antipsychotics in a Medicaid population with schizophrenia.

Methods: Patients were included if they were diagnosed with schizophrenia (ICD9 295.xx), initiated treatment with olanzapine or risperidone from July 1998 through October 2000 with no prior use of atypical antipsychotics, and were continuously eligible in the North Carolina Medicaid program during the six-month pre-treatment period. Both descriptive and multivariate analyses were conducted to investigate the associations between patient demographics, comorbidities, and resource utilization and the choice of olanzapine or risperidone.

Results: A total of 764 patients meeting study criteria were identified. Of these, 420 initiated olanzapine and 344 initiated risperidone. Gender, prior hospitalization, and county were found to be significantly associated with treatment selection. Males were more likely than females to be prescribed olanzapine (odds ratio (OR)=1.44, p=0.025). Patients who had a mental health-related hospitalization during the pre-treatment period were more likely than those without hospitalization to be prescribed olanzapine (OR=1.53, p=0.043). Finally, results

revealed significant regional variation in the likelihood of prescribing olanzapine versus risperidone.

Conclusion: The findings of this study indicate differences between patients treated with different atypical antipsychotics. The results underscore the importance of controlling for patient differences when comparing treatment outcomes among atypical antipsychotics using non-randomized data.

Funding Source: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Voris JC, Glazer WM: Use of risperidone and olanzapine in outpatient clinics at six Veterans Affairs hospitals. Psychiatric Services 1999; 50:163-4, 168.
- 2. Gibson PJ, Ogostalick A, Zhu B, Ramsey J: Risperidone versus olanzapine: How population characteristics can confound results, Drug Benefit Trend 2003; 15:38–46.

Poster 82

Friday, October 31 9:30 a.m.-11:00 a.m.

#### INTERFERON-A INDUCED DEPRESSION: SYMPTOM-SPECIFIC RESPONSE TO TREATMENT WITH ANTIDEPRESANT MEDICATIONS

Emily Williams, B.A., Department of Psychiatry, Oregon Health Sciences University, Hepatitis Resource Center, Portland VA Medical Center, 3710 Southwest, U.S. Veterans Hospital Road, Portland, OR 97239; Jennifer M. Loftis, Ph.D.; Ashlee Whitehead; Robert Socherman, Ph.D.; Peter Hauser, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate a better understanding of how different depressive symptom dimensions respond to SSRI antidepressant treatment for patients with hepatitis C who have interferon-induced depression; treat neuropsychiatric depressive symptoms that are induced in patients comorbid with hepatitis C undergoing interferon therapy.

#### **SUMMARY:**

Objective: Although symptoms of depression are among the most common side effects of interferon- $\alpha$  (IFN- $\alpha$ ) therapy, there have been no systematic studies assessing treatment responsiveness of specific IFN- $\alpha$ -induced depressive symptoms in patients with chronic hepatitis C viral (HCV) infection. The primary objective of this study was to assess the response of specific depressive symptom dimensions (negative cognitions, psychomotor anhedonia, vegetative symptoms, and somatic symptoms) to selective serotonin reuptake inhibi-

tor (SSRI) antidepressant treatment in patients with HCV who develop IFN- $\alpha$ -induced major depressive disorder (MDD).

Method: Thirty-nine HCV patients on IFN- $\alpha$  combination therapy were monitored weekly using the Beck Depression Inventory (BDI). Thirteen of 39 patients (33%) developed IFN- $\alpha$ -induced MDD and were treated with citalogram, a selective SSRI antidepressant.

Results: All four symptom dimensions of the BDI increased significantly at week eight for those patients who developed MDD as compared with those who did not develop MDD. In patients who developed MDD, antidepressant treatment resulted in a significant reduction of BDI scores on the dimensions of psychomotor anhedonia, vegetative and somatic symptoms, but not the dimension of negative cognitions.

Conclusions: Although larger sample size studies are needed, these findings could have enormous implications for side effect management and may suggest strategies for improved adherence to IFN- $\alpha$  therapy.

#### **REFERENCES:**

- 1. Dunn RT, Kimbrell TA, Ketter TA, et al: Principal components of the Beck Depression Inventory and regional cerebral metabolism in unipolar and bipolar depression. Biol Psychiatry 2002; 51(5):387–99.
- 2. Hauser P, Khosla J, Aurora H, et al: A prospective study of the incidence and open-label treatment of interferon-induced major depressive disorder in patients with hepatitis C. Mol Psychiatry 2002; 7(9):942-7.

#### **TARGET AUDIENCE:**

Psychiatrists, psychologists, nurse practitioners

Poster 83

Friday, October 31 9:30 a.m.-11:00 a.m.

#### COMORBID DIABETES AND SCHIZOPHRENIA: IMPACT ON HEALTH CARE RESOURCE USE

Pfizer Inc.

Joan A. Mackell, Ph.D., Director, Outcomes Research Studies, Pfizer Inc., 235 East 42nd Street, New York, NY 10017; Lewis E. Warrington, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the completion of this presentation, participants will be able to discuss the reported findings from a patient survey on the impact of comorbid diabetes on the ability of people with schizophrenia to engage in productive activities, such as paid employment, volunteer work, and school work.

#### **SUMMARY:**

*Introduction:* We compared the use of health care resources in patients with schizophrenia alone, comorbid diabetes and schizophrenia, and diabetes alone.

Methods: In June 2002, 850 people with schizophrenia, identified through NAMI and community mental health centers, completed self-administered questionnaires. A total of 109 (12.8%) reported comorbid diabetes. For comparison, a random sample of 1,000 individuals with type 2 diabetes (ages 18 to 64 years) was generated from a similar study of 4,721 people with diabetes. Data on ED visits and hospitalization during the past six months were collected for all respondents. Costs were calculated using Statistical Abstracts of the United States: 2000 (ED \$320/visit; hospitalization \$1,126/day). Gender, age, and race were controlled using multiple regression analysis.

Results: Patients with schizophrenia averaged 3.3 days more hospitalized (P=0.004) than those with diabetes alone (additional cost: \$3,700). Patients with comorbid schizophrenia and diabetes averaged 1.2 ED visits more (P<0.001) and 11.3 days more hospitalized (P<0.001) than patients with diabetes alone (\$396 and \$12,800, respectively), and one ED visit more (P=0.001) and 8.1 days more hospitalized (P<0.001) than respondents with schizophrenia alone (\$319 and \$9,100, respectively).

Conclusions: Comorbid schizophrenia and diabetes are associated with significantly greater health care resource use and costs of care than diabetes or schizophrenia alone.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Dixon L, Weiden P, Delahanty R, Goldberg R, Postrado L, Lucksted A, Lehman A: Prevalence and correlates of diabetes in national schizophrenia samples. Schizophr Bull 2000; 26:903–912.
- Koro CE, Fedder DO, L'Italien GJ, Weiss SS, Magder LS, Kreyenbuhl J, Revicki DA, Buchanan RW: Assessment of independent effect of olanzapine and risperidone on risk of diabetes among patients with schizophrenia: population-based nested casecontrol study. BMJ 2002; 325:243.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 84

Friday, October 31 9:30 a.m.-11:00 a.m.

#### CHANGES IN MEDICATION USE PATTERNS AND OUTCOMES AFTER OPEN ACCESS TO SECOND-GENERATION ANTIPSYCHOTIC MEDICATIONS

Eli Lilly and Company

Jeffrey McCombs, Ph.D., Department of Economics, University of Southern California School of Pharmacy, 1540 East Alcazar, Room CHP-140, Los Angeles, CA 90033; Mulani Parvez; P. Joseph Gibson, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the complicated manner in which access to new medications affects treatment decisions. Participants will also understand how simple comparisons of treatment outcomes achieved before and after a new class of medications becomes available can be misleading and how policy decisions based on such comparisons could harm patients.

#### **SUMMARY:**

Objectives: The California Medicaid program established open access to atypical antipsychotics in October 1997. This study evaluates if the intended impact of open access of improved persistence, lower total costs, and less racial disparities were achieved.

Methods: A total of 132,574 antipsychotic treatment episodes were identified using paid claims for 1994–2000. Episodes were defined for each antipsychotic used if data were available six months before and 12 months after the episode start date.

Results: Open access caused a temporary 87% increase in the number of episodes initiated per month, primarily among previously treated and higher-cost patients initiating therapy on atypical antipsychotics (+231%). Substitutions of atypical antipsychotics for conventional medications decreased their use per month by 54% after the transition period. Persistence with therapy declined for all antipsychotics, but cost outcomes improved and racial disparities in access to new drugs were reversed.

Conclusions: Open access produced a short-term increase in use while achieving two of the three intended effects. The characteristics of the treated population changed significantly with open access.

Funding: Research grant from Eli Lilly and Company, Indianapolis, IN. The University of Southern California retains all rights to publication subject to review and comment by Eli Lilly and Company.

#### **REFERENCES:**

- 1. McCombs JS, et al: Antipsychotic drug use patterns and the cost of treating schizophrenia. Psychiatric Services 2000: 51(4):525–527.
- 2. Lyu RR, et al.: Use of conventional antipsychotics and the cost of treating schizophrenia. Health Care Financing Review 2001: 23(2):83–99.

#### **TARGET AUDIENCE:**

P&T committee members, formulary managers

Poster 85

Friday, October 31 9:30 a.m.-11:00 a.m.

#### ROLE OF MOOD DISORDERS IN PSYCHOPHYSIOLOGICAL TREATMENT OF TYPE II DIABETES

Ronald A. McGinnis, M.D., Assistant Professor of Psychiatry, Medical College of Ohio, 3120 Glendale Avenue, Toledo, OH 43614; Angele McGrady, Ph.D.; Judy Malhotra, B.S.N.; Kim Grower-Dowling, B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the usefulness of biofeed-back-assisted relaxation in the treatment of type-2 diabetes, (2) identify the impact of depressive symptoms on the treatment response to biofeedback-assisted relaxation in patients with type-2 diabetes.

#### **SUMMARY:**

Depressive symptoms and mood disorder are relatively common in patients who have chronic diseases such as diabetes mellitus. In addition to emotional distress, the manifestations of depression can be psychological, cognitive, or behavioral. Diabetic care regimens may be complex, requiring daily self-management of medicine, proper nutrition and exercise. Biofeedbackassisted relaxation therapy (BFRT) requires the ability to concentrate on a fluctuating signal, and to learn the relaxation response. A minimum number of clinic sessions and home practice are necessary to achieve positive results. It has frequently been observed that adherence to medical therapy recommendations is compromised in patients with depression. This study assessed the impact of clinical depression and depressive sytmpoms on treatment response to BFRT in patients with type 2 diabetes mellitus. Twenty-three patients copmleted either BFRT (N=11) or education (N=12). Beck Depression Inventory (EDI) scores ranged from 4 to 35. The ED group showed no significant changes in Blood glucose or HbA1C. The BFRT group demonstrated a significant reduction in both blood glucose and HbA1C compared to ED. Subjects with BDI scores above 20 failed to lower blood glucose in the BFRT group. A significant correlation was found between starting BDI scores and post-test HbA1C values.

#### **REFERENCES:**

- 1. Anderson RJ, et al: The prevelence of comorbid depression in adults with diabetes: a meta-analysis. Diabetes Care 2001; v. 24:1069–1078.
- 2. Surwit RS, et al: Stress management improves long term glycemic control in type 2 diabetes. Diabetes Care 2003; v. 25 (1):30–34.

#### **TARGET AUDIENCE:**

Psychiatrists, psychologists, physicians who treat patients with depression and diabetes.

Poster 86

Friday, October 31 9:30 a.m.-11:00 a.m.

## PHARMACOKINETICS OF ZIPRASIDONE IN PEDIATRIC VERSUS ADULT SUBJECTS

Pfizer Inc.

Jeffrey J. Miceli, Ph.D., Senior Associate Director, Central Nervous System Clinical Development, Pfizer Global Research and Development, 50 Pequot Avenue, MS 6025-B-2233, New London, CT 06320; Stephen R. Murray, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant will be able to discuss the reported findings which demonstrate that the pharmacokinetics of oral ziprasidone in children and adolescents are comparable to those in adults.

#### **SUMMARY:**

Objective: To compare single-dose pharmacokinetics of oral ziprasidone in children and adolescents with those in adults.

Methods: Three groups of eight pediatric subjects (age range 7 to 16) were assigned a dose based on body weight: Group 1 (>60 kg), 20 mg; Group 2 (31–60 kg), 10 mg; and Group 3 (16–30 kg), 5 mg. Dose in mg/kg was calculated for each group. Pharmacokinetic values for the groups were compared with each other and with data from a single-dose study of ziprasidone 40 mg in 10 adults.

Results: Mean doses adjusted for body weight for Groups 2 and 3 were 19% and 38% lower than for Group 1; mean values were correspondingly lower for  $AUC_{0\infty}$  and  $C_{max}$ ,  $T_{max}$ ,  $T_{1/2}$ , and oral clearance (Cl/F) were similar for the three groups, and these values for the groups were comparable to values for adults. Linear

regression analysis for  $AUC_{0\infty}$  versus dose adjusted for weight indicated pharmacokinetic linearity between children and adolescents and adults.

Conclusion: Similarities in T<sub>max</sub>, T<sub>1/2</sub>, and Cl/F observed in adults and children and adolescents indicate that the pharmacokinetics of oral ziprasidone are comparable in these populations. Pharmacokinetics are linear in pediatric subjects, and appear also to be so in adults. Funding Source: Pfizer Inc.

#### **REFERENCES:**

- 1. Miceli JJ, Wilner KD, Hansen RA, Johnson AC, Apseloff G, Gerber N: Single- and multiple-dose pharmacokinetics of ziprasidone under non-fasting conditions in healthy male volunteers. Br J Clin Pharmacol 2000; 49(suppl 1):5S-13S.
- Wilner KD, Tensfeldt TG, Baris B, Smolarek TA, Turncliff RZ, Colburn WA, Hansen RA: Single- and multiple-dose pharmacokinetics of ziprasidone in healthy young and elderly volunteers. Br J Clin Pharmacol 2000; 49(suppl 1):15S-20S.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 87

Friday, October 31 9:30 a.m.-11:00 a.m.

## OPTIMAL DOSING OF ORAL ZIPRASIDONE: CLINICAL TRIAL DATA Pfizer Inc.

Stephen R. Murray, M.D., Ph.D., Medical Director, Medical Studies, Pfizer Inc., 235 East 42nd Street, New York, NY 10017; Cynthia O. Siu, Ph.D.; Steven J. Romano, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss the reported findings on optimal dosing, symptom improvement, and tolerability in clinical trials of ziprasidone.

#### **SUMMARY:**

*Objective:* To elucidate optimal dosing of oral ziprasidone through analysis of clinical trial data.

Methods: We analyzed pooled efficacy (BPRS Total score), discontinuation, and AE data from four fixed-dose, placebo-controlled trials in which patients received ziprasidone 40 to 160 mg/day, and reviewed dosing and discontinuation data from three flexible-dose (maximum 160 mg/day), active-comparator trials of ziprasidone.

Results: In analyses of placebo-controlled trials, early and sustained improvement was demonstrated with doses  $\geq 120$  mg/day (P < 0.01 at Week 1; P0.05 at Week

6). Doses ≤80 mg/day were not associated with significant changes until Week 3. Improvement was generally dose related. Discontinuation rate within the first 14 treatment days was lower with doses of 120 and 160 mg/day (5.2%) than with doses of 40 and 80 mg/day (11.5%). The incidence of AEs was comparable across dosing groups. In the three flexible-dose trials, mean daily dose during flexible periods was 123 to 137 mg; discontinuation due to inadequate response was less common in the two studies allowing faster titration.

Conclusion: The superior, more rapid BPRS Total score improvement observed in placebo-controlled trials and dosing results from short- and long-term, flexible-dose studies support the titration of ziprasidone to ≥120 mg/day in patients with acute schizophrenia.

Funding Source: Pfizer Inc.

#### **REFERENCES:**

- Keck P Jr, Buffenstein A, Ferguson J, Feighner J, Jaffe W, Harrigan EP, Morrissey, MR: Ziprasidone 40 and 20 mg/day in the acute exacerbation of schizophrenia and schizoaffective disorder: a 4-week placebo-controlled trial. Psychopharmacology 1998; 140:173–184.
- Daniel DG, Zimbroff DL, Potkin SG, Reeves KR, Harrigan EP, Lakshminarayanan M, and the Ziprasidone Study Group: Ziprasidone 80 mg/day and 160 mg/day in the acute exacerbation of schizophrenia and chizoffective disorder: a 6-week placebo-controlled trial. Neuropsychopharmacology 1999; 20:491-505.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 88

Friday, October 31 9:30 a.m.-11:00 a.m.

#### PSYCHIATRIC REHABILITATION THERAPY PROGRAM: AN OVERVIEW

Gregory A. Miller, M.D., Chair, Department of Psychiatry, North General Hospital, 1879 Madison Avenue, New York, NY 10035; Valerie R. Hubbs, M.S., A.D.T.R., Director, Psychiatric Rehabilitation Therapy Program, Department of Psychiatry, North General Hospital, 1879 Madison Avenue, New York, NY 10035; Lisa Donohue, M.A.; Kristi Graziano, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize innovative unification of various philosophies / approaches: therapeutic milieu, (2) intensive psychiatric rehabilitation therapy, medical / biological and function-based outcomes, acquire knowledge and skill in psychiatric rehabilitation therapy, to

improve patient care, and (3) introduce strategies for monitoring quantifiable outcome, to provide records of treatment efficacy.

#### **SUMMARY:**

This inpatient psychiatric service has developed a novel approach to the treatment of severely mentally ill adults that stresses quantifiable, outcome-based, psychotherapeutic interventions, while integrating traditional principles of milieu therapy with contemporary concepts of functionally based psychiatric rehabilitation. The program incorporates the use of staff, patients, and activities as sources of therapeutic community interventions, while simultaneously applying individualized interventions. These approaches are operationalized around comprehensive functional assessment and geared toward creating measurable improvements in patient functioning.

The unique approach emerged from attempts to unify culturally sensitive therapeutic milieu models and allow for quantifiable outcomes that measure the effectiveness of biological treatment modalities. In our Psychiatric Rehabilitation Therapy Program, individual and group psychotherapy, psychoeducation, milieu, vocational rehabilitation, spirituality, and creative arts therapy sessions are facilitated to help the patient in dealing both on verbal and nonverbal levels, with specific problems related to the diverse and complicated functions of everyday life. Through action and expression-oriented processes, individuals restore, maintain, and improve their mental, emotional, physical, and social functioning, as well as increase their level of self-satisfaction.

Effectiveness of this model has been proven through outcome indicators, showing dramatic changes in functional measures across the course of hospitalization.

#### **REFERENCES:**

- Hansen JT, Slevin C: The implementation of therapeutic community principles in acute care psychiatric hospital setting. An empirical analysis and recommendations to clinicians. J Clinical Psychology 1996; 52:673–678.
- Zwerling, I: The creative arts therapies as "real therapies." Hospital Community Psychiatry 1979; 20:541–544.

#### **TARGET AUDIENCE:**

Multidisciplinary inpatient psychiatry staff

Poster 89

Friday, October 31 9:30 a.m.-11:00 a.m.

## TREATMENT OF REFRACTORY DEPRESSION: IMPACT ON PSYCHOSOCIAL FUNCTIONING

George I. Papakostas, M.D., Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street, WAC-812, Boston, MA 02114; Maurizio Fava, M.D., Director, Depression Clinical and Research Program, Psychopharmacology Unit, Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street, WAC-812, Boston, MA 02114; Ella L. Masson, B.A.; Andrew A. Nierenberg, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the impact of treatment on psychosocial functioning in outpatients with treatmentresistant depression (TRD).

#### **SUMMARY:**

Objective: Depression is an illness associated with significant disability, having a profound impact on quality of life. This is particularly true for those suffering from treatment-resistant depression (TRD- Kornstein et al. 2001). Studying the impact of various treatments on psychosocial functioning in TRD could help improve the standard of care.

Methods: Ninety-two patients with TRD were treated openly with nortriptyline (NT) for six weeks. Psychosocial functioning was measured with the use of the longitudinal interval follow-up evaluation (LIFE) scale, administered at baseline and during the patients' final visit. We then tested whether (1) there was a statistically significant change in LIFE scores reflecting psychosocial functioning before and after treatment with NT, or (2) there was a statistically significant difference in LIFE scores reflecting psychosocial functioning between responders and non-responders to NT at week 6.

Results: We did not find any significant improvement in psychosocial functioning during treatment in either responders or non-responders, or a significant difference in psychosocial functioning between these two groups at week 6.

Conclusion: Resistance to improvement in psychosocial functioning may represent a distinct clinical feature of TRD. Further studies that focus on the impact of treatment on psychosocial functioning in TRD are warranted.

#### **REFERENCES:**

- Kornstein SG, Schneider RK: Clinical features of treatment-resistant depression. J Clin Psychiatry 2001; 62 (Suppl 16):18-25.
- 2. Keller MB: The Longitudinal interval follow-up evaluation: a comprehensive method for assessing outcome in prospective longitudinal studies. Arch Gen Psychiatry 1987; 44:540–548.

108

Poster 90

Friday, October 31 9:30 a.m.-11:00 a.m.

#### PHARMACOKINETIC STUDY OF MEMANTINE AND DONEPEZIL IN HEALTHY YOUNG SUBJECTS

Forest Laboratories, Inc.

Antonia Periclou, Ph.D., Senior Scientist, Clinical Pharmacology and Drug Dynamics, Forest Laboratories, Inc., Harborside Financial Center, Jersey City, NJ 07311; Daniel Ventura, Ph.D., Medical Director, Forest Research, Inc., Harborside Financial Center, Jersey City, NJ 07311; Tyler Sherman, R.Ph., C.C.R.A.; Niranjan Rao, Ph.D.; Wattanaporn Abramowitz, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the pharmacokinetic and safety profile of the NMDA-receptor antagonist memantine in combination with the acetylcholinesterase inhibitor donepezil.

#### **SUMMARY:**

Objective: Memantine, a moderate-affinity, uncompetitive NMDA-receptor antagonist, is approved in Europe for Alzheimer's disease and under investigation in the U.S. Our objective was to determine whether an in vivo pharmacokinetic and pharmacodynamic interaction exists between memantine and the acetylcholinesterase inhibitor (AChE) donepezil.

Methods: In an open-label, multiple-dose study, 24 healthy subjects (18–35 years) received 10mg memantine orally on Day 1. Following a 14-day washout, subjects received 5mg donepezil orally once daily for seven days (outpatient). Beginning on Day 22, donepezil dosage was doubled for 22 days; the last donepezil dose was concomitantly administered with 10mg memantine on Day 43. Assessments included pharmacokinetic, pharmacodynamic (AChE inhibition), and safety parameters (adverse event recording, ECG, vital signs, clinical laboratory tests).

Results: Memantine bioavailability was not significantly altered with donepezil daily dosing, nor was the multiple-dose donepezil bioavailability altered with single-dose memantine. Percent maximum inhibition of AChE activity by donepezil averaged 77.8% and was not statistically different upon memantine co-administration (81.1%). Two patients withdrew due to adverse events while treated with donepezil. Of 19 completers, single memantine doses administered with donepezil multiple-doses were well tolerated.

Conclusion: Memantine and donepezil did not interact pharmacokinetically or pharmacodynamically, suggesting that they can be safely co-administered.

Funding Source: Forest Laboratories, Inc.

#### **REFERENCES:**

- Wenk GL, Quack G, Moebius HJ, Danysz W: No interaction of memantine with acetylcholinesterase inhibitors approved for clinical use. Life Sci 2000; 66:1079–1083.
- 2. Tiseo PJ, Rogers SL, Friedhoff LT: Pharmacokinetic and pharmacodynamic profile of donepezil HCl following evening administration. Br J Clin Pharmacol 1998; 46:13–18.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 91

Friday, October 31 9:30 a.m.-11:00 a.m.

#### TRANSFORMING MENTAL HEALTH SERVICES: IMPACT ON GROUP HOME PROVIDERS IN MONTREAL, CANADA

Myra Piat, Ph.D., Research Scientist, Research Centre, Douglas Hospital, 6875 Lasalle Boulevard, Verdun, PQ, Canada H4H 1R3; Nicole Ricard, Ph.D.; Alain Legage, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session participants will (1) learn about the new responsibilities that group home providers have taken on, (2) gain insight into the role that group home providers have in supporting people in the community, and (3) learn about the specific recommendations for improving services to this population.

#### **SUMMARY:**

Statement of Problem: Over the past four decades mental health professionals have used group homes (foster homes) to place deinsitutionalized persons into the community. However, as services evolved, and new forms of housing emerged, group homes and providers have taken on a peripheral role. During the recent reorganization of mental health services (1997–2001) psychiatric hospitals downsized considerably, and discharged patients into group homes. However, group home providers were not informed or consulted.

Objectives: The purpose of this study was to examine the impact of this reorganization on group home providers and their work with severe and persistent mentally ill persons in Montreal, Canada. The fundamental research question was: How do group home providers perceive their role and responsibilities, the type of clientele they care for, and the demands being put on them since the restructuring of services? Ultimately, this study would give a "voice" to group home providers, which in turn would improve services.

Methods: Thirty semi-structured, in-depth interviews were conducted with group home providers of two major psychiatric hospitals in Montreal. The sampling universe included a total of 1,346 persons with severe mental illness living in 261 group homes. Group home providers were selected according to: (1) the number of years of experience as a provider, and (2) the size of the group home. Interviews were tape recorded and transcribed verbatim. Data analysis was inductive and used a constructivist approach.

Results: Group home providers identified both positive and negative impacts resulting from the restructuring in services. However, more negative than positive consequences emerged. Respondents report that patients now being discharged and placed into group homes are inappropriate and require 24-hour supervision. Group home providers argued that their workload has increased and that they are now doing the work previously done by professionals. They also noted the lack of support services as well as unrealistic expectations from professionals.

Conclusion: Findings from this study have important implications for supporting group home providers. Specific recommendations are put forth to improve working relationships between providers and mental health professionals.

Funding Source(s): Fonds De Recherche En Santé Du Québec Programme Conjoint FRSQ-CQRS-MSSS De Subventions De Recherche En Santé Mentale Projet Subventionné #990679

#### **REFERENCES:**

- 1. Kvale S: InterViews: An Introduction to Qualitative Research Interviewing. Thousand Oaks, Sage Publications, 1996.
- 2. Lincoln YS, Guba EG: Naturalistic Inquiry. Beverly Hills, Sage Publications, 1985.

Poster 92

Friday, October 31 9:30 a.m.-11:00 a.m.

#### ZIPRASIDONE REDUCES PHARMACY COSTS FOR CORRECTIONAL INPATIENTS

Pfizer Inc.

Michael F. Pondrom, Pharm.D., Department of Medicine, St. Francis Hospital and Medical Center, 114 Woodland Street, Hartford, CT 06105; Suzanne E. Ducate, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported effects on pharmacy costs of making ziprasidone the preferred atypical antipsychotic agent in the formulary of correctional inpatient psychiatric facilities.

#### **SUMMARY:**

Objective: To assess the economic impact of a formulary change specifying ziprasidone as the preferred atypical antipsychotic agent in inpatient psychiatric facilities.

Methods: Beginning in October 2001, patients receiving olanzapine, quetiapine, or >6 mg/day of risperidone were switched to ziprasidone unless contraindicated. Prior utilization rates were risperidone, 64%; olanzapine, 21%; quetiapine, 8%; and clozapine, 7%. Data from two inpatient psychiatric units were collected and analyzed from July 2000 to May 2002.

Results: Following the formulary change, 45% of atypical antipsychotic prescriptions were for ziprasidone, 43% were for risperidone, 6% for clozapine, 4% for quetiapine, and 2% for olanzapine. Mean monthly expenditures for atypical agents decreased significantly (P=0.001), from \$82,257 (July 2000 to October 2001) to \$59,507 (November 2001 to May 2002). We observed a decrease in the number of concomitant prescriptions for antidepressant and anticholingeric medications. Overall pharmacy costs were reduced \$40,989 per month. Between October 2001 and May 2002, costs for atypical antipsychotics decreased by \$35,782 per month. Comparing total prescription costs, we project annual pharmacy cost savings of \$491,868 (about 25%).

Conclusion: In the studied correctional inpatient psychiatry units, switching to ziprasidone as the preferred atypical antipsychotic significantly reduced expenditures for atypical agents and decreased overall pharmacy costs.

Funding source: Pfizer Inc.

#### REFERENCES:

- Modeling of annual treatment costs and health outcomes of antipsychotic agents for schizophrenic populations. Based on a presentation by Josephine Mauskopf, PhD. Am J Manag Care 1999; 5(10 Suppl):S601-S611.
- Russell JM, Sorensen SV, Mackell JA: An economic model comparing tolerability of ziprasidone, olanzapine, risperidone, and haloperidol. Presented at the 8<sup>th</sup> annual meeting of the International Society for Pharmacoeconomics and Outcomes Research, May 18–21, 2003; Arlington, Virginia.

#### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

110

Poster 93

Friday, October 31 9:30 a.m.-11:00 a.m.

#### THE IMPACT OF PAYMENT SOURCE ON THE PRESCRIPTION FREQUENCY OF OLANZAPINE VERSUS RISPERIDONE IN THE UNITED STATES

Eli Lilly and Company

Janet L. Ramsey, M.S., Senior Research Associate, Health Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; David L. van Brunt, Ph.D., Research Scientist, Health Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss differences associated payment source and the prescription frequencies of olanzapine and risperidone.

#### **SUMMARY:**

Objectives: Though some studies have focused on the association of payment source and quality of mental health care, few have examined the relationship between payment source and antipsychotic prescription frequency. This study investigated the impact of payment source on the prescription frequency of two commonly used antipsychotics, olanzapine and risperidone.

Methods: Four years (1997–2000) of data from the National Ambulatory Medical Care Survey (NAMCS) were combined for the analysis. The distribution of visits associated with prescriptions for olanzapine and risperidone were computed among the insurance types. Logistic regression models assessed the impact of payment source on the probability of receiving olanzapine versus risperidone after controlling for age, race, and gender.

Results: Visits where olanzapine was prescribed had higher (but not statistically) frequencies of either private insurance or paying out of pocket (14.1%, 6.3%, respectively) compared with those receiving risperidone (13.5%, 5.8%, respectively). Logistic models revealed that visits paid out of pocket were more likely (OR 1.87; 1.31–2.69 95% CI) to result in olanzapine prescriptions than risperidone prescriptions, after adjusting for age, race, and gender (p=0.001).

Conclusions: These results suggest that there may be a relationship between antipsychotic selection and payment source. Future research should investigate the reasons for these differences.

Source of funding: Eli Lilly and Company.

#### **REFERENCES:**

1. Rabinowitz J, Bromet EJ, Lavelle J, Severance KJ, Zariello SL: Relationship between type of insurance

- and care during the early course of psychosis, American Journal of Psychiatry 1998; 155(10):1392–97.
- Zarin DA, Pincus HA, Peterson BD, West JC, Suarez AP, Marcus SC, McIntyre JS: Characterizing psychiatry with findings from the 1996 National Survey of Psychiatric Practice. American Journal of Psychiatry 1998; 55(3): 397–404.

Poster 94

Friday, October 31 9:30 a.m.-11:00 a.m.

### ONSET OF DIABETES IN SCHIZOPHRENIA: RISK AND SEQUELAE

Bristol-Myers Squibb Company

Robert A. Rosenheck, M.D., Professor, Department of Psychiatry, Yale Medical School, 950 Campbell Avenue, NEPEC/182, West Haven, CT 06516; Douglas L. Leslie, Ph.D.; Michael J. Sernyak, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the risk of new-onset diabetes mellitus among patients with schizophrenia who receive antipsychotic medications and the additional costs associated with diabetes mellitus in these patients.

#### **SUMMARY:**

Objective: To investigate the risk and associated costs of new-onset diabetes mellitus (DM) among patients with schizophrenia.

Methods: VA pharmacy claims for schizophrenics without history of DM were used to identify patients stably medicated on the same antipsychotic monotherapy for three months. Patient claims were analyzed from July 2001 through September 2002. Risk of developing DM on four atypicals was compared with conventional antipsychotics.

Results: Among 56,880 patients, 4,132 (7.3%) DM cases were reported. The risk of DM was highest among patients on clozapine (hazard ratio=1.57) and olanzapine (hazard ratio=1.15). If conventionals were used instead of olanzapine and clozapine, 13.3% and 36.3% of the respective DM cases could be avoided, with an attributable risk for the population of 0.6% to 2%. Differences in medication changes are minimal across the DM and control groups. Average health care cost per DM patient was \$3,104 more than the controls over the 16-month post-stable period, concentrated in the two months immediately after diagnosing DM, but was less than \$10 per month per schizophrenic patient due to the low attributable risk.

Conclusions: Compared with conventionals, clozapine and olanzapine increase risk for DM. The average cost consequence per schizophrenia patient is small but considerable per DM patient.

Funding Source: Bristol-Myers Squibb Company.

#### **REFERENCES:**

- Sernyak MJ, Leslie DL, Alarcon RD, Losonczy MF, Rosenheck R: Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. Am J Psychiatry 2002; 159(4):561–6.
- 2. Allison DB, Mentore JL, Heo M, Chandler LP, Cappelleri JC, Infante MC, Weiden PJ: Antipsychotic-induced weight gain: a comprehensive research synthesis. Am J Psychiatry 1999; 156(11):1686–96.

#### **TARGET AUDIENCE:**

Clinicians, researchers, administrators

Poster 95

Friday, October 31 9:30 a.m.-11:00 a.m.

#### EFFECTIVENESS OF XENICAL VERSUS DIET AND EXERCISE FOR WEIGHT GAIN ASSOCIATED WITH USE OF ANTIDEPRESSANTS: A PILOT STUDY

Mihai Simionescu, M.D., Department of Psychiatry, State University of New York Upstate Medical Center, 713 Harrison Street, Syracuse, NY 13210; Nikhil D. Nihalani, M.D., Department of Psychiatry, State University of New York Upstate Medical Center, 713 Harrison Street, Syracuse, NY 13210; Juhi Hussein, M.D.; Shefali Jindal, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants will better understand the impact of psychotropic induced weight gain and orlistat interventions to alleviate this side effect.

#### **SUMMARY:**

*Objective:* To assess the effectiveness orlistat (Xenical) in alleviating weight gain generated by antidepressant use.

Method: Twelve subjects who had gained at least ten pounds from antidepressant usage were openly, randomly assigned to receive Orlistat 120mg three times a day and attend a diet/exercise group or to attend the group without taking Orlistat. They were followed over three months and the following variables were measured: weight, BMI, body fat percentage.

Results: Six subjects received Orlistat plus group therapy and five controls (group only) were established. The mean weight loss for Orlistat was 2.83 pounds (controls gained 1.4 pounds) over three months. The mean change in BMI was -0.4 for Orlistat and +0.4 for controls. Body

fat percent change was -.35 for Orlistat and +.37 for controls. These results were not statistically significant, but may be clinically relevant.

Conclusion: This case-control pilot study suggests that Orlistat may promote mild to moderate weight loss in patients who have gained weight from antidepressants. Diet and exercise alone failed to promote weight loss or a lowering of BMI or body fat percent.

#### **REFERENCES:**

- Anghelescu I, Klawe C, Benkert O. Orlistat in the Treatment of Psychopharmacologically Induced Weight Gain. J of Clin Psychopharmacology 2000; 20:716-717.
- Schwartz TL, Beale M. Psychotropic Induced Weight Gain Alleviated with Orlistat: A case Series. Psychopharmacology Bulletin; 2003; 37(1):5-8

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 96

Friday, October 31 9:30 a.m.-11:00 a.m.

## PERSISTENCE AND COMPLIANCE WITH INITIALLY PRESCRIBED ANTIPSYCHOTIC MEDICATIONS

AstraZeneca Pharmaceuticals

W. Robert Simons, Ph.D., Global Health Economics and Outcomes Research, 41 River Road, Summit, NJ 07901

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to summarize and compare the rates of persistence over the first year of monotherapy with quetiapine versus olanzapine, risperidone, and haloperidol in patients receiving initial therapy for bipolar or psychotic disorders.

#### **SUMMARY:**

Objective: To compare persistence (duration of initially prescribed monotherapy without addition, switching, or discontinuation) with quetiapine versus other antipsychotics.

Methods: From managed care claims data, 1,294 patients with bipolar or psychotic disorders treated with quetiapine were matched with comparator groups treated with haloperidol, risperidone, or olanzapine. Persistence was assessed at six, nine, and 12 months.

Results: At six months, persistence was greater with quetiapine (55%) than with haloperidol (33%, P<0.01), risperidone (51%, P=0.03), and olanzapine (51%, P=0.03). Persistence remained significantly greater with

quetiapine than with haloperidol and risperidone at nine months and with haloperidol at 12 months. There were significantly fewer discontinuations with quetiapine than with all comparators at all assessments. In the bipolar subset (n=775), six-month persistence was greater with quetiapine (57%) than with haloperidol (42%, P<0.01) and risperidone (52%, P=0.04), and there were significantly fewer discontinuations with quetiapine than with all comparators at 12 months. Average quetiapine dosage was 342.8 mg/d; higher dosage was associated with greater persistence (P<0.01).

Conclusion: During the first year of treatment, persistence was greater with quetiapine than with other anti-psychotics, and higher dosage contributed to improved persistence.

Funding Source: Support contributed by AstraZeneca Pharmaceuticals, L.P.

#### **REFERENCES:**

- Tilden D, Aristides M, Meddis D, Burns T: An economic assessment of quetiapine and haloperidol in patients with schizophrenia only partially responsive to conventional antipsychotics. Clin Ther 2002; 24:1648–1667.
- Lynch J, Morrison J, Graves N, Meddis D, Drummond MF, Hellewell JS: The health economic implications of treatment with quetiapine: an audit of long-term treatment for patients with chronic schizophrenia. Eur Psychiatry 2001; 16:307–312.

#### **TARGET AUDIENCE:**

Psychiatrists, institutional pharmacists, managed care operators.

Poster 97

Friday, October 31 9:30 a.m.-11:00 a.m.

#### METABOLIC RISKS ACCOMPANY SYMPTOM CHANGE WITH DRUG THERAPY OF SCHIZOPHRENIA

Joyce G. Small, M.D., Professor of Psychiatry, Indiana University School of Medicine, Division of Mental Health, Larue D. Carter Memorial Hospital, 2601 Cold Spring Road, Indianapolis, IN 46222; Marietta H. Klapper, M.S., Research Associate, Department of Psychiatry, Indiana University School of Medicine, Division of Mental Health, Larue D. Carter Memorial Hospital, 2601 Cold Spring Road, Indianapolis, IN 46222; Fred W. Malloy, M.S.; Jeffrey J. Kellams, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the inherent adverse metabolic effects of antipsychotic drug treatment of schizophrenia.

#### **SUMMARY:**

Weight gain and metabolic dysfunctions are risk factors associated with diagnosis of schizophrenia and antipsychotic drugs, more so with favorable therapeutic response. The current study investigated relationships between symptomatic changes and physical and laboratory metabolic measures during hospitalization. Subjects were 50 adult schizophrenic and schizoaffective consecutive admissions to a tertiary care facility. Assessments included PANSS, CGI and AIMS ratings, measures of weight, body mass index and bioimpedance and fasting blood triglycerides, HDL, glucose, HgbAlC, insulin, and leptin. Tests were repeated at 12 and 24 weeks with interim biweekly weights, fasting glucose, and triglycerides. Patients received psychotropic agents throughout Significant relationships hospitalization. changes in rating scores and laboratory measures (p≤.05) were observed after 12 weeks. Improvement in PANSS total and general scores was associated with increased glucose levels, whereas positive scores were correlated with elevations in leptin and insulin. Negative symptoms varied inversely with percent body fat. BPRS thought disorder factor changes accompanied increased body weight and leptin. Longitudinal profiles of interim data over 24 weeks separated CGI responders and nonresponders and patients on dibenzodiazepines from those on other drugs. Virtually all patients displayed evidence of worsening metabolic dysfunction.

#### **REFERENCES:**

- 1. Newcomer JW, et al: Abnormalities in glucose regulation during antipsychotic treatment of schizophrenia. Arch Gen Psychiatry 2002; 59:337–345.
- Czobor P, et al: Antipsychotic-induced weight gain and therapeutic response: a differential association. J Clin Psychopharmacol 2002; 22, 244–251.

#### **TARGET AUDIENCE:**

Clinical psychiatrists, mental health workers

Poster 98

Friday, October 31 9:30 a.m.-11:00 a.m.

### DIALECTIC BEHAVIORAL THERAPY FOR WOMEN WITH EATING DISORDERS: LONG-TERM EFFICACY

Birgit K. Steinbrenner, M.D., Department of Psychiatry, University Hospital, Auenbruggerplat Z-34, Graz, Austria A-8036; Martina Schoenauer-Ceypek, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to (1) understand the basic principals of DBT for eating disorders, (2) recognize critically ill patients with eating disorders and when to treat them in an inpatient setting.

#### **SUMMARY:**

Introduction: In general, outpatient setting is given preference in treating eating disorders. Due to medical reasons (critically low body weight, electrolyte imbalances) hospital admission often becomes necessary. In Graz a modified Dialectic Behavioral Therapy (DBT) concept was developed to teach eating disordered patients a different way to cope with their inner tensions.

Implementations: With the help of semi-structured interviews and questionnaires (FBeK (2), BDI (3), FKB - 20 (4), TEFQ (5) and EDI (6)) we explored ten patients who had been treated for anorexia/bulimia with the modified DBT concept (7) in 2000 concerning their course of illness, symptoms, subsequent hospital stays, strategies leading to subjective improvement, and follow-up psychotherapy.

Results: The incidence of symptoms that had necessitated hospital admission diminished. The modified DBT-concept, especially skills-training, where patients learn to cope with inner tensions by using strategies like distress tolerance, emotion regulation, mindfulness, interpersonal relations, and eatingness to regain control over their eating habits and achieve a reduction of bingeing and purging proved to be very helpful. Also, the motivation to continue psychotherapy increased vastly.

Discussion: Based on these results, we consider inpatient treatment to be more favorable for critically ill patients to stabilize their health conditions. Further, the high motivation to continue psychotherapy, the significant reduction of signs and symptoms proves that the modified DBT therapy is a very appropriate method to achieve long lasting remission and give patients successful and permanent tools to handle or even get rid of their symptoms.

#### **REFERENCES:**

- M Schoenauer-Cejpek M, Steinbrenner B, Hirsch R, Steinbrenner J: Das modifizierte Konzept der dialektisch behavioralen Psychotherapie (DBT) in der Theraple von Borderline-Persönlichkeltsstörungen, S 119–121 in Psychiatrie Update 2000, Trauner Verlag 2000, Hrsg. Hofmann et al., ISBN 3-85487-224-0.
- Steinbrenner B, Schönauer-Cejpek M, Althuber P, Martischnig A: Dialektisch-Behaviorale Gruppentherapie für Bulimikerinnen, S. 137–141 in in Psychiatrie Update 2000, Trauner Verlag 2000, Hrsg. Hofmann et al., ISBN.

Poster 99

Friday, October 31 9:30 a.m.-11:00 a.m.

### WELLNESS PROGRAM OUTCOME AND GUIDELINES

Nuchanart Venbrux, M.D., Program Leader, Department of Psychiatry, Harrisburg State Hospital, P.O. Box 61260, McClay and Cameron Streets, Harrisburg, PA 17106; James Truckenmiller, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should have a general understanding of the wellness concepts and understand the benefits of such a program for the mentally ill.

#### **SUMMARY:**

We designed and implemented a pilot wellness program for three months at a chronic care state hospital, because of weight gain due to inactivity and medications. Twelve of the most obese patients were chosen to participate. The program was tailored to the cognitive level and the physical capacity of these patients and included a dietary and an exercise component. Healthy eating groups and exercise groups were formed to meet our objective of weight loss and conscious eating. An incentive program was implemented that awarded each patient for participation with items from his/her "wish" list. Staff motivation was maintained through their own participation as leaders of the groups and by use of a competitive team concept. Data were collected on weight changes, triglyceride level, cholesterol level, blood pressure, and pulse rate. Participation, dietary knowledge, and cognitive improvement were followed. Data analysis: Pair-wise average change data for each variable were subjected to multiple comparisons. Overall, the majority of the patients demonstrated weight loss. Triglyceride and cholesterol level also dropped the first month but did not during the second, which coincided with the holiday season. The moral of the unit improved significantly. Numerous patients who were not a part of the program asked to join. Those in the program felt that it was beneficial. The wellness team will be presenting to the state committee soon for possible statewide implementation.

#### **REFERENCES:**

- 1. Balady GJ: Survival of the fittest. The New England Journal of Medicine 2002;346(1): 854–854.
- 2. Chakravarthy MV, Joyner MJ, Booth FW: An obligation for primary care physicians to prescribe physical activity to sedentary patients to reduce the risk of chronic health conditions. Mayo Clinic Proceedings 2002; 77(2): 165–173.

#### TARGET AUDIENCE:

Health care providers for both inpatient and outpatient, including all disciplines and consumers.

Poster 100

Friday, October 31 9:30 a.m.-11:00 a.m.

### THE EFFECTS OF NEFAZODONE ON LIVER FUNCTION TESTS

Athi P. Venkatesh, M.D., Department of Psychiatry, Scott and White Hospital, 404 South Fryers Creek Circle, #607, Temple, TX 76504; Antunes Phillip, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize if nefazodone will cause an elevation in LFT.

#### **SUMMARY:**

Background: Recently, there have been reports in the literature that Nefazodone is associated with liver cell failure. This study is to determine the effects of Nefazodone on liver functions tests (LFT.)

Methods: Medical records for outpatients and inpatients, who were on Nefazodone, seen at the S&W hospital in Temple, Texas, over a three-year period from January 1, 1999, to December 31, 2001, were reviewed by trained staff. Data were collected on LFT, Nefazodone dosage, past medical history, current medications, side effects, and their psychiatric diagnoses. Results of the LFT were grouped into four grades (mild, moderate, severe, very severe) to assess the degree of the hepatic injury. The exclusion criteria included medical conditions and drugs that cause an elevation in LFT. The hospital pharmacy provided the list of drugs obtained from Micromedex that will cause an elevation in the LFT. Data were collected on the list of medical conditions that will cause an elevation in LFT

Results: There were 1,853 patients treated with Nefazodone during this period. Of these, 359 patients (19%) had liver function tests. Of the patients tested, 162 patients (45%) had elevated liver function. Of these, 90 patients (25%) had previously elevated LFT prior to Nefazadone treatment. Seventy-two patients (20%) had elevated liver function tests after they were started on Nefazodone. Of these 72 patients, 71% had mild elevations, 15% had moderate elevations, 11% had severe, and 2% had very severe elevations in LFT. The prevalence of elevated LFT while they were on Nefazadone is 20% (95% confidence interval, 16% to 25%)

However, of these 72 patients, 58 patients (16%) had either a medical condition or a drug that is associated with elevations in LFT. Only 14 patients (3.9%) had their LFT elevation solely due to Nefazodone. Of these,

13 patients had mild elevations in LFT and one patient had moderate elevation in LFT. The prevalence of elevated LFT solely due to Nefazodone is 3.9% (95% confidence interval, 2.1% to 6.5%)

Conclusion: Results of this study suggest that Nefazodone may cause a mild elevation on LFT. Hence, liver function test should be done before starting a patient on Nefazodone and they should be routinely monitored while they are on Nefazodone. However, our sample population did not have any serious liver cell failure associated with Nefazodone.

Since the FDA black box warning about Nefazadoneinduced liver cell failure, most (none) of the residents are not prescribing Nefazadone. Our study results indicate that we don't have to panic, though we should be careful in monitoring the LFT. To my knowledge, there are no studies to demonstrate the effects of Nefazadone on LFT except some case reports.

#### **REFERENCES:**

- 1. Hepatic adverse reactions associated with nefazodone. Can J Psychiatry 2002; 47(4):375–7.
- 2. Nefazodone-induced liver failure: report of three cases. Ann Intern Med 1999; 130(4 Pt 1):285-8.

#### **TARGET AUDIENCE:**

residents

Poster 101

Friday, October 31 9:30 a.m.-11:00 a.m.

## ARIPIPRAZOLE IS NOT ASSOCIATED WITH INCREASED DIABETES RISK: A LONG-TERM MODEL

Bristol-Myers Squibb Company

Peter J. Weiden, M.D., Director, Schizophrenia Research, Department of Psychiatry, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Box 1203, Brooklyn, NY 11203; Reg Waldeck, Ph.D.; Eskinder Tafesse, Ph.D.; William H. Carson, Jr., M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand projected risk of diabetes with long-term aripiprazole or placebo therapy.

#### **SUMMARY:**

Objective: Previous studies suggest an association between some of the newer antipsychotics and diabetes. We compared the projected risk of diabetes for patients on aripiprazole and placebo using randomized trial data (N = 306).

Methods: The risk from baseline for diabetes at 7.5 years of maintenance treatment was estimated using a logistic regression model with risk factors for each individual patient, at baseline and 26 weeks. Risk between treatment arms was compared using ANCOVA.

Results: Observed changes from baseline ( $\pm$  SE) for placebo at 26 weeks were: fasting plasma glucose (FPG = 4.89 $\pm$ 2.96 mg/dL) high density lipoprotein (HDL =  $-2.41\pm1.71$  mg/dL), blood pressure (SBP= $-3.93\pm2.15$  mm Hg), and body mass index (BMI =  $-0.49\pm0.30$  kg/m²). The changes for aripiprazole were: FPG =  $0.61\pm2.33$  mg/dL; HDL =  $-3.51\pm1.35$  mg/dL, SBP =  $-5.31\pm1.70$  mm Hg, and BMI =  $-0.54\pm0.23$  kg/m². The change between treatment arms was not statistically significant (MANOVA, p=0.75).

Conclusion: Patients with schizophrenia are at higher risk for diabetes than the general population; hence, it is reassuring to have antipsychotic therapy that would not elevate this risk in these vulnerable patients.

Funded by Bristol-Myers Squibb and Otsuka Pharmaceuticals

#### **REFERENCES:**

- 1. Stern P, Williams K, Haffner SM: Identification of persons at high risk for type 2 diabetes mellitus: Do we need the oral glucose tolerance test? Ann Intern Med 2002: 136:575–581.
- Sernyak MJ, Leslie DL, Alarcon RD, Losonczy MF, Rosenheck R: Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. Am J Psychiatr 2002; 159:561–566.

#### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 102

Friday, October 31 9:30 a.m.-11:00 a.m.

### INTENSIVE POST-DISCHARGE CARE IS CRUCIAL IN PREVENTING RECIDIVISM IN THE CHRONIC MENTALLY ILL

Ibrahim Youssef, M.D., Department of Psychiatry, Walter P. Reuther Psychiatric Hospital, Michigan Department of Community Health, 30901 Palmer Road, Westland, MI 48186; Rosario Muñoz, R.N., Department of Psychiatry, Walter P. Reuther Psychiatric Hospital, Michigan Department of Community Health, 30901 Palmer Road, Westland, MI 48186; Norma C. Josef, M.D.; Karen Chapin, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that intensive interventions i.e. psychiatrist home visits and good communication between the various mental health providers to implement after care discharge treatment, will reduce recidivism and increase LOS in the community for the very chronically ill patients.

#### **SUMMARY:**

Recidivism is a concern among mental health care providers. To identify factors that might prevent recidivism, this adult state psychiatric facility randomly compared ten patients who stayed in the community longer than four months with ten patients who were readmitted within four months over a period of one year.

Variables included diagnosis, number of prior admissions within the past 90 days, inpatient LOS prior to discharge, discharge medications, and type of services provided post discharge.

The intensity of treatment received after discharge was the only variable that differentiated the groups. The early recidivist received psychiatric evaluations and medication reviews only. The group who stayed longer in the community was provided with psychiatric home visits in 80% of cases and recommendations of the referring psychiatrist to maintain the same discharge medication was followed in 100% of cases. Although there was a predominance of a single neuroleptic in either group, the sample was too small to draw conclusions.

Such approach to post-discharge care might decrease the frequency of rehospitalizations and increase the LOS in less restrictive environments for these patients.

#### **REFERENCES:**

- Caton CLM, Goldstein O, et al: The impact of discharge planning on chronic schizophrenic patients.
   Hospital and Community Psychiatry 1984; 35:225–262.
- 2. Parks E, Josef N: A retrospective study of determinants of length of stay in a geropsychiatric state hospital. Psychiatric Quarterly 1997; 66:91–99.

#### POSTER SESSION 3

Posters 103-151-A

FROM EPIDEMIOLOGY TO BIOLOGY: MISCELLANEOUS ISSUES

Poster 103

Friday, October 31 3:00 p.m.-4:30 p.m.

### FAMILY CAREERS OF PEOPLE WITH MENTAL RETARDATION

Regi T. Alexander, M.R.C., Consultant Psychiatrist, Department of Psychiatry, St. Johns Hospital, Lion Road

Palgrave, Diss Norfolk, United Kingdom 22 IBA; Satheesh K. Gangadharan, M.R.C.Psych.; Cathy Thorpe

Poster 104 Friday, October 31 3:00 p.m.-4:30 p.m.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the range of needs that family care givers, of those with mental retardation have. In particular, the prevalence of depressive symptoms is highlighted.

#### **SUMMARY:**

*Introduction:* People with mental retardation live longer now and are often looked after by elderly family care givers.

Method: This study from Leicestershire, U.K. (population 1 million) uses the Leicestershire mental retardation register. It compares two groups of family care givers, those aged above and below 65, on the following parameters: psychiatric morbidity, level of disability, needs and use of services, and care giver stress.

Results: A total of 1137 adults with mental retardation living with family care givers were identified. Of them, 258 had care givers who were over age 65. There were no significant differences in the level of mental retardation or physical disability of the people the two groups were looking after. However, the younger care givers were looking after a group with higher psychiatric morbidity and service needs. The older caregivers themselves had higher prevalence of physical illnesses and lower levels of informal support. Perceived stress was significantly higher among younger care givers, while 20% of both groups reported depression.

Discussion: The needs of the two care giver groups vary significantly and services should be aware of and sensitive to this. Irrespective of age, care givers of people with mental retardation have a high prevalence of depressive symptoms.

#### **REFERENCES:**

- McGrother CW, Bhaumik S, Thorpe CF, Watson J, Taub N: Prevalence, morbidity, and service need among South Asian and white adults with intellectual disability. J of Int Disab Research 2002; 46(4): 299-309.
- Smith S, Branford D, Collacott RA, Cooper SA, McGrother C: Prevalence and cluster typology of maladaptive behaviours in a geographically defined population. Br J Psychiatry, 1996; 169 (suppl 2): 219-227.

#### **TARGET AUDIENCE:**

Professionals working with people with mental retardation.

### STAFF PERCEPTIONS OF RESIDENT SEXUALITY IN LONG-TERM CARE FACILITIES

Cynthia L. Ardito Fields, Psy.D., Assistant Attending Psychologist, Department of Geriatrics, McLean Hospital, 129 Adams Street, Holliston, MA 01746; Yosef Berlow, B.S., Research Coordinator, McLean Hospital, 115 Mill Street, Belmont, MA 02478; Stephen L. Pinals, M.D.; David W. Fish, B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to appreciate some of the often overlooked issues regarding sexual expression among residents of long-term care facilities and the need for staff training and education.

#### **SUMMARY:**

Objective: To investigate the attitudes and experiences of long-term care staff concerning the sexual behaviors of residents.

Design: Postal questionnaire.

Participants: Two hundred twenty-two staff members from 35 long-term care facilities.

*Measure:* A 14-part questionnaire was developed by the authors.

Results: 59% of respondents reported that they had personally observed sexual behaviors among residents. Respondents with more experience and those from medium and large facilities (>90 residents) were more likely to observe these behaviors. Most respondents acknowledged that their residents had sexual desires, but expressed some level of discomfort when dealing with these issues. 24% were not sure whether residents should be allowed to engage in sexual behaviors at all and 54% felt that it is unacceptable even for cognitively intact residents to engage in certain sexual behaviors. Respondents with professional titles (those requiring an advanced degree), those from medium and large facilities (>90 residents), and those from assisted living and skilled nursing home facilities were more likely to demonstrate acceptance of residents' sexual expression than staff without professional titles, those from smaller facilities, and those from rest homes.

Conclusion: Significant gaps exist in understanding and tolerance of resident sexuality among some long-term care staff, indicating the need for staff training.

#### **REFERENCES:**

1. Holmes D, Reingold J, Teresi J: Sexual expression and dementia. Views of caregivers: a pilot study. Int J Geriatr Psychiatry 1997;12(7):695-701.

2. Steinke EE: Sexuality in aging: implications for nursing facility staff. J Contin Educ Nurs 1997;28(2):59-63.

#### **TARGET AUDIENCE:**

Health care staff involved with residents of long-term care facilities

Poster 105

Friday, October 31 3:00 p.m.-4:30 p.m.

## THE IMPACT OF HOMELESSNESS AND ALCOHOL ABUSE IN LENGTH OF HOSPITALIZATION

Nancy M. Barr, M.P.H., Performance Improvement Program, Department of Psychiatry, Maine General Medical Center, 6 East Chestnut Street, Augusta, ME 04330; Janis B. Petzel, M.D., Department of Psychiatry, Maine General Medical Center, 6 East Chestnut Street, Augusta, ME 04330; Vince S. Thomas, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize that homeless patients have longer lengths of psychiatric hospitalization, and (2) dual-diagnosis patients are at higher risk for homelessness.

#### **SUMMARY:**

Homelessness has previously been observed to exacerbate rates of alcohol and other substance abuse, as well as psychiatric hospitalizations. We used a retrospective chart review on all admissions to the detoxification (N= 329) and psychiatric (N=545) units at the Augusta campus of MaineGeneral Medical Center from July 1, 2001 to June 30, 2002, to investigate the impact of homelessness and alcohol abuse on acute psychiatric care utilization. 12.2% of patients admitted for medical detoxification from alcohol reported being homeless, as compared with 11.9% of patients admitted to psychiatry. Among homeless patients admitted to psychiatry, 44.6% were dual diagnosis (alcohol abuse/dependence and a psychiatric diagnosis on Axis I) compared with 24.6% of established housing admissions. Homeless patients admitted to psychiatry also had a longer average length of stay (LOS) (11.3 days) vs. those with housing (7.4 days). The substantially longer LOS required for homeless patients probably reflects ethical considerations and regulations discouraging discharge of patients to shelters or back to the street. Given the cost of hospital stay, transitional housing might be a less expensive alternative.

#### **REFERENCES:**

- 1. Gelberg L, Leake BD: Substance use among impoverished medical patients: the effect of housing status and other factors. Med Care 1993; 31:757–66.
- 2. Winkleby MA, Rockhill B, Jatulis D, Fortman SP: The medical origins of homeless. Am J Public Health 1992; 82:1394–8.

#### **TARGET AUDIENCE:**

Physicians, social workers, administrators

Poster 106

Friday, October 31 3:00 p.m.-4:30 p.m.

### PREVALENCE RATE AND COMORBID DISORDERS FOR PATIENTS WITH ADHD AND EPILEPSY

Eli Lilly and Company

Howard Birnbaum, Ph.D., Vice President, Analysis Group, Inc., 111 Huntington Avenue, 10th Floor, Boston, MA 02199; Kristina Secnik; Maryna Marynchenko, B.A.

#### **EDUCATIONAL OBJECTIVES:**

After studying the poster's contents, the participant should be able to recognize the epidemiological and economic impact of double diagnosis of attention-deficit/hyperactivity disorder and epilepsy as well as to assess the new methodology used to estimate these two disorders using claims databases.

#### **SUMMARY:**

Background: Multiple studies document that individuals with attention-deficit/hyperactivity disorder (ADHD) have many psychosocial and neurological comorbidities, such as epilepsy.

Methods: ADHD/epilepsy patients of age <=18 (n=33) were compared with non-ADHD controls with epilepsy of the same age (n=21) in terms of the prevalence of epilepsy, selected comorbidities, and costs based on a large claims dataset.

Results: The treated prevalence rate of epilepsy was 3.0% among ADHD patients and 0.4% among controls. The odds ratio of having epilepsy given an ADHD diagnosis is 7.1. ADHD/epilepsy patients were treated for mental disorders 4.5 times more than control epilepsy patients (42.4% vs. 9.5% of patients, respectively, p<0.01). Among ADHD/epilepsy patients, the most frequent mental health diagnoses in their claims were for depression, disturbances of childhood or adolescence, bipolar disorder, adjustment reaction, conduct disorder, and schizophrenia. The average annual costs were \$2,742 for ADHD/epilepsy patients and \$1,757 for controls. These costs were primarily for non-mental health diagnoses. However, the cost of mental health treatment

of ADHD/epilepsy patients was more than 100 times higher than that for non-ADHD/epilepsy patients (p<0.01).

Discussion: Epilepsy is more common among ADHD patients than the general population. ADHD/epilepsy patients use more health care services and cost more than non-ADHD/epilepsy patients.

This research is supported by Eli Lily and Company.

#### **REFERENCES:**

- 1. Dunn DW, et al: ADHD and epilepsy in childhood. Dev Med Child Neurol 2003; 45(1):50–54.
- 2. LaJoie J, Miles DK: Treatment of attention-deficit disorder, cerebral palsy, and mental retardation in epilepsy. Epilepsy Behav 2002; 3(5), supplement 1.

#### **TARGET AUDIENCE:**

child psychiatrists

Poster 107

Friday, October 31 3:00 p.m.-4:30 p.m.

## THE HEALTH PSYCHOLOGY IN THE GENERAL HOSPITAL: DATA FROM THE HOLY HOUSE OF SAO PAULO, BRAZIL

Wilze L. Bruscato, Ph.D., Psychology Services, Santa Casa de São Paulo, Rua Borges Lagoa 1231 Conj 82, São Paulo, Brazil 04038 020; Flavia L. Fernándes, Psy.D., Psychology Services, Santa Casa de São Paulo, Rua Borges Lagoa 123 Conj 82, São Paulo, Brazil 04038 020; Sandra F. Amorim, Psy.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the importance of the psychology services in the general hospital.

#### **SUMMARY:**

Introduction: Different studies show the benefits of the mental health professional in the general hospital. The general hospital is a larger facility for patient handling, higher adherence to the treatment, and reduction of the recovering period, there is also a decrease of the relapse index and of a search for medical appointments in patients who present untreated emotional problems.

Objective: To characterize quantitatively the consultations of the psychology service

*Method:* Rising the data extracted from the protocols of the service internal use.

Results: In a calculation of the number of orders sent to the Consultation Sector in the last years, we have a total of 3161 solicitations. As each appointment order generates an average of five appointments, about 15000 appointments are totaled in the refereed period. The

specialities that most required intervention in infirmaries are: Pediatry/Pediatrics Orthopedy, Medical Clinic, Orthopedy, Surgeon Clinic and Gynecology/Obstetrician. The Liaison Sector, with 4356 consultations in 2001, had as the biggest required areas: the Rehabilitation Service, Morbid Obesity, Lung and Heart Unity, Adolescents Clinic, Intestinal Illnesses, Liver and Intestine Transplant, Nephrology, Renal and Pancreas Transplant, Pediatrics, Obese Adolescents, Medical Genetics and the Pain Therapy.

Conclusion: The use of protocols for the data compilation has been an interesting strategy that provides the systematization of information and permits the improvement of actuation and elaboration of new approach strategies.

#### **REFERENCES:**

- Botega NJ: Prática Psiquiátrica No Hospital Geral: Interconsulta E Emergencia. Aorto Alegre: Artmed, 2002
- Botega NJ: Servicos de Saú de Mental No Hospital Geral Campinas, Papirus, 1995.

#### **TARGET AUDIENCE:**

Psychologists and mental health professionals

Poster 108

Friday, October 31 3:00 p.m.-4:30 p.m.

# DEFICITS OF OBJECT RELATIONS IN SCHIZOPHRENIA: A TRANSCULTURAL COMPARISON BETWEEN BRAZIL AND THE UNITED STATES

Wilze L. Bruscato, Ph.D., Psychology Services, Santa Casa de São Paulo, Rua Borges Lagoa 1231 Conj 82, São Paulo, Brazil 04038 020; Sergio L. Blay, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the ubiquity hypothesis of the deficits of object relation in schizophrenia

#### **SUMMARY:**

Introduction: The person with schizophrenia has a long-lasting incapacity to have a relationship, even when the symptoms are controlled by medication. Object relation is the *capacity of the individuals for human relation-ships*.

Objective: To verify if the deficits of object relations are an ordinary characteristic of schizophrenia in different cultural samples.

Method: The BORRTI Form—O (Bell Object Relations Inventory) was translated to Portuguese, determining its validity and reliability index, and it was applied

to 61 Brazilian patients with schizophrenia. Its scores were compared to an American patients sample matched by their age, gender, and diagnosis subtypes. It was also applies the PANSS as part of the study.

Results: There were no significant differences in age, gender, and scholarship. The groups also didn't differ between paranoids and non-paranoids, marital status, and race and these groups had a similar age of onset, age of the first treatment, and years of illness. The American sample was clearly more years in scholarship and the PANSS scores were uniformly higher for the positive scale. The pathological elevation frequencies in the BORRTI scales for Brazilians and Americans were not significantly different. (Alienation = 57.45% and 45.9%,  $X^{2}(1)=1.16$ , p=ns; Insecure Attachment = 26.2% and 16.4%,  $X^{2}(1)=1.77$ , p=ns; Egocentrism = 67.2% and 41.0%,  $X^2(1)=8.5$ , p<0.004; Social Incompetence = 37.7% and 29.5%,  $X^2(1)=0.92$ , p=ns). The frequency of the patients who presented a certain type of deficit in object relations was 85,6% for Brazilians and 68,2% for Americans. ( $X^2(1)=3.66, p=ns$ ).

Conclusion: The findings give support to the ubiquity hypothesis of the deficits of object relations in schizophrenia.

#### **REFERENCES:**

- Bell MD: Bell Object Relations and Reality Testing Inventory Manual Los Angeles: Western Psychological Services, 1995.
- 2. Bruscato WL, Iacopon E: Validity and Reliability of the Brazilian Version of an inventory for the Evaluation of object relations. Revista Brasileira de psiquiatria 2000; 22:172–177.

#### **TARGET AUDIENCE:**

Psychologists and mental health professionals

Poster 109

Friday, October 31 3:00 p.m.-4:30 p.m.

#### SLEEPLESS IN AMERICA: DEPRESSION-BASED ACTIVITY LIMITATION AND IMPAIRED SLEEP

Daniel P. Chapman, Ph.D., Psychiatric Epidemiologist, Adult and Community Health, Department of Health Care and Aging, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 4770 Buford Highway, N.E., MS K-45, Atlanta, GA 30341; Matthew M. Zack, M.D.; David G. Moriarity, B.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the association between

activity limitation attributed to depression and sleep impairment.

#### **SUMMARY:**

Sleep disturbance is a potential sign of a depressive disorder and may result in impaired health and functioning in affected individuals. Although the association between sleeplessness and depression has been widely documented in clinical samples, less is known about its prevalence in the general population. To better address this issue, we studied adults aged 18 years of age and older who responded to the Health-Related Quality of Life Module of the 1995-1997 Behavioral Risk Factor Surveillance System, a telephone survey assessing demographic, behavioral, and health characteristics (N= 42,632). Respondents estimated the number of days during the past 30 days when they did not get enough rest or sleep, experienced pain, depression, or anxiety. Respondents also reported the presence of activity limitations and their cause and duration. Our results indicated that activity limitation caused by depression or other emotional disorder was associated with a greater number of sleep-impaired days (13.4) than activity limitations attributed to cancer (11.0), arthritis (8.8), or no activity limitation (7.2). Overall, respondents reported an average of 7.6 days affected by sleeplessness, with the mean number of days varying inversely with age. These results suggest that assessment of sleep disturbance among patients reporting activity limitation is an important aspect of the management of depression and other illnesses characteristically assuming a chronic course.

#### **REFERENCES:**

- 1. Hennessy CH, Moriarity DG, Zack MM, et al: Measuring health-related quality of life for public health surveillance. Public Health Reports 1994;109:665–672.
- Leger D: Public health and insomnia: economic impact. Sleep 2000;23(Suppl 3):S69–S76.

#### TARGET AUDIENCE:

Psychiatrists, nonpsychiatric physicians, nurses, psychologists.

Poster 110

Friday, October 31 3:00 p.m.-4:30 p.m.

# SUBSTANCE ABUSE PATIENTS IN THE PSYCHIATRIC EMERGENCY SERVICE: CLINICAL AND METHODOLOGICAL ISSUES

Yves Chaput, M.D., Associate Professor of Psychiatry, McGill University, Douglas Hospital, Verdun, Canada, 6875 Boulevard Lasalle, Verdun, PQ, Canada H44 1R3;

Lucie Beaulieu, M.D.; Edith Labonte, M.D.; Marie Josée Lebel, R.N.; Marlo Fortier, R.N.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to appreciate the diagnostic difficulties as well as the impact of substance abuse in the PES. Such an understanding might help provide possible solutions to this problem.

#### **SUMMARY:**

Substance abuse (SA) in the psychiatric emergency service (PES) is a complex phenomenon. It may be a primary/contributing factor to a PES visit in patients with or without SA (which itself may be active or in remission) or a primary/contributing factor to a visit in patients with a confirmed comorbid psychiatric diagnosis. As such, though its diagnosis has been reported to be between 3% and 50% of the PES population, diagnosis alone may not reflect its true socio-economic impact upon the PES.

Objective: To more precisely define and characterize this impact using a prospective, standardized method of data acquisition permitting several levels of clinical detection for SA.

Methods: Using an electronic database, clinical data (up to 60 variables) were acquired from 6,643 patients making 11,760 visits to a large metropolitan hospital PES from July 1, 1996, to December 31, 2000.

Results: Phase I. SA represented less than 1.4% of all reasons for referral, whereas is represented over 17% of primary and 11.7% of secondary diagnoses. Furthermore, 18.7% and 9.3% of the visits were judged clinically to have either a "direct" or "indirect" link with SA, respectively, regardless of diagnosis. About 10% of visits judged directly and 34% of those judged indirectly related to SA did not have SA as a primary or secondary diagnosis. Preliminary data from a multi-center extension of this study (simultaneous data acquisition in four PESs which began in Sept 2002), which confirm and extend these findings, will be presented.

Conclusion: Even the several (overlapping) levels of clinical detection for SA used in the present study most likely underestimate its importance in the PES (estimated to be an important contributing factor to 25% and 35% of all PES visits). SA thus remains a severe burden to the mental health system.

This work was supported in part by a grant from the Government of Quebec (VRQ).

#### **REFERENCES:**

1. Breslow RE, Klinger BI, Erickson BJ: Acute intoxication and substance abuse among patients presenting to a psychiatric emergency service. Gen Hosp Psychiatry 1996;18:183–191.

2. Bartels S, Teague GB, Drake RE, Clark RE, Bush PW, Noordsy DL: Substance abuse in schizophrenia: service utilization and costs. J Nervous Mental Dis 1993;181:227–232.

#### **TARGET AUDIENCE:**

PES physicians and staff, health administrators/planners

#### Poster 111

Friday, October 31 3:00 p.m.-4:30 p.m.

#### DIFFERENCES IN BRAIN BLOOD FLOW BETWEEN HIGH AND AVERAGE CREATIVITY SUBJECTS

Rosa A. Chavez, M.D., Ph.D., Coordinator, Creativity Studies Unit, Instituto Nacional de Psiquiatria, Dalz Mexico-Xochimilco 101, Mexico City, Mexico, DF 14370; Ariel Graff-Guerrero, M.D., M.S., Psychiatrist, Creativity Studies Unit, Instituto Nacional de Psiquiatria, Dalz Mexico-Xochimilco 101, Mexico City, Mexico, DF 14370; Juan Carlos García-Reyna, M.D.; Victor Vaugier, M.S.; Carlos Cruz, Ph.D.; A. Jonathan Eakle, M.Ed.; Walfred Rueda, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to compare the brain blood flow between individuals with high and average creativity indexes during the performance of the verbal Torrance Test of Creative Thinking.

#### **SUMMARY:**

Objective: To compare the cerebral blood flow (Cbf) between subjects with high and average creativity indexes (CI) during administration of the Torrance Test of Creative Thinking (TTCT).

Method: Two groups (n = 6 respectively) were formed from an adult cohort using CI as the selection criteria. Two TTCT verbal tasks were used. The first task was a warm-up activity, whereas the second was administered after intravenous injection of the radiotracer Tc99m-ECD. Cbf images were obtained by SPECT. Contrasts between groups were made by ANCOVA. The significant threshold for a priori regions (fronto-temporal) was Z > 3.25; clusters formed by >10 voxels were analyzed with SPM99.

Results: Significant Cbf differences between groups were found. Highly creative subjects had increased activation in: (1) right and left middle temporal gyrus. Brodman areas 20 and 21. (2) right uncus, Brodman area 36, (3) left and right cerebellum, cutmen, (4) left parahippocampal gyrus, (5) hypothalamus, and (6) left anterior cingulated.

Conclusions: Creative thinking involves greater activity in right and left temporal lobes, confirming interhemispheric interactions previously found. Furthermore, this study points out the relevant participation of right and left cerebellum and limbic system structures that have been associated with memory processes and subjective difficulty.

Acknowledgments: To CONACyT, and to the Program of Incubation of Talents FUNSALUD.

#### **REFERENCES:**

- 1. Carlsson I, Wendt P, Risberg J: On the neurobiology of creativity. Differences in frontal activity between high and low creative subjects. Neuropsychologia 2000; 38: 873–885.
- Bekhtereva N-P, Dan'ko S-G, Starchenko M-G, Pakhomov S-V, Medvedev S-V: Study of the brain organization of creativity: III. Brain activation assessed by the local cerebral blood flow and EEG. Human-Physiology 2001; 27: 390–397.

Poster 112

Friday, October 31 3:00 p.m.-4:30 p.m.

# MAJOR DEPRESSION AMONG MINORITY PATIENTS WITH OSTEOARTHRITIS: PREVALENCE AND RESPONSE TO PAIN TREATMENT

Pfizer Inc.

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the high prevalence of depression in minority patients with osteoarthritis, and (2) understand the importance of screening and monitoring depressive symptoms in such patients.

#### **SUMMARY:**

Background: Major depression is generally thought to be common in patients with osteoarthritis. However, previous studies have been limited by small samples and the lack of diagnostically valid measures. The goal of the current analysis was to evaluate the prevalence of major depression among African American, Hispanic, and Asian patients with osteoarthritis at screening baseline who were enrolled in a pain treatment trial. To our knowledge, this is the first systematic study to examine this issue among ethnic minority patients.

Methods: African American, Hispanic, and Asian patients with osteoarthritis of the knee were enrolled in

three separate and identically designed six-week multicenter, randomized, double-blind, parallel controlled studies in one of the three treatment groups (celecoxib, naproxen, or placebo). The planned enrollment for each study was 300 patients. The PHQ-9, a nine item validated measure for depression in primary care settings was used to assess the presence of major depression at screening baseline. Scores of 10 and higher have a 88% sensitivity and specificity for DSM-IV major depression. Preliminary analyses with over 85% of the target enrollment are cited below.

Results: A total of 322 African Americans, and 318 Hispanics, were available for analysis with mean ages of 58 years and 60 years, respectively. The percentage of female patients in each group were: 80.1%, and 66.3%, respectively. The mean PHQ-9 by group were  $5.3 \pm 4.8$  for African Americans and  $5.7 \pm 5.0$  for Hispanics. Using a PHQ-9 cut off score of  $\geq 10$ , 19.3% of African Americans, and 19.2% of Hispanics had major depression. Among all patients that reported any depressive symptoms, 73.1% of African Americans, and 65.9% of Hispanics, reported that the symptoms made it at least somewhat difficult to function.

Conclusion: Major depression is highly prevalent among minority patients with osteoarthritis and is associated with functional burden. Clinicians are advised to screen for depression among these patients and monitor their depressive symptoms during pain treatment.

Source of Funding: Pfizer Inc.

#### **REFERENCES:**

- Kroenke K, Spitzer RL, Williams JBW: The PHQ-9: validity of a brief depression severity measures. J Gen Intern Med 2001; 16: 606-613.
- Memel DS, Kirwan JR, Sharp DJ, Hehir M: General Practitioners miss disability and anxiety as well as depression in their patients with osteoarthritis. Br J Gen Prac 2000; 50: 645-648.

Poster 113

Friday, October 31 3:00 p.m.-4:30 p.m.

## INPATIENT ART GALLERY DISPLAYS PATIENT CREATIVITY AND BOOSTS SELF-ESTEEM

Nancy C. Clayton, M.D., Assistant Professor of Psychiatry, University of North Carolina at Chapel Hill, 303 Sunset Creek Circle, Chapel Hill, NC 27516

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participant will demonstrate an ability of how to set up a patient art gallery in their mental health program.

#### **SUMMARY:**

Brushes With Life: Art, Artists & Mental Illness is a permanent patient art gallery located outside an inpatient psychiatric unit at UNC Hospitals. Its purposes are several: (1) to allow mentally ill patients to display their art to the public, (2) to demonstrate that the mentally ill can be productive and creative, and (3) to reduce stigma associated with the chronically mentally ill.

Methods: A description of the volunteer committee and the process to initiate, install, and maintain a permanent art gallery is reviewed. An evaluation was sent to artists and inpatient staff to gather feedback. Description of traveling exhibits and their venues are provided. Funding sources and the initial costs of the permanent gallery are described.

Results: The art gallery visibly brightens the entranceway to the inpatient unit. Positive feedback from artists, families, and staff were received from evaluations and anecdotal information. Artists report improvements in self-esteem. Media attention has been positive.

Conclusion: A permanent art gallery at UNC Hospital has allowed chronically mentally ill patients display their art and targets stigma associated with chronic mental illnesses. Artists report increased self-esteem, which is supported by observations of families and staff.

#### **REFERENCES:**

- 1. Waddell C: Creativity and mental illness: Is there a link? Can J of Psychiatry 1998: 43:166–172.
- Rothenberg A: Creativity and Madness: New Findings and Old Stereotypes. Baltimore, John Hopkins University Press, 1990.

#### **TARGET AUDIENCE:**

Mental health providers at inpatient or outpatient programs interested in setting up a similar art gallery program in their mental health setting.

Poster 114

Friday, October 31 3:00 p.m.-4:30 p.m.

## COURSE OF SCHIZOPHRENIA IN PATIENTS WITH DIABETES VERSUS PATIENTS WITHOUT DIABETES

Eli Lilly and Company

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: (1) recognize similarities and differences in the course of schizophrenia among patients with and without diabetes, and (2) recognize that diabetic schizophrenia patients may use more non-psychiatric services, without using more psychiatric services, than non-diabetic schizophrenia patients.

#### **SUMMARY:**

Objective: To compare schizophrenia patients with comorbid diabetes to those without comorbid diabetes on their one-year course of schizophrenia.

Methods: This analysis compared schizophrenia patients with self-reported comorbid diabetes mellitus (DM, N=63) and without diabetes (NDM, N=423) in the Schizophrenia Care and Assessment Program (SCAP). SCAP is a non-randomized, three-year, prospective, observational study of schizophrenia patients in the U.S. DM and NDM groups were compared on sociodemographics, psychiatric medication use, resource utilization, and change in clinical and functional status, using clinician ratings, patient self-report, and medical record abstractions. Statistical analyses employed parametric tests and linear and logistic regression models.

Results: At baseline, DM patients were significantly more likely to be female, to be ≥15 years of age, report hypertension, have more nonpsychiatric physician visits, and report poorer physical health. DM and NDM patients were not found to significantly differ on most measures at one year, with the exception of poorer physical health and greater use of non-psychiatric physician visits.

Conclusion: The one-year course of schizophrenia was found to be similar for the diabetic and non-diabetic patient groups. Expectedly, comorbid diabetes appears to impact physical health and non-psychiatric health resource utilization. Funded by Eli Lilly and Company.

#### **REFERENCES:**

- 1. Guthrie SK: Clinical issues associated with maintenance treatment of patients with schizophrenia. Am J Health-Syst Pharm 2002; 59(Suppl 5):S19-24.
- 2. Mukherjee S, Decina P, Bocola V, Saraceni F, Scapicchio PL. Diabetes mellitus in schizophrenia patients. Compr Psychiatry 1996; 37:68–73.

#### **TARGET AUDIENCE:**

Clinicians, researchers, policymakers, patients, and advocacy groups.

Poster 115

Friday, October 31 3:00 p.m.-4:30 p.m.

# VALIDITY AND RELIABILITY OF THE ENDICOTT WORK PRODUCTIVITY SCALE IN GENERALIZED ANXIETY DISORDER

Pfizer Inc.

Jean Endicott, Ph.D., Chief, Department of Research Assessment and Training, New York State Psychiatric Institute, 1051 Riverside Drive, Unit 123, New York, NY 10032-2603; John Mee, Ph.D.; T.N. Taylor, Ph.D.; Douglas E. Feltner, M.D.; Atul C. Pande, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the potential value of the EWPS as an outcome measure in studies of patients with generalized anxiety disorder.

#### **SUMMARY:**

The EWPS is a self-report questionnaire that assesses the degree to which behaviors and subjective feelings or attitudes are likely to reduce productivity at work. We evaluated the EWPS in 285 patients with generalized anxiety disorder (GAD).

Test-retest intraclass coefficients of reliability were very high (total score r=.85 and 20 of the 25 items were 0.60 or above) as were the internal consistency coefficients at baseline and endpoint (Alpha=0.94 and 0.95). One factor accounted for 41% of the variance, while a second factor accounted for 5%.

Validity of the EWPS was assessed by comparing the EWPS with the HAMA scale. A moderate degree of correlation was found between the EWPS and the HAMA total scores at endpoint (r=.49) and between change in EWPS and change in HAMA from baseline to endpoint (r=.43). The EWPS total score was also differentiated between responders and nonresponders, defined by the CGI (t-test=5.76) and the HAMA (t-test=5.78).

In summary, the performance characteristics of the EWPS were excellent for these subjects with GAD. It was found to be a highly reliable and valid measure of an important functional dimension related to severity of illness that is not adequately addressed by clinical rating scales.

Funding source: Pfizer Inc.

#### **REFERENCES:**

1. Endicott J, Nee J: Endicott Work Productivity Scale (EWPS): a new measure to assess treatment effects. Psychopharmacology Bulletin 1997; 33:13–16.

2. Frank RG, Manning WG Jr (eds): Economics and Mental Health. Baltimore, MD, Johns Hopkins University Press, 1992.

#### TARGET AUDIENCE:

Clinicians, investigators, administrators, managers

Poster 116

Friday, October 31 3:00 p.m.-4:30 p.m.

## POST-TRAUMATIC SYMPTOMS IN A SAMPLE OF THE KOSOVAR POPULATION

Geneva University Hospitals

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participants should be able to recognize the traumatic impact of war related events on a civilian Kosovar population sample two and a half years after the end of the conflict.

#### **SUMMARY:**

A cross-sectional survey was conducted among 300 households in eight municipalities of Kosovo between September and November 2001. A total of 996 persons over age 15 agreed to participate. Prevalence of PTSD was established using the Mini International Neuropsychiatric Interview (MINI) locally translated in Albanian. Ouestions about traumatic events were adapted from the Harvard Trauma Questionnaire (HTQ). A total of 234 individuals (23.5%) fulfilled the diagnostic criteria for current PTSD. Presence of this disorder was significantly associated with exposure to combat situation, having been close to death, murder of family member or friend, forced separation from family, and to combinations of such events. Other factors significantly associated with current PTSD were being female, coming from the municipality of Decani (which was especially affected by guerilla war), low education level, low economic status, and low perceived general health. We compared for traumatic stress reactions those who remained in Kosovo throughout the conflict with those who sought temporary asylum in a safe country. The impact of asylum on symptoms is complex and is probably linked with living conditions and duration of stay in host country. These results will be discussed in the light of contemporary conceptual frameworks of trauma related to torture and mass human rights violations.

#### **POSTER SESSIONS**

Funding sources:

Survey: University Hospitals of Geneva and the International Organization for Migrations (IOM). Trip from Geneva to San Francisco partly financed by Organon.

#### **REFERENCES:**

- Eytan A, Bischoff A, et al: Screening of mental disorders in asylum-seekers from Kosovo. Aust N Z J Psychiatry 36(4): 499–503.
- 2. Lopes Cardozo B, Vergara A, et al: Mental health, social functioning, and attitudes of Kosovar Albanians following the war in Kosovo. Jama 2000; 284(5): 569–77.

Poster 117

Friday, October 31 3:00 p.m.-4:30 p.m.

### RESPONSIVENESS OF THE MOTIVATION AND ENERGY INVENTORY IN PATIENTS WITH DEPRESSION

**GlaxoSmithKline** 

Sheri E. Fehnel, Ph.D., Global Head, Patient-Reported Outcomes, RTI Health Solutions, Research Triangle Institute, 3040 Cornwallis Road, Durham, NC 27709; Lori McLeod, Ph.D.; Susan L. Hogue, Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the use of the MEI as a valuable tool to assess depressed patients' motivation and energy response to treatment.

#### **SUMMARY:**

Background: The Motivation and Energy Inventory (MEI) measures treatment effects on physical and mental energy, and social motivation in depressed patients. Previous evaluations provided evidence of internal consistency, test-retest reliability, and construct validity. Initial responsiveness results are more equivocal; data from two clinical trials failed to demonstrate advantages for two antidepressants vs. placebo. A second responsiveness evaluation of the MEI to distinguish responders (regardless of treatment) was undertaken.

Methods: Patients were classified as responders if the AM-D scores decreased by > 50% during the treatment period. Pairwise t-tests were conducted and effect sizes computed to examine differences in MEI change scores between responders and non-responders. Proportions of responders and non-responders in each treatment arm were computed to investigate the possibility of a placebo effect within the trials.

Results: Each MEI subscale was able to distinguish responders from non-responders (p < 0.001 for all t-tests; effect size 1.19 to 1.78). The proportion of responders in

the placebo arm was similar to those in both active treatment arms, indicating a large placebo effect.

Conclusions: Limiting responsiveness evaluations to detection of treatment effects may be insufficient. There is now strong evidence that the MEI is responsive to changes in the severity of depressive symptoms across time.

Funding Source: GlaxoSmithKline.

#### **REFERENCES:**

- 1. Guyall GH, Walter SD, Norman G: Measuring change over time: assessing the usefulness of evaluative instruments. Journal of Chronic Diseases 1987; 40: 171–178.
- 2. Hamilton M: A rating scale for depression. Journal of Neurology, Neurosurgery and Psychiatry 1960; 23:56-62.

#### **TARGET AUDIENCES:**

Physicians and researchers.

Poster 118

Friday, October 31 3:00 p.m.-4:30 p.m.

## IMPLEMENTING LIFE SKILLS: A PSYCHOSOCIAL REHABILITATION PROGRAM

Mona L. Goldman, Ph.D., Research Investigator, Department of Psychiatry, University of Michigan, 1500 East Medical Center Drive, Box 0120, Ann Arbor, MI 48109; Nancy A. Mann, R.N., B.S.N., Clinical Nurse, Department of Psychiatry, University of Michigan, 1500 East Medical Center Drive, Ann Arbor, MI 48109; William C. Borem, B.S.N.; Rajiv Tandon, M.D.; Robert Johnson, M.S.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) understand the process of implementing a community-based social skills training program, (2) identify components of a social skills training program for persons with schizophrenia.

#### **SUMMARY:**

Although social skills training programs have shown promise in improving the social and independent living skills of people with schizophrenia, they have proven difficult to implement in community-based settings. Such settings require comprehensive, efficient, and flexible programs that meet the needs of clients with a broad range of functional deficits. Life Skills is a manualized training program designed to embody these characteristics. It draws on evidence-based educational methodology and social learning theory to provide clients with

the tools necessary to rebuild their lives as part of the recovery process.

Life Skills consists of 20 weekly sessions. Classes are one hour each and are grouped into six categories: introduction to basic skills, social skills, practical skills, independent living skills, understanding mental illness, and advanced skills such as acquiring and keeping a job. A variety of learning paradigms are utilized including didactics, role play, discussion, homework, and in-vivo practice. The program has been effectively implemented in 11 settings, including mental health clubhouses, drop-in centers, outpatient clinics, group homes, and a residential treatment facility, with over 400 individuals participating. Over 95% of the clients surveyed report satisfaction with the program, and preliminary results suggest that Life Skills improves participants' quality of life.

#### **REFERENCES:**

- 1. Mann NA, Tandon R, Butler J, Boyd M, Eisner WH, Lewis M: Psychosocial rehabilitation in schizophrenia; beginnings in acute hospitalization. Archives of Psychiatric Nursing 1993; 7:154–162.
- 2. Bellack AS, Mueser KT, Gingerich S, Agresta J: Social Skills Training for Schizophrenia. New York, The Guilford Press, 1997.

Poster 119

Friday, October 31 3:00 p.m.-4:30 p.m.

#### AUDITORY P-3 INDEXES PERSONALITY AND COGNITION IN HEALTHY INDIVIDUALS

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the relationships between personality traits and neuropsychological function, and P3 amplitude and latency, in healthy individuals.

#### **SUMMARY:**

Introduction: Auditory P3 amplitude is reduced in severe personality disorders, but few studies have examined P3 amplitude and personality traits in normal individuals. P3 latency is associated with variations in intellectual performance (O'Donnell et al), but data are scant regarding latency and personality.

Methods: Healthy volunteers (28M, 15F; mean(S.D.) age 27.1(9.2) years) were recruited from the community. Written informed consent was obtained from all subjects.

The NEO-FFI measured neuroticism (N), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C). Neuropsychological testing included WAIS subtests, Symbol-Digits Modality Test, Trail Making Test, and a sentence repetition task. ERP data were collected from six electrode sites (Fz, Pz, F3, F4, T5, T6) using a standard auditory "oddball" paradigm (see Salisbury et al).

Results: An overall relationship between P3 amplitude and personality traits (p=.014 by Partial Least Squares) accounted for 67.5% of the variance within the first latent variable pair. Amplitude was positively related to E (salience or weight = 0.403), O (0.025), A (0.718), and C (0.214); and negatively related to N (-0.525). Amplitude was positively (p=.002), and latency negatively (p=.023), related to neuropsychological performance; first latent variable pairs accounted for 62.2% and 71.3% of the variance, respectively. Variables of interest were unrelated to age or gender.

Conclusions: P3 amplitude, but not latency, was negatively associated with N and positively associated with other NEO dimensions. Greater frontal and parietal amplitude, and shorter parietal latency, were associated with better cognitive performance. In this non-psychiatric sample, better neuropsychological function, like personality, was correlated with a healthier P3 response.

#### **REFERENCES:**

- 1. Salisbury DF, Rutherford B, Shenton ME, McCarley RW: Button-pressing affects P300 amplitude and scalp topography. Clin Neurophysiol 2001; 112:1676–1684.
- O'Donnell BF, Drachman DA, Swearer JM, Friedman S: Active and passive P3 latency and psychometric performance: influence of age and individual differences. Int J Psycholophysiol 1992; 12:187–195.

Poster 120

Friday, October 31 3:00 p.m.-4:30 p.m.

## DEPRESSION, ETHNICITY, AND COMORBIDITIES IN AN URBAN UNIVERSITY SETTING

Pfizer Inc.

John T. Hardy, M.D., Private Practice, 1115 North Grand Avenue, Pueblo, CO 81003; Timothy J. Hartman, Pharm.D., Clinical Education Consultant, Pfizer Inc., 20334 Vista Circle, Parker, CO 80138; Larry Bridger, R.Ph., M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the benefits of screening

in a university setting, and (2) identify depression score influencers in this university population.

#### **SUMMARY:**

*Purpose:* Determine the prevalence of depression and comorbid conditions among adult urban university students in 2001 and 2002.

Methods: HANDS(TM) Screening tool was administered to 365 students in 2001 and 235 students in 2002. Effects of gender, year of screening, ethnicity, and comorbid conditions on HANDS(TM) score were examined using SPSS.

Results: Average age for both years were 25 for females and 27 for males. Both females (8.89 vs 9.19) and males (7.54 vs. 9.63) saw an increase in their scores, but only the men saw a significant increase (p=0.68 vs. p=0.006). Ethnicity by year: Caucasian 48% 2001, 50% 2002; Hispanic 10% 2001, 18% 2001; African American 10% 2001, 17% 2002. Average HANDS(TM) score increase significantly from 2001 to 2002 (8.34 vs. 9.38, p=0.04). Likelihood of depression increased from 42% to 48%. Although HANDS(TM) scores increased in both Caucasian (8.5 vs. 10.4) and Hispanic (5.6 vs. 9.9) students, this increase was only significant among the later (p=0.054, vs.p=0.04). The three most common comorbid conditions in both years were anxiety (36% vs. 19%), alcohol abuse (14% vs. 17%), and drug abuse (12% vs 15%).

Conclusion: The use of repeated screening instrument for major depression may yield important prevalence information, which allows more precise interventions in young urban university students. Resource planning should reflect difference in ethnicity and associated comorbid conditions.

#### **REFERENCES:**

- 1. Greenfield SF, Reizes JM, Magruder KM, Muenz LR, Kopans B, Jacobs DG: Effectiveness of community-based screening for depression. Am J Psychiatry 1997; 154:10.
- Regier DA, Narrow WE, Rae DS, et al: The de facto mental and addictive disorders service system. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. Arch of Gen Psych 1993;50(2): 85-94.

Poster 121

Friday, October 31 3:00 p.m.-4:30 p.m.

## TRAUMA EXPOSURE AND PTSD IN AN INNER-CITY CHILD AND ADOLESCENT PSYCHIATRY CLINIC

Iliyan S. Ivanov, M.D., Department of Psychiatry, Mount Sinai Medical Center, 306 East 96th Street, #16-J, New

York, NY 10128; Jeffrey Newcorn, M.D.; Edward Greenblatt, Ph.D.; Rachel Yehuda, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize high prevalence of traumatic stress and self-reports of PTSD in this sample but less frequent clinical cases of PTSD diagnosed by physicians.

#### **SUMMARY:**

Objective: This study examines child/parental reports of traumatic exposure and their relationship to PTSD and other mood/behavior disorders over one year in an inner-city outpatient clinic.

*Methods:* Two hundred and three youth ages four to 17 were assessed using self-report instruments such as PTSRI, CBCL, MASC, CDI, and Conners Rating Scale.

Results: Fifty-nine percent of parents (102/172) reported the occurrence of a stressor to the child. Fiftyfour cases reported full/partial PTSD on the PTSRI-Parent version. Sixty-eight percent of children (92/135) reported a stressor; 60 of them reported full/partial PTSD on the PTSRI-Child version. Comparison of symptom ratings between children with/without PTSD on PTSR-P showed significantly higher T-values of parents' reports of hyperactivity and total ADHD symptoms for children with full/partial PTSD. Similar comparison of symptom reports from PTSRI-C showed significantly higher CDI-T values for youth with full/partial PTSD. Of the 54 parent reports of full/partial PTSD, clinicians diagnosed PTSD in 10 cases, depression in 15 cases, anxiety d/o in 13 cases, 16 cases of DBD, and eight cases of AD from 60 cases of child reports of full/partial PTSD clinicians diagnosed PTSD in 15 cases, 24 cases of depression, 13 cases of anxiety d/o, 19 cases of DBD, and four cases of AD.

Conclusions: Trauma exposure and PTSD reports were highly prevalent in this clinic, with child reports of trauma exposure/PTSD being higher than parent reports. Parental reports of PTSD correlated with higher self-reports of mood symptoms. Clinician diagnosis of PTSD was much less frequent, suggesting the impact of trauma in children is under-appreciated.

#### **REFERENCES:**

- Mertin P, Mohr PB: Incidence and correlates of Post Trauma symptoms in children from background of domestic violence. Violence Vict 2002; 17(5):5550-67.
- Silva RR, Alpert M, Munoz DM, Sight S, Matzner F, Dummit S: Stress and vulnerability to post traumatic stress disorder in children and adolescents. Am J Psychiatry 2000; 157 (8); 1229–35.

Poster 122

Friday, October 31 3:00 p.m.-4:30 p.m.

Tsuang, M Tonan and G Zehner (eds). New York, John Wiley and Sons, 1995.

### THE IMPACT OF CHRONIC ILLNESSES ON RISK OF DEVELOPING DEPRESSION

**GlaxoSmithKline** 

Anupama A. Krishnan, M.S., Scientist, Health Outcomes, GlaxoSmithKline, 5 Moore Drive, Durham, NC 27709; Li-ling Chang, Ph.D.; Susan L. Hogue, Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the association between common chronic illnesses and risk of developing comorbid depression.

#### **SUMMARY:**

Depression imposes a significant economic burden and is frequently comorbid with several chronic illnesses. The U.S. Preventive Services Task Force recommends screening adults for depression in clinical practice.

Aim: To determine the association between common chronic illnesses and risk of developing comorbid depression.

Methods: Incident cases of depression (between 7/95 and 12/96) were identified among continuously enrolled members in a national managed care claim and were age- and gender-matched to controls without depressive illness in the study period. Exposure of interest was a diagnosis for any one of the following chronic illnesses: anxiety, irritable bowel syndrome (IBS), fatigue, migraine, asthma, and diabetes in the six months prior to diagnosis of depression.

Results: The odds ratio for the risk of developing depression was statistically significant (p<0.0001) for all associations and highly clinically relevant in patients with anxiety (OR=9.01, 95%, Cl=1.43, 1.86). The odds ratios and 95% Cl for other chronic illnesses were: diabetes: 1.64 (1.43, 1.86); asthma: 1.86 (1.65, 2.09); migraine: 2.61 (2.26, 3.02); IBS: 2.86 (2.27, 3.61); fatigue: 3.69 (2.36, 4.05).

Conclusion: Presence of a chronic condition increases the likihood that the person has a depressive disorder. Hence patients with chronic illnesses should be screened regularly for depression.

Funding Source: Glaxo SmithKline.

#### REFERENCES:

- Screening for Depression, Recommendations and Rationale, May 2002. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov-clinic/3rduspst/depression/depressar.htm
- Kaselar R: The epidemiology of psychiatric comorbidity, In Textbook of Psychiatric Epidemiology. M

#### **TARGET AUDIENCE:**

Physicians and researchers

Poster 123

Friday, October 31 3:00 p.m.-4:30 p.m.

### THE IMPACT OF COMORBID ANXIETY DISORDERS ON THE COST OF ILLNESS OF DEPRESSION

GlaxoSmithKline

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#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the impact of comorbid anxiety disorders on the cost of illness of depression.

#### **SUMMARY:**

Depressive and anxiety disorders commonly occur together in patients presenting in the primary care setting.

Aim: To determine the impact of comorbid anxiety on the cost of illness of depression.

Methods: A total of 23,712 cases newly diagnosed with depression between 7/95 and 12/96 were identified among continuously enrolled members in a national managed care plan. Presence of comorbid anxiety in the one-year period following diagnosis of depression was identified by a medical claim for anxiety (ICD9-CM: 300.00, 300.01, 300.02, 300.09) patients. In all, three groups were identified: patients with neither depression nor anxiety (N=23,425), patients with depression alone (N=21,700), and patients with depression and anxiety (N=2,012). Log-transformed multivariate models adjusting for age, gender, regional differences, and comorbidities at baseline were retransformed using smearing estimates to compute adjusted cost differences between the three groups.

Results: Patients with comorbid anxiety were at increased risk for hospitalization (18.6%) and emergency room visits (37.9%) as compared with patients with depression alone (13.3%, 25.0%) and controls (5.5%, 12.2%), respectively. Patients with comorbid anxiety and depression (\$6,613) incurred significantly higher (p<0.0001) costs than patients with depression alone (\$4,465) and patients with neither depression nor anxiety (\$1,630).

Conclusions: Depression with comorbid anxiety is associated with greater severity and chronicity than depression alone.

Funding Source: GlaxoSmithKline.

#### **REFERENCES:**

- 1. Hirschfield RMA: The comorbidity of major depression and anxiety disorders: recognition and management in primary care, Journal of Clinical Psychiatry 2001; 52(3):244–254.
- 2. Lecubrier Y: The burden of depression and anxiety in general medicine. Journal of Clinical Psychiatry 2001; 52 (Suppl 8):4–9.

#### **TARGET AUDIENCE:**

Physicians and researchers

Poster 124

Friday, October 31 3:00 p.m.-4:30 p.m.

#### THE BURDEN OF ILLNESS OF DEPRESSION IN A MANAGED CARE POPULATION

GlaxoSmithKline

Anupama A. Krishnan, M.S., Scientist, Health Outcomes, GlaxoSmithKline, 5 Moore Drive, Durham, NC 27709; Li-ling Chang, Ph.D.; Susan L. Hogue, Pharm.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the significant economic burden imposed by depression in managed care.

#### **SUMMARY:**

Depression has a significant impact of health resource consumption, over and above the underlying physical disease

Objective: To evaluate the economic burden of depression in a managed care population.

Methods: A total of 23,712 cases newly diagnosed with depression between 7/95 and 12/96 were identified among continuously enrolled members in a national managed care plan and age- and gender-matched to 23,711 controls. Log-transformed multivariate models adjusting for age, gender, regional differences, comorbidities at baseline were retransformed using smearing estimates to compute adjusted cost differences between depressed patients and controls.

Results: Total annual health care costs in the oneyear period post-diagnosis for depressed patients (\$4,067) were significantly higher as compared with controls (\$1,472). Depressed patients consistently had higher office visit costs (\$1,757 vs \$678) and pharmacy costs (\$770 vs \$238) as compared with matched controls. Non-depression related costs were also higher for depressed patients (\$2,996) as compared with controls (\$1,461), indicating that depression was also associated with a high level of comorbidity in this population. All differences were statistically significant at the 0.0001 level

Conclusions: Depression imposes a significant economic burden on society. Effective management of depression could result in a reduction of depression-related and non depression-related costs for the payer.

Funding Source: GlaxoSmithKline.

#### **REFERENCES:**

- 1. Simon GE, VonKorff M. Barlow W: Healthcare costs of primary care patients with recognized depression. Archives of General Psychiatry 1995; 52 (10): 850–856.
- 2. Greenberg PE, Stiglin LE. Finktestine SN, et al: The economic burden of depression in 1990. Journal of Clinical Psychiatry 1993; 54(11): 405–408.

#### **TARGET AUDIENCE:**

Physicians and researchers

Poster 125

Friday, October 31 3:00 p.m.-4:30 p.m.

### PSYCHIATRISTS' UNDERSTANDING OF MEDICAL STATISTICS

Arun R. Kunwar, M.D., Resident, Department of Psychiatry, State University of New York Upstate Medical University, 750 East Adams Street, Syracuse, NY 13210; Geoffrey M. Hopkins, M.D., Resident, Department of Psychiatry, State University of New York Upstate Medical University, 750 East Adams Street, Syracuse, NY 13088

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the importance of statistics knowledge in accurate interpretation of medical studies.

#### **SUMMARY:**

Objective: To investigate the understanding of medical statistics by psychiatrists.

Methodology: The questionnaire was a self-report and anonymous. It consisted of questions on demographics, confidence, difficulty in interpreting medical statistics, specific understanding of statistical techniques, and on the need for a statistics tutorial in medical journals. Both general and specific understanding of different medical statistics used in psychiatric literature was examined.

Results: Out of 50 psychiatrist surveyed, 33 responded. Overall confidence in interpretation of medical statistics was 44.2% (SD 21.0%). Overall difficulty per-

ceived was 56%(SD 25.1%). The cohort reported that they had no comprehension of 51% of the statistical methods probed. No statistically significant difference existed between the academic and non-academic psychiatrists in reporting confidence and difficulty. Statistically significant difference existed for understanding specific statistical techniques; (56% vs 41%; p 0.0009). The majority (84%) of respondents agreed with the need for a simplified statistical tutorial in the medical literature.

Conclusions: This pilot study reveals that the overall understanding of key statistical concepts by psychiatrists was insufficient for accurate interpretation of medical studies. The majority of the respondents agreed with the need for a simplified statistical tutorial in medical journals. The limitations of this study include limited sample size and self-reported questionnaire.

#### **REFERENCES:**

- 1. Tanenbaum SJ: Evidence and expertise: the challenge of the outcomes movement to medical professionalism. Acad Med 1999; 74(12):1259–60.
- Laopaiboon M, Lumbiganon P, Walter SD: Doctors' statistical literacy: a survey at Srinagarind Hospital, Khon Kaen University. Journal of the Medical Association of Thailand 1997; 80(2):130–7.

#### TARGET AUDIENCE:

Psychiatrist, medical doctors, and residents.

Poster 126

Friday, October 31 3:00 p.m.-4:30 p.m.

### CURRENT TREND IN PSYCHIATRIC RESEARCH

Arun R. Kunwar, M.D., Resident, Department of Psychiatry, State University of New York Upstate Medical University, 750 East Adams Street, Syracuse, NY 13210; Subhdeep Virk, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the present trend in psychiatric research, the funding sources, topic areas in which researches are carried out, and common methodologies. Participant will be able to identify the topics that lack research and the need for balance funding of different topics in psychiatry.

#### **SUMMARY:**

Objective: To study the present trend in psychiatry research as captured in the published research articles of the American Journal of Psychiatry (AJP).

Method: The research articles published in AJP in the year 2002, totaling 256 were taken. They were catego-

rized according to the source of funding, field of research, and methodological approach.

Results: Source of grant for 76% of published research was of non-industry (drug companies) origin, industry accounted for 11.5%, and 12% were non-funded. Schizophrenia and psychotic disorders accounted for 22% of the research, affective disorders accounted for 20%, and other disorders accounted for the remainder. Almost half (44%) of the published research articles used cross-sectional methods, 22% used case control/retrospective methods, 22% used cohort/perspective methods, and 12% were clinical trials.

Conclusions: This study concludes (that within a major psychiatric journal), that the majority of the research funding comes from public funding and not industry. This could very well be due to editorial policies in the journal. Public policy for funding future mental health research can most effectively be directed through the examination of funding streams, research approaches, and disorders studied, which will help clarify where research resources are being directed and which disease states are being overlooked.

#### **REFERENCES:**

- 1. Pincus HA, Henderson B, Blackwood D, Dial T: Trends in research in two psychiatric journals in 1969–1990: research on research. Am J Psychiatry 1993; 150:135–142.
- Bekelman JE, Li Y, Gross CP: Scope and impact of financial conflicts of interest in biomedical research: a systematic review. JAMA 2003; 289(4):454-65.

#### **TARGET AUDIENCE:**

Psychiatrists, psychiatry residents, and researchers

Poster 127

Friday, October 31 3:00 p.m.-4:30 p.m.

### MENTAL HEALTH TREATMENT AND THE ELDERLY: GOING FROM "GOTTA" TO "WANNA"

Leila B. Laitman, M.D., Psychiatrist, Community Mental Health Services, Visiting Nurse Service of New York, 1601 Bronxdale Avenue, Bronx, NY 10462; Rebecca Morales, C.S.W., Supervisor, Geriatric Mental Health Services, Visiting Nurse Service of New York, 1601 Bronxdale Avenue, Bronx, NY 10462; Linda Sacco, A.C.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand issues involved in getting older patients to accept mental health treatment without the use of coercive techniques.

#### **SUMMARY:**

Objective: The In Home Geriatric Mental Health Program of the Visiting Nurse Service of New York is a specialized outreach team. Staff assesses people over the age of 60 in their homes that have some kind of psychiatric symptom and links them with ongoing care by community resources within an eight-week period. In 1998, only 14% of the patients discharged from our service actually accepted a mental health treatment referral. A training program that focused on interviewing and engagement techniques to help staff overcome patient and family resistances to ongoing mental health follow up was instituted. Acceptance of mental health linkage increased to about 50% by 2002. We wanted to investigate the role that staff felt use of coercive techniques played in achieving our success and perhaps alter it. Our hypothesis was that training staff to understand defenses and accept resistances as opposed to challenging them would lead to patient cooperation. This would be reflected in a lower number of cases in which clinicians assessed coercive techniques were necessary to achieve linkage.

Method: All cases opened May-August 2002 were reviewed. Those cases in which patients accepted mental health linkage were included in the study (N=36). Each respective clinician provided an assessment as to whether the patients accepted the referral voluntarily or if they had to be pressured to do so. A new eight-session training program (September-December 2002) that concentrated on helping staff decrease the use of coercion through the above principles was instituted. Subsequently, cases that were opened and closed during the training program were reviewed and selected for study in the same way as in the previous four months (N=40). Ultimately, we will include additional data from the months since the training has been completed.

Results: Prior to the training program, staff assessed that 56% of the cases voluntarily accepted mental health treatment while they assessed that they "forced" 44% into linkage. Preliminary results show that three months into the training, staff used coercive techniques 25% less.

Conclusion: Training staff to pay attention to these issues can have a positive impact in increasing patient cooperation. Some literature reports that perhaps less than 5% of those in the geriatric age group who need mental health treatment actually receive it. This study shows that linkages to mental health treatment can be increased dramatically through specialized staff training.

#### **REFERENCES:**

- 1. Pearlin LI, Skaff MM: Stressors and adaptation in late life, in Emerging Issues in Mental Health and Aging. Edited by Gatz M. Wash, DC, American Psychological Association 1995, pp 97–123.
- 2. Kennedy G: Mental Health Consultation in the General Hospital, Home or Nursing Facility. In Geriatric

Mental Health Care, Kennedy G, NY, Guilford Press 2000 pp248–281

Poster 128

Friday, October 31 3:00 p.m.-4:30 p.m.

### METHAMPHETAMINE ABUSE AND EMERGENCY PSYCHIATRY: A CHART REVIEW

Louise M. Lettich, M.D., Private Practice, and Consultant, Queen's Medical Center at Honolulu, 801 Summer Street, Manchester, MA 01944; Mark P. Toles, A.P.R.N., Clinical Nurse Specialist in Psychiatry, Queen's Medical Center at Honolulu, 554 Ulumawad Street, Kailua, HI 96734

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to clearly understand the extent of methamphetamine abuse in Hawaii.

#### **SUMMARY:**

Since the 1980s, abuse of crystal methamphetamine (MAP) has been a problem in emergency psychiatry. The scale of the MAP problem in Hawaii, at this time, is greater than many other parts of the country. Charts of psychiatric emergency department visits to the Queen's Medical Center in Honolulu, Hawaii, from March to May 2002 were reviewed (n>1200). In the review, we found MAP abuse in one of five cases seen by psychiatry in the emergency department. We found no gender differences between MAP abusers and non-MAP abusers in the emergency department (the ratio for each is 1:2). We found that MAP abusers are younger than non-MAP abusers. We found that MAP abusers are primarily Asians and Pacific Islanders, minority groups in Hawaii. Finally, we found that MAP abusers discharged from the emergency department to the hospital or to the community were significantly more likely to be prescribed Risperdal and Zyprexa than non-MAP abusers. We conclude that MAP abuse is a major problem and that the effectiveness of Risperdal and Zyprexa in MAP abuse treatment needs more study.

#### REFERENCES:

- 1. Rawson MA, Anglin MD, Ling W: Will the methamphetamine problem go away? Journal of Addictive Diseases 2002; 21(1).
- 2. Richards JR, et al: Methamphetamine and emergency psychiatry utilization. Western Journal of Medicine 1999; 170:198.

Poster 129

Friday, October 31 3:00 p.m.-4:30 p.m.

#### NEUROTOXICITY OF MPP+ AND β-AMYLOID ATTENUATED WITH ATYPICAL ANTIPSYCHOTIC MEDICATIONS

AstraZeneca Pharmaceuticals

Xin-Min Li, Ph.D., Neuropsychiatry Research Unit, University of Saskatchewan, 103 Wiggins Road, Saskatoon, SK, Canada S7N 5E4; Wei Zelan, M.D., Ph.D.; Hong Qing, M.D., Ph.D.; Darrell Mousseau, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize that the atypical antipsychotics quetiapine, clozapine, and olanzapine may slow down the process of neurodegeneration in patients with Alzheimer's disease or other neurodegenerative disorders.

#### **SUMMARY:**

Background: Neuronal atrophy and cell death occur during the course of normal aging and are accelerated during neurodegenerative diseases such as Alzheimer's disease (AD). Clinical studies have demonstrated that atypical antipsychotics are safe and effective in the treatment of AD patients with behavioral disturbances and psychotic symptoms.

Objective: This study examined the ability of the atypical antipsychotics quetiapine, clozapine, and olanzapine to prevent 1-methyl-4-phenylpyridinium (MPP $^+$ )- and  $\beta$ -amyloid (25-35)—induced cell death in PC12 cells.

Methods: The PC12 cell line was cultured in RPMI 1640 medium containing 5% newborn calf serum and 10% horse serum plus 100 units/mL penicillin. A 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide (MTT) reduction assay was used to measure cell viability.

Results: After exposure to MPP<sup>+</sup> (50 μM) or aged or fresh β-amyloid (25-35) (1, 10, and 25 μM), cell viability decreased; pretreatment with quetiapine and other atypical antipsychotic drugs attenuated the decrease in cell viability.

Conclusion: The data suggest that these atypical antipsychotic drugs may have neuroprotective potential to slow the process of neurodegeneration in patients with AD or other neurodegenerative disorders.

Funding Source: Support contributed by AstraZeneca Pharmaceuticals, L.P., and the Alzheimer Society of Canada.

#### **REFERENCES:**

1. Xu H, Qing H, Lu W, et al: Quetiapine attenuates the immobilization stress-induced decrease of brain-

- derived neurotrophic factor expression in rat hippocampus. Neurosci Lett 2002; 321:65–68.
- 2. Li XM, Chlan-Fourney J, Juorio AV, et al: Differential effects of olanzapine in the gene expression of superoxide dismutase and the low affinity nerve growth factor receptor. J Neurosci Res 1999; 56:72–75.

#### **TARGET AUDIENCE:**

Meeting attendees

Poster 130

Friday, October 31 3:00 p.m.-4:30 p.m.

## RE-EXAMINING FREQUENT USE OF PSYCHIATRIC EMERGENCY ROOM SERVICES

Alisa K. Lincoln, Ph.D., Assistant Professor of Public Health and Psychiatry, Department of Psychiatry, Boston University, 715 Albany Street, Talbot 244-W, Boston, MA 02118; Andrew White, Graduate Research Assistant, Department of Psychology, University of Rhode Island, 80 Washington Street, Room 236, Providence, RI 02903; Peggy L. Johnson, M.D.; Anna L. Fitzgerald, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session the participant should be able to think critically about service utilization patterns in the PER, understand the differences between subgroups of patients who use the PER, and consider implications of these sub-group analyses for treatment and intervention design.

#### **SUMMARY:**

*Purpose:* This poster explores patterns of repeat use of an urban psychiatric emergency room (PER) and compares groups who use the PER in different ways.

Content: Whether referred to as frequent flyers, recidivists, revolving-door patients, or frequent users, patients who use psychiatric services more frequently than others have been the subject of many studies. However, there has been little consensus on definitions for frequent use, thus making it difficult to draw conclusions about frequent PER use, in these diverse studies.

Methodology: With funding from the BU School of Public Health, we examined three years of data from the public urban PER at Boston Medical Center (BMC) in order to better understand service utilization patterns. Logistic regression and discriminant function analyses were conducted to examine group membership.

Results: Data collected on patients seen over three years at the BMC psychiatric emergency room (n = 6,222 individuals) will be used to show the manner in

which different definitions of "frequent use" identify different subgroups of individuals.

Importance: Labeling all repeat visitors to the PER similarly, obscures important differences in patterns of repeat service use. This has direct implications for treatment and interventions aimed at reducing inappropriate PER use.

#### **REFERENCES:**

- Bassuk E, Gerson S: Chronic crisis patients: a discrete clinical group. American Journal of Psychiatry 1980; 137:1513–1717.
- Goldfinger S, Hopkin J, Surber R: Treatment resistors or system Resistors? Towards a Better Service System for Acute Care Recidivists. New Directions for Mental Health Sciences 1984; 21:17–27.

#### **TARGET AUDIENCE:**

Administrators, service providers, mental health advocates

Poster 131

Friday, October 31 3:00 p.m.-4:30 p.m.

### CIGARETTE SMOKING: THE GATEWAY TO DRUG DEPENDENCE

David E. Lyon, D.O., Resident, Department of Psychiatry, Michigan State University, Saint Lawrence Hospital, 1210 West Saginaw, Lansing, MI 48915; Dale A. D'Mello, M.D., Associate Professor, Department of Psychiatry, Michigan State University, Saint Lawrence Hospital, 1210 West Saginaw, Lansing, MI 48915

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the predictive significance of concurrent nicotine dependence in the management of substance use disorders.

#### **SUMMARY:**

Cigarette smoking is the leading preventable cause of death. Patients with psychiatric illness, and substance dependence disorders smoke at an alarmingly high rate. Nevertheless, patients in treatment for drug dependence are generally permitted to continue smoking.

*Purpose:* The present study sought to elucidate the inter-relationship between the use of nicotine and the abuse of other substances.

Method: The authors completed a prospective study of 83 patients in a residential substance abuse program in mid-Michigan. They elicited detailed information regarding demographics, psychiatric diagnosis, patterns of substance abuse, and sources of abused drugs.

*Results:* The majority of patients acknowledged mixed substance dependence. Ninety-seven percent admitted a

history of previous alcohol dependence, 90% nicotine dependence, 83% cannabis, and 26% opioid dependence. An examination of the sequence of drug abuse revealed that in the vast majority (58%) cigarette smoking preceded the use of other substances. Alcohol was the initial drug in 46%, cannabis in 11%, cocaine in 1%, and opioids in 1%.

Discussion: Cigarette smoking was antecedent to excessive use of alcohol and other illicit substances. Continued smoking may perpetuate abuse of other substances; smoking cessation may enhance recovery from drug abuse.

#### **REFERENCES:**

- 1. Stuyt EB: Recovery rates after treatment for alcohol/drug dependence. Am J Addict 1997; 6:159–167.
- 2. Battjes RJ: Smoking as an issue in alcohol and drug abuse treatment. Addict Behav 1988; 13:225–230.

#### **TARGET AUDIENCE:**

Psychiatrists, psychologists, nurses, social workers

Poster 132

Friday, October 31 3:00 p.m.-4:30 p.m.

### EATING DISORDERS IN WOMEN WITH ALCOHOL AND DRUG DEPENDENCY

H. Lundbeck A/S

Ayse Fulya Maner, M.D., Associate Professor of Psychiatry, Neurosis Department, Bakirköy-RE Psychiatric Hospital, Firildak Sok No=20-22/2 Moda, Istanbul, Turkey 34740; Yolsel Hantas, M.D., Department of Psychiatry, Bakirköy-RE Psychiatric Hospital, Firildak Sok No=20-22/2 Moda, Istanbul, Turkey 34740; Murat Erkiran, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, this study showed that the prevalence of eating disorders (ED), all of which are bulimia nervosa and atypical eating disorder type is significantly high (n:9, 16.1%) among Turkish female alcohol and drug-dependent patients (n:72) compared with both controls and alcohol-drug abuse group.

#### **SUMMARY:**

The comorbidity of eating disorders (ED) with other psychiatric disorders is of special interest in recent years. In this study, we investigated in 72 females who met DSM-IV (SCID-I) criteria of alcohol or drug use disorders. The ages of the subjects ranged from 15 to 51 years. We performed the study in Bakirköy State of Education and Research Hospital for the Psychological and Neurological Diseases in Istanbul, between October 2001 and February 2002. The subjects were 56 (77.7%)

alcohol or drug dependent and 16 (22.3%) alcohol or drug abuse females. The control group was 41 females within the same age range who had no history of drug use (use alcohol only as a social drinker) and no history of psychiatric admission. The social and familial backgrounds and clinical features of the two groups were assessed with the use of a semi-structured interview form developed for the study. We applied Eating Attitudes Test and DSM-VI eating disorders question list. We performed chi-square tests, Fischer's Exact Test, and analysis of variance for statistical evaluations. Nine patients (16.1%) in the dependent group had eating disorders. This was significantly different from the control group ( $X^2$ :3.947, p:0.047). There was no ED in the abuse group. Among nine patients, four (44.5%) were alcohol, four (44.5%) were opioid, one (11.1%) was drug dependent. Three (33.3%) of the dependent patients were bulimic, six (66.6%) were atypical ED, three of which were binge ED. In the control group there was no bulimia and only one (2.4%) was atypical ED. There was no anorexia in dependent and control groups.

Funding Source: Lundbeck

#### **REFERENCES:**

- Daniels ES, Mashed RM, Berman RM, Mickley D, Grilo CM: Bulimia nervosa and alcohol dependence. Journal of Substance Abuse Treatment 1999; 17(1–2):163–166.
- Dansky BS, Brewerton TD, Kilpatrick DG: Comorbidity of bulimia nervosa and alcohol used disorders: results from the national women's study. Int Journal of Eating Disorders 2000; 27(2):180–190.

Poster 133

Friday, October 31 3:00 p.m.-4:30 p.m.

#### BURNOUT COMPARISON AMONG RESIDENTS IN DIFFERENT MEDICAL DISCIPLINES

Shahm Martini, M.D., Resident, Department of Psychiatry, Wayne State University, 2751 East Jefferson Avenue, Suite 400, Detroit, Mi 48207; Richard Balon, M.D., Chair, APA Institute Scientific Program Committee, and Professor of Psychiatry and Behavioral Sciences, Wayne State University, 2751 East Jefferson Street, Suite 200, Detroit, MI 48207; Cynthia L. Arfken, Ph.D.; Amy Schultz

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to become familiar with issues related to stress among residents.

#### **SUMMARY:**

Recent changes in residents' number of hours have been implemented nationwide, partially due to concern about resident burnout. This concern was supported by a study of internal medicine residents, where 76% of the respondents met criteria for burnout. We investigated burnout among residents in eight different residency programs at Wayne State University using the Maslach Burnout Inventory (MBI) and its association with work and home factors.

The MBI identifies burnout as a combination of three factors or dimensions: depersonalization, emotional exhaustion, and the lack of personal accomplishment. Demographic information related to residents' training programs and home environment was also obtained using a mailed survey.

A total of 321 questionnaires were sent with a response rate of 30%. Increased emotional exhaustion was independently associated with increased number of hours worked, decreased satisfaction with faculty, and not having a child. Increased depersonalization was independently associated with decreased satisfaction with faculty and not having a child. Personal accomplishment was associated with increased satisfaction with faculty. Residents who had a child worked on average fewer hours per week, while married residents without children worked the most hours per week.

The study is limited by the low response rate similar to previously reported data among medical students; however the results highlight that several factors are associated with burnout among residents, most notably number of hours worked per week.

#### **REFERENCES:**

- Shanafelt TD, Bradley KA, Wipf JE, Back AL: Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med 2002; 136:358–367.
- 2. Lemkau J, Rafferty J, Gordon R Jr: Burnout and career-choice regret among family practice physicians in early practice. Fam Pract Res J 1994; 14:213–22.

#### TARGET AUDIENCE:

Psychiatrists, psychologists, residency program directors

Poster 134

Friday, October 31 3:00 p.m.-4:30 p.m.

### PANIC SYMPTOMS IN MAJOR DEPRESSIVE DISORDER

Jessica L. Murakami, B.A., Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, 50 Staniford Street, Suite 1401, Boston, MA 02114; Paolo Cassano, M.D.; Dan Vlad Iosifescu, M.D.; Naomi M. Simon, M.D.; Jonathan E. Alpert, M.D., Ph.D.; Andrew A. Nierenberg, M.D.; Maurizio Fava, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the role of panic symptoms as a predictor for poorer short- and long-term treatment outcomes among depressed individuals treated with fluoxetine.

#### **SUMMARY:**

Objective: We assessed the impact of both DSM-IV panic disorder (PD) and panic symptoms (PA-sym) on antidepressant response to fluoxetine among outpatients with major depressive disorder (MDD).

Method: We derived a measure of PA-sym at baseline (range: 0–17) from the self-rated Symptom Questionnaire (11 items) and Beck Anxiety Inventory (six items), and defined high PA-sym scores as ≥8. Outpatients (n=310) with MDD (SCID-DSM-III-R criteria), who received fluoxetine (20 mg/day) for at least two weeks were then followed for up to 36 weeks of treatment. Outcome variables were HAM-D-17 change in scores from baseline to week 8 (acute phase) and at endpoint (long term phase), examined as percentage change and as response, defined as a ≥50% reduction from baseline. Remission was defined as a HAM-D-17 score ≤7.

Results: Mean score for PA-sym at baseline was 5.7±3.6. Sixteen (5.2%) and thirty-four (11.1%) subjects had current and lifetime diagnosis of PD, respectively. Only 44.6% (vs.63.3%) of patients with high PA-sym scores were responders (p<.003) at week 8 (LOCF). PA-sym scores, but not current diagnosis of PD, predicted lower percent change of HAM-D-17 score (p<.02). During continuation, both PA-sym scores (p<.01) and current PD diagnosis (p<.02) predicted greater burden of depressive residual symptoms at endpoint.

Conclusion: Our data suggest that panic symptoms significantly predict poorer short- and long-term treatment outcomes among outpatients with MDD.

#### **REFERENCES:**

- Kellner R: A Symptom Questionnaire. J Clin Psychiatry 1987; 48, 268–274.
- 2. Frank E, et al: Influence of panic agoraphobic spectrum symptoms on treatment response in patients with recurrent major depression Am J Psychiatry. 2000; 157(2):1101-1107.

#### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 135

Friday, October 31 3:00 p.m.-4:30 p.m.

#### FEATURES OF OCD WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER

Masayuki Ohta, M.D., President, Akashi Tsuchiyama Hospital, and Department of Neuropsychiatry, Hyogo College of Medicine, 1-1, Mukogawa, Nishinomiya, Japan 663-8501; Masahiro Kokai, M.D.; Yoshio Morita, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants will be able to recognize obsessive-compulsive disorder (OCD) comorbid with schizophrenia or schizoaffective disorder frequently and to understand a possibility to distinguish schizophrenic patients with OCD based on their motor symptoms.

#### **SUMMARY:**

Objective: It is difficult to diagnose obsessions among patients with schizophrenia or schizoaffective disorder. For better diagnosis of obsessions among schizophrenic patients, we investigated differences in the neuropsychiatric features between schizophrenic patients with or without obsessive-compulsive disorder (OCD).

Methods: Eighty-two subjects with the DSM-IV diagnosis of schizophrenia or schizoaffective disorder were evaluated by the Structured Clinical Interview for DSM-IV Axis I Disorders, the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS), and the Positive and Negative Syndrome Scale. To assess their motor symptoms, the Abnormal Involuntary Movements Scale (AIMS), the Barnes rating scale for drug-induced akathisia (BAS), and the Simpson and the Angus extrapyramidal symptoms rating scale (SAEPS) were used.

Results: The 16 subjects with OCD (19.5%) had significantly more severe motor symptoms than the non-OCD subjects on the AIMS and the SAEPS. The mean Y-BOCS score of the subjects with OCD was nearly twice as high as that of the subjects without OCD. The average age of the subjects, age of onset of psychosis, duration of psychosis, total amount of neuroleptics, and duration of exposure to neuroleptics did not differ between the two groups.

Conclusion: In schizophrenic patients, we may be able to distinguish these patients with OCD based on their motor symptoms.

#### **REFERENCES:**

1. Kruger S, Braunig P, Hoffler et al: Prevalence of Obsessive-Compulsive Disorder in Schizophrenia and Significance of Motor Symptoms. J. Neuropsychiatry Clin Neurosci 2000; 12:16–24.

Elsen JL, Beer DA, Pato MT, Venditto TA, Rasmussen SA. Obsessive-compulsive disorder in patients with schizophrenia or schizoaffective disorder. Am J Psychiatry 1997; 154:271–273.

#### **TARGET AUDIENCE:**

Clinicians, residents, students, and others

Poster 136

Friday, October 31 3:00 p.m.-4:30 p.m.

#### HIGH RESOLUTION BRAIN SPECT IMAGING IN ADHD CHILDREN WITH OR WITHOUT COMORBIDITIES: QUANTITATIVE ANALYSIS USING STATISTICAL PARAMETRIC MAPPING

Eun-Young Oh, M.D., Professor, Department of Child Psychiatry, Ajou University School of Medicine, 5 Wonchon San 5, Suwon, Kyoung-Gi, South Korea 442-721; Hwang Isaac, M.D.; Yoon Seok-Nam, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize that rCBF of left temporal area is significantly decreased in children with attention deficit-hyperactivity disorder(ADHD) and ADHD with chronic tic disorder.

#### **SUMMARY:**

Objectives: We examined the abnormalities of regional cerebral blood flow(rCBF) in children with attention deficit-hyperactivity disorder(ADHD) without comorbidity and ADHD with chronic tic disorder using statistical parametric mapping (SPM) method. We revised our previous study by increasing the normal control subjects.

Method: Tc- 99mECD brain SPECT was performed on 155 patients (M:F=117:38, 10.03+2.5y) with DSM-IV diagnosis of ADHD and 15 normal control group (M:F=14:3, 10.09+2.2y). ADHD group is divided into two groups, one is ADHD patients without comorbidity (M:F=98:22, 10.35+2.6y), another is ADHD patients with chronic tic disorder (M:F=29:3, 9.89+2.29y). Using SPM methods, we compared individual and patient group's SPECTs with those of 16 control subjects and measured extent of the area with significant hypoperfusion(p<0.01) in predefined 34 cerebral regions.

Results: (1) Left temporal area and left orbitofrontal area showed significant hypoperfusion in total ADHD patients(n=155) when compared with control subjects (n=15)(p<0.01). (2) Only left temporal area showed significant hypoperfusion in ADHD patients without comorbidity (n=60) when compared with control subjects(n=15). (3) Left temporal area, left parietal area, left orbito-

frontal area, and both basal ganglia showed significantly decreased rCBF in ADHD patients with chronic tic disorder (n=25) when compared with control subjects(n=15)

Conclusion: Left temporal area rCBF was decreased in ADHD group whether subjects have comorbidity or not, when compared with control groups. According to this result, the left temporal dysfunction may mediate ADHD symptoms in children.

#### **REFERENCES:**

- Amen DG, Carmichael BD: Overview: high-resolution brain SPECT imaging in ADHD. Ann Clin Psychiatry 1997.
- 2. Rubia K, Overmeyer S: Overview: hypofrontality in attention deficit hyperactivity disorder during higher-order motor control: a study with functional MRI. Am J Psychiatry 1999.

Poster 137

Friday, October 31 3:00 p.m.-4:30 p.m.

#### MENTAL HEALTH STAFF PERCEPTIONS OF SAFETY IN THE WORK ENVIRONMENT

Michael Privitera, Jr., M.D., Clinical Associate Professor, Department of Psychiatry, University of Rochester Medical Center, 300 Crittenden Boulevard, Rochester, NY 14642; Kevin Coffey, C.S.W., Senior Clinical Instructor, Department of Psychiatry, University of Rochester Medical Center, 300 Crittenden Boulevard, Rochester, NY 14642; Robert L. Weisman, D.O.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion, participants will be able to describe the incidence of threats, assaults, and differences in sense of safety on the job that may vary as a function of treatment site location in a department of psychiatry.

#### **SUMMARY:**

The department of psychiatry at the University of Rochester Medical Center has the highest annual number of workplace violence incidents involving patients of any clinical department. Violence among psychiatric patients has a multifactorial etiology involving complex interactions of primary psychiatric and personality disorders, noncompliance with medication, stress, and other environmental factors. While research has focused on risk factors for violence and effective clinical management strategies, little research has been done to examine staff perceptions of workplace safety or of their need for safety training.

In response to a recent increase in violent episodes at the URMC Department of Psychiatry, a workplace

violence survey was developed to obtain information from staff of varying demographic backgrounds, training, years of experience, service areas, and sense of safety. The frequency of having experienced patient, visitor relative, visitor friend, and coworker-related threats or assaults was assessed. Data about the perpetrators of these incidents were collected, as were data about whether charges were pressed. A total of 742 staff members were surveyed, and a response rate of 49% was achieved. A preliminary data analysis suggests that 18% of respondents have been physically assaulted. Survey results will be presented.

### **REFERENCES:**

- 1. U.S. Department of Labor Occupational Safety and Health Administration (OSHA) www.osha.gov.
- 2. Weisman RL, Lamberti JS: Violence prevention and safety training for case management services. Comm Mental Health J 2002; 38(4).

### **TARGET AUDIENCE:**

Mental health professionals

Poster 138

Friday, October 31 3:00 p.m.-4:30 p.m.

# FACTORS RELATED TO A GOOD, POOR, OR FLUCTUATING COURSE OF BIPOLAR DISORDER

Christine E. Ryan, Ph.D., Department of Psychiatry, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903; Gabor I. Keitner, M.D.; David I. Solomon, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the multi-dimensional factors that may affect the course of a bipolar illness.

### **SUMMARY:**

Objective: To determine a set of factors that will help distinguish the course of illness of patients hospitalized with bipolar disorder.

Method: A total of 92 patients with bipolar disorder were randomly assigned to three treatment conditions (pharmacotherapy alone; pharmacotherapy + family therapy; pharmacotherapy + multi-family psychoeducational group) and followed for 28 months post-hospitalization. Symptom severity was assessed monthly using the Bech-Rafaelson Mania Scale, the Hamilton Depression Rating Scale, and the Brief Psychiatric Rating Scale. Scores for mania, depression, and psychosis were graphed from the acute phase through month 28 for each patient. Experienced clinicians, blind to treatment group,

then categorized patient course of illness as good, poor, or fluctuating.

Results: There were no differences in course of illness by treatment group. There were significant differences in proportion of time well (symptom free) between the three groups (F(2,61)=36.6, p<.001). The model for proportion of time in episode also reached a significant level (F(2,61)=40.5,p<.001). Those with a poor course were in episode 41% of the time and differed significantly from patients categorized as having a good course (3% of time in episode) as well as those having a fluctuating course (10% of time in episode). A series of bivariate and multivariate analyses indicated that age of onset of mania, gender, polarity at index episode, and family functioning are factors that may affect the course of a patient's illness.

Conclusion: A combination of clinical, psychosocial, and sociodemographic variables may be most useful for distinguishing a patient's illness course and suggesting treatment interventions.

### **REFERENCES:**

- 1. Baldessarini RJ: A plea for integrity of the bipolar disorder concept. Bipolar Disorder 2000; (2):3–7.
- Judd LL, Akiskal HS, Schettler PJ, Endicott J, Maser J, Solomon DA, Leon AC, Rice JA, Keller MB: The Long-term Natural History of the Weekly Symptomatic Status of Bipolar I Disorder.

Poster 139

Friday, October 31 3:00 p.m.-4:30 p.m.

### MENOPAUSE AND MENTAL ILLNESS

Eli Lilly and Company

Martha Sajatovic, M.D., Associate Professor of Psychiatry, Case Western Reserve University, Cleveland VA Medical Center, 345 Timberidge Trail, Gates Mills, OH 44040-9319; Isabel N. Schuermeyer, M.D., Department of Psychiatry, Case Western Reserve University, Cleveland VA Medical Center, 11100 Euclid Avenue, Cleveland, OH 49106; Susan J. Hatters-Friedman, M.D.; Monica McDougall, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participant will better understand how menopause may affect women with serious mental illness.

### **SUMMARY:**

Menopause is a significant event in the life of every woman. Physical symptoms include irregular menstrual periods, hot flashes, night sweats, and sleeplessness, while psychological symptoms may include mood swings and depression. The menopause experience is likely to be affected by a woman's knowledge of menopause, her expectations of menopause on well-being, and physical symptoms that impact quality of life. This is a prospective pilot assessment of individual perception of effects of menopause on women with schizophrenia/ schizoaffective disorder (SZ), bipolar disorder (BPD), and major depression (MD). The aim of the study is to examine expectations and concerns regarding menopause from a patient centered viewpoint among women with serious mental illness who are either currently perimenopausal or have experienced menopause within the past five years. The three groups were compared regarding fund of knowledge of menopause and menopause symptoms, expectations of effect on illness outcome, and quality-of-life effects of menopause. In this interim report, 20 women (mean age 50.4, ±2.4, range 45-54 years) have been enrolled in this planned 90-subject study. Diagnostic composition is 50% (n=10) of women with major depressive disorder, 35% (n=7) with bipolar disorder and 15% (n=3) with schizophrenia. The majority of women (70%, n=14) endorsed the statement that menopause was affecting their mental status, with 8/20 (40%) perceiving a negative effect of menopause on underlying mental illness, while 7/20(35%) were neutral or undecided and 5/20 (25%) did not perceive negative effects of menopause on underlying mental illness. Ongoing data collection and analysis will evaluate fund of knowledge regarding menopause and menopause related quality of life among women with serious mental illness.

This study is supported in part by a grant from Eli Lilly Company

### **REFERENCES:**

- 1. Becker D, Lomranz J, Pines A, et al: Psychological distress around menopause. Psychosomatics 2001: 42(3) 252–257.
- 2. Hilditch JR, Lewis J, Peter A, et al: A menopause-specific quality of life questionnaire: development and psychometric properties. Maturitas 1996;(24) 161-175.

### **TARGET AUDIENCE:**

Physicians, nurses, social workers

Poster 140

Friday, October 31 3:00 p.m.-4:30 p.m.

### ADHERENCE ENHANCEMENT IN BIPOLAR DISORDER

Woodruff Foundation

Martha Sajatovic, M.D., Associate Professor of Psychiatry, Case Western Reserve University, Cleveland VA Medical Center, 345 Timberidge Trail, Gates Mills, OH 44040-9319; Marilyn

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participant will better understand how psychosocial interventions may enhance treatment adherence among individuals with bipolar disorder.

### **SUMMARY:**

Lack of adherence with treatment plays an important role in outcome of bipolar disorder (BPD), and is associated with substantial humanitarian and financial costs. It has been reported that 20% to 55% of individuals with BPD have major lapses in treatment adherence. Factors associated with non-adherence include patientrelated (i.e. attitude toward medication, denial of illness), illness-related (i.e. comorbid personality disorder or substance abuse), drug-related (i.e. side effects) and physician-related variables (i.e. prescribing patterns). This study seeks to examine how a psychosocial intervention based upon a collaborative treatment model affects treatment adherence attitudes and behaviors. This is a prospective, randomized, controlled study of effects on treatment adherence attitudes and behaviors associated with the addition of a standardized psychoeducational intervention (The Life Goals Program) to the medical management (usual care) of outpatients with BPD who attend a community mental health center (CMHC).

To date, 43 patients have been recruited (22 to Life Goals and 21 to usual care). Substance abuse is very common in this community-based sample, with 65% of individuals having either current or past substance abuse. The study investigators have hypothesized that Life Goals will improve treatment adherence attitudes among individuals with BPD. Preliminary findings support this, as patients involved in the group intervention had significant improvement in attitudes towards medication after three months (p=0.02) compared with patients in usual care. A larger sample of study patients followed over the anticipated one-year study trajectory is needed to confirm these preliminary findings.

Funding Source: Woodruff Foundation

### **REFERENCES:**

- 1. Colom F, Vieta E: Treatment adherence in bipolar patients. Clinical Approaches in Bipolar Disorders 2002; 24 (10): 1668–1676.
- 2. Scott J: Predicting medication non-adherence in severe affective disorders. Acta Neuropsychiatrica 2000; 12: 128–130.

### **TARGET AUDIENCE:**

Physicians, nurses, social workers

Poster 141

Friday, October 31 3:00 p.m.-4:30 p.m.

### **TARGET AUDIENCE:**

Psychiatrists, psychologists, and mental health workers interested in mood disorders.

### IMPAIRMENT IN MEMORY STRATEGIES MEDIATE VERBAL EPISODIC MEMORY IMPAIRMENT IN BIPOLAR DISORDER

Heather M. Schloss, B.A., Department of Psychiatry, Massachusetts General Hospital, 50 Staniford Street, Suite 580, Boston, MA 02114; Thilo Deckersbach, Ph.D.; Stephanie McMumch, B.A.

### **SUMMARY:**

Objective: To determine whether episodic memory impairment in euthymic patients with bipolar I disorder is attributable to impairment in the use of memory enhancing strategies during learning.

Methods: Subjects were 30 patients with DSM-IV bipolar I disorder (60% female) and 55 healthy control participants (62% female) matched for age, education, and handedness. Subjects completed the California Verbal Learning Test (CVLT), which includes measures of word-list learning (five learning trials), and long-delayed free recall. The CVLT also enables an assessment to which extent subjects use memory enhancing strategies during learning in order to improve long-delayed free recall memory performance, such as semantic clustering.

Results: Bipolar patients recalled fewer words than controls over the first five successive learning trials (sum of words trial 1–5; F=47.12, df=1,83, p<.0001). BP I patients exhibited less semantic clustering during the five successive learning trials (F=21.85, df=1,83, p=.0001) than controls. Finally, BP I patients recalled fewer words than controls at long-delayed free recall (F=25.50, df=1, 83, p=.0001). Group differences in the number of words recalled during the long-delayed trial greatly decreased when semantic clustering was included as a covariate (F=6.89, df=2,82, p<.01). Nonmedicated patients did not differ significantly from patients taking mood stabilizers (lithium or anticonvulsants) in semantic clustering and recall measures (p>.05).

Conclusion: Results suggest that episodic memory impairments in patients with bipolar I disorder are partially mediated by impaired use of memory enhancing strategies during learning.

### **REFERENCES:**

- 1. Van Gorp WG, Altshuler L, Theberge DC, Wilkins J, Dixon W: Cognitive impairment in euthymic bipolar patients with and without prior alcohol dependence. Archives of General Psychiatry 1998; 55, 41–46.
- 2. Clark L, Iversen SD, Goodwin GM: Sustained attention deficit in bipolar disorder. British Journal of Psychiatry 2002; 180, 313-319.

Poster 142

Friday, October 31 3:00 p.m.-4:30 p.m.

### IMPAIRMENT IN MEMORY STRATEGIES MEDIATE NONVERBAL EPISODIC MEMORY IMPAIRMENT IN BIPOLAR I DISORDER: WORK IN PROGRESS

Rebecca S. Siegel, B.A., Department of Psychiatry, Massachusetts General Hospital, 50 Staniford Street, Suite 580, Boston, MA 02114; Thilo Deckersbach, Ph.D.; Jacqueline Ogntha, B.A.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that nonverbal episodic memory impairment in patients with bipolar I disorder is mediated by impaired use of memory enhancing strategies during encoding.

### **SUMMARY:**

Objective: To investigate whether nonverbal episodic memory impairment in euthymic patients with bipolar I disorder is mediated by an impairment in the use of memory enhancing strategies during encoding.

Methods: Study subjects were 20 euthymic patients with DSM-IV bipolar I disorder (BP-I) and 20 healthy control participants matched for age, gender, education, and handedness. Subjects completed the Rey-Osterrieth Complex Figure Test (RCFT). In the RCFT, participants copy a complex geometric figure and redraw it from memory immediately afterwards as well as after a 20-minute delay. The RCFT also makes it possible to assess the extent to which participants organize the geometric figure into meaningful units during copy (e.g. a large rectangle, diagonals, etc. See Figure 1). Organizing the RCFT figure into meaningful units during copy is known to enhance subsequent free recall performance.

Results: Individuals with BP-I copied the RCFT figure as well as control participants (F=.10, df=1,38, p=.75), but organized the RCFT less than control participants (F=15.88, df=1,38, p<.0001). The BP-I patients also recalled less of the RCFT figure at immediate recall (F=8.09, df=1,38, p=.007) and after the 20-minute delay (F=4.18, df=1,38, p=.048). Group differences in free recall between BP-I and normal control participants did not remain statistically significant when group differences in organization during copy were statistically partialled out (F=.16, df=2,37, p=.69).

Conclusion: Our results suggest that nonverbal episodic memory impairment in patients with bipolar I disorder is mediated by impaired use of memory enhancing strategies during encoding.

### **REFERENCES:**

- Van Gorp WG, Altshuler L, Theberge DC, Wilkins J, Dixon W: Cognitive impairment in euthymic bipolar patients with and without prior alcohol dependence. Archives of General Psychiatry 1998; 55, 41–46.
- 2. Clark L, Iversen SD, Goodwin GM: Sustained attention deficit in bipolar disorder. British Journal of Psychiatry 2002; 180, 313–319.

Poster 143

Friday, October 31 3:00 p.m.-4:30 p.m.

### DIAGNOSING INTERMITTENT EXPLOSIVE DISORDER IN AGGRESSIVE ADOLESCENTS

Paula Gaudino, M.S.W., L.I.C.S.W., Neuropsychiatric Social Worker, Neuropsychiatry Unit, Riverside Hospital, 4460 MacArthur Boulevard, N.W., Washington, DC 20007; Mark J. Smith, M.D., Ph.D., Psychiatrist, Neuropsychiatry Unit, Riverside Hospital, 4460 MacArthur Boulevard, N.W., Washington, DC 20007; Daniel M. Matthews, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should know the value of using a symptom-oriented scale to diagnose intermittent explosive disorder in adolescents.

### **SUMMARY:**

Objective: Adults with unprovoked rage outbursts are sometimes diagnosed with intermittent explosive disorder (IED). Aggressive adolescents are usually diagnosed with some externalizing behavior disorder, but not IED, in part because clinical interviews do not test for it. IED may explain some aggressive behavior in adolescents and it may be overlooked. We tested for IED in 65 adolescents hospitalized for chronic aggression.

Method: The IED Scale, an operationalization of DSM-IV criteria for IED, consists of 12 yes or no questions asked directly to the adolescent and the same 12 questions asked to parents, teachers, or anyone who can provide history. Questions 1–7 assess the severity of aggression and questions 8–12 assess whether aggression is impulsive or premeditated. It has three rule-out criteria: outbursts not frequent enough, statutory exclusion due to certain DSM-IV diagnoses, other. We hypothesized some patients would meet full IED diagnostic criteria including absence of rule outs.

Results: Of the original 65, insufficient information was available for 21. Of the remaining 44, 12 met IED criteria (27%); others had rule-out diagnoses; some ex-

hibited insufficient severity scores and predatory type of aggression.

Conclusions: Adolescent IED may be a viable diagnosis. Further studies should clarify if it requires specific management.

### **REFERENCES:**

- Olvera RL, Pliszka SR, Konyecsni WM, Hernandez Y, Farnum S, Tripp RF: Validation of the Interview Module for Intermittent Explosive Disorder (M-IED) in children and adolescents: a pilot study. Psychiatry Res 2001; 101(3)259-67.
- 2. Coccaro EF, Intermittent explosive disorder. Curr Psychiatry Rep 2000; 2(1):67–71.

### **TARGET AUDIENCE:**

All clinicians working with children and adolescents

Poster 144

Friday, October 31 3:00 p.m.-4:30 p.m.

### DISTINGUISHING BIPOLAR AFFECTIVE DISORDER AND ADHD IN AGGRESSIVE ADOLESCENTS

Mark J. Smith, M.D., Ph.D., Psychiatrist, Neuropsychiatry Unit, Riverside Hospital, 4460 MacArthur Boulevard, N.W., Washington, DC 20007; Paula Gaudino, M.S.W., L.I.C.S.W., Neuropsychiatric Social Worker, Neuropsychiatry Unit, Riverside Hospital, 4460 MacArthur Boulevard, N.W., Washington, DC 20007; Daniel M. Matthews, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should be aware of the value of non-symptomatic diagnostic aids in distinguishing bipolar disorder from ADHD.

### **SUMMARY:**

Objective: Bipolar affective disorder (BAD) is an increasingly prevalent diagnosis in aggressive adolescents, but its clinical criteria are imprecise and subjective. Symptoms of attention deficit hyperactive disorder (ADHD) resemble those of bipolar mania, and structured interviews often diagnose the two as comorbid.

Method: We compared 12 adolescents hospitalized for aggressive behavior meeting K-SADS diagnostic criteria for bipolar mania or hypomania with 15 patients meeting criteria for ADHD but not mania or hypomania criteria on: sex, age, K-SADS diagnoses, Continuous Performance Test (CPT) scores, presence of cognitive disorders based on the Woodcock-Johnson III; Tests of Cognitive Ability and Achievement, and presence or absence of P300 evoked potentials to frequent stimuli. We hypothesized co-morbid K-SADS diagnoses, CPT anomalies,

and absence of P300 responses to frequent stimuli would be more prevalent in the BAD group.

Results: ADHD was found in 100% of the BAD patients, who had significantly more ODD and PTSD diagnoses than non BAD patients, fewer cognitive disorders, more aggression, more often absent P300 evoked potentials to frequent stimuli, and more CPT anomalies on retest.

Conclusion: Bipolar mania resembles aggressive ADHD with more comorbid diagnoses and previous medication. Objective testing may help distinguish these two disorders.

### **REFERENCES:**

- 1. Bars DR, Heyrend FL, Simpson CD, Munger JC: Use of visual evoked-potential studies and EEG data to classify aggressive, explosive behavior of youths. Psychiatr Serv 2001; 52(1)81-6.
- Atkins MS, Stoff DM: Instrumental and hostile aggression in childhood disruptive behavior disorders.
   J Abnorm Child Psychol 1993; 21(2):165-78.

### **TARGET AUDIENCE:**

Clinicians dealing with child and adolescents

Poster 145

Friday, October 31 3:00 p.m.-4:30 p.m.

### EMOTIONAL NUMBING IN PTSD IS MORE SEVERE IN FEMALES

Bristol-Myers Squibb Company, Wyeth Pharmaceuticals, and Pfizer Inc.

Aida Spahic-Mihajlovic, M.D., M.S., Psychiatrist, Alexian Brothers Medical Center, Elk Grove Village, and Departments of Cell Biology, Neurobiology, and Anatomy, Loyola University at Chicago, 2160 South First Avenue, Maywood, IL 60153; Edward J. Neafsey, Ph.D.; John W. Crayton, M.D.

#### **EDUCATIONAL OBJECTIVES:**

After this poster, the participant should understand that emotional numbing in PTSD may be much more global in women than in men.

### **SUMMARY:**

Our recent work has used 21 pictures from the International Affective Picture Set and Lang's Looking at Pictures test to examine emotionality in male and female Bosnian refugees with and without PTSD (n=10–11/group). Our previous findings in males with PTSD indicated that numbing was selective, reducing emotional arousal to positive images much more than to negative images, and hardly affecting their valence (pleasant-unpleasant) ratings at all. Affect in females with PTSD,

however, appears to be more severely abnormal. Like males, they show reduced arousal to pleasant images. However, unlike males with PTSD, they also show pronounced hyperarousal to unpleasant images. In addition, in females with PTSD, their valence ratings for all pictures are significantly reduced compared with female Bosnian controls and to normal ratings. These findings were especially clear when the mean picture valence and arousal ratings of males and females with and without PTSD for the five most unpleasant (U5) and five most pleasant pictures (P5) were compared using AN-OVA and Bonferroni t-tests. For valence, in males there was no significant difference between PTSD and control subjects in their mean valence ratings of either U5 or P5. In contrast, in females, those with PTSD rated both the U5 (p=.014) and the P5 (p=.0005) as significantly lower in valence than the mean control ratings for U5 and P5. For arousal, in both sexes those with PTSD rated the U5 as more arousing than controls (p=.014 for males, p=.0036 in females), while in both sexes those with PTSD found the P5 as much less arousing than controls (p=.006 for males, p=.02 for females).

Supported by unrestricted grants from Bristol-Myers-Squibb, Wyeth-Ayerst, and Pfizer.

### **REFERENCES:**

- 1. Lang PJ, Greenwald MK, Bradley MM, Hamm AO: Looking at pictures: affective, facial, visceral, and behavioral reactions. Psychophysiology 1993; 30:261–273.
- 2. Breslau N: Gender differences in trauma and post-traumatic stress disorder. Journal of Gender Specific Medicine 2002; 5:34–40.

#### **TARGET AUDIENCE:**

Those interested in posttraumatic stress disorder.

Poster 146

Friday, October 31 3:00 p.m.-4:30 p.m.

# QUALITY OF LIFE AFTER HOSPITALIZATION FOR ACUTE CORONARY SYNDROME: INFLUENCE OF DEPRESSION AND EFFECT OF TREATMENT WITH SERTRALINE Pfizer Inc.

J. Robert Swenson, M.D., F.R.C.P., Deputy Head, General Campus, and Director of Outpatient and Community Psychiatry, Ottawa General Hospital, and Associate Professor of Psychiatry, University of Ottawa, 501 Smyth Road, Box 400, Ottawa, ON, Canada K1H 8L6; Alexander H. Glassman, M.D.; Christopher M. O'Connor, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to understand how depression impacts on the physical, mental, and social functioning of patients with cardiac disease, and how treatment of depression may improve their overall quality of life.

### **SUMMARY:**

Objective: To evaluate the efficacy of sertraline in improving quality of life (QoL) and functioning in a sample (n=369) of patients hospitalized with acute myocardial infarction or unstable angina (acute coronary syndromes, ACS), and diagnosed with major depression.

*Method:* Patients were randomized to 24 weeks of double-blind, placebo-controlled treatment with sertraline, up to 200 mg. daily. Depression was assessed by the Hamilton Rating Scale for Depression (HAM-D), and QoL and functional status were assessed by the Quality of Life, Enjoyment and Satisfaction Scale (Q-LES-Q) and the Short-Form 36 (SF-36). Severe depression was defined *a priori* as HAM-D ≥18 and ≥2 episodes of major depression.

Results: Severe baseline impairment was found in Q-LES-Q and SF-36 for the total sample. A multivariate regression analysis identified depression as the strongest predictor of baseline QoL impairment. In the more severely depressed subgroup, sertraline showed a significant advantage over placebo on improvement from baseline in the SF-36 Mental Component Summary Score and on the Q-LES-Q life satisfaction and medication items.

Conclusion: Depression has a substantial negative impact on QoL and functioning patients hospitalized for ACS. Antidepressant treatment with sertraline resulted in improved mood, and was associated with improvement in multiple domains of QoL in patients with ACS and severe depression.

Supported by funding from Pfizer, Inc.

### **REFERENCES:**

- Glassman AH, O'Connor CM, Califf R, et al: Sertraline treatment of major depression in patients with actue MI or unstable angina. JAMA 2002; 288:701-709.
- 2. Rumsfeld JS, Magid DJ, Plomondon ME, et al: Predictors of quality of life following acute coronary syndromes. Am J Cardiol 2001; 88:781–784.

### TARGET AUDIENCE:

Health professionals who treat patients with cardiac disease and depression

Poster 147

Friday, October 31 3:00 p.m.-4:30 p.m.

### BEHAVIORAL AND BIOCHEMICAL CHANGES DURING CHOLESTEROL— LOWERING THERAPY

Jan Vevera, M.D., Department of Psychiatry, Psychiatric Clinic, Ke Karlovu 11, 12000 Praha 2, Prague, Czechoslovakia 12000; Zdeněk Fišar, Ph.D.; Tomaš Kuasnička, M.D.; Hana Papežová, M.D.; L. Stárková, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to understand the role of cholesterol lowering therapy to fluidity of plasma membrane, serotonin transporter functioning, and behavioral parameters.

### **SUMMARY:**

Several studies have reported an increased risk for violent deaths and suicide at reduction of serum cholesterol concentrations. It is supposed that impulsivity, aggression, addiction, and suicidality are connected with impairment of brain serotonergic neurotransmission. The purpose of our study was determination of correlations between serum and membrane cholesterol, microviscosity of erythrocyte membranes, kinetic of platelet serotonin uptake and clinical parameters (depression, impulsivity, empathy, adventure). The parameters were monitored in 17 persons with hyperlipoproteinaemia before first administration of simvastatin and after one month and two months of treatment. Serum and membrane cholesterol concentration and membrane microviscosity were increased before treatment in comparison with controls (18 persons). Overall, treatment with simvastatin induced a decrease in serum and membrane cholesterol concentration, an increase in erythrocyte membrane fluidity, and an increase in serotonin transporter activity after one month and two months of treatment. Clinical parameters were not significantly increased both before and after treatment. These results suggest that membrane cholesterol modulates membrane fluidity and activity of serotonin transporter, but decrease of serum cholesterol from abnormal high concentration to normal value have no effect on the impulsivity, depression, auto and heteroaggressive behavior, and other behavioral consequences.

Supported by grants MSM 111100001 and NIH Fogarty Program Finance and Mental Health Services Training in Czech Republic, School of Public Health, UC Berkeley, D43 TW05810-01.

### **REFERENCES:**

1. Hyyppa MT, Kronholm E, Virtanen A, Leino A, Jula A: Does simvastatin affect mood and steroid hormone levels in hypercholesterolemic men? A randomized

- double-blind trial. Psychoneuroendocrinology 2003; 28(2):181–194.
- Muldoon MF, Manuck SB, Mendelsohn AB, Kaplan JR, Belle SH.: Cholesterol reduction and non-illness mortality: meta-analysis of randomized clinical trials. BMJ 2001; 322:11-15.

### **TARGET AUDIENCE:**

Mental health professionals interested in membranology and neurochemistry.

Poster 148

Friday, October 31 3:00 p.m.-4:30 p.m.

### PREVALENCE OF PSYCHIATRIC AND SUBSTANCE USE COMORBIDITY IN PATIENTS WITH HEPATITIS C

Emily Williams, B.A., Department of Psychiatry, Oregon Health Sciences University, Hepatitis Resource Center, Portland VA Medical Center, 3710 Southwest, U.S. Veterans Hospital Road, Portland, OR 97239; Marian Fireman, M.D.; Ashlee Whitehead; David W. Indest, Psy.D.; Peter Hauser, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the high prevalence of psychiatric comorbidity in patients with hepatitis C and demonstrate increased knowledge around the importance of using a multidisciplinary approach in working with patients who have hepatitis C.

### **SUMMARY:**

Objective: Chronic hepatitis C virus (HCV) is prevalent in the United States and affects approximately three-to-four million individuals. The purpose of this study was to examine psychiatric and substance abuse comorbidity in veterans with HCV with a particular focus on depression.

Method: Two hundred eight veterans accepted for liver clinic evaluation, with a confirmed HCV diagnosis signed informed consent to participate in our local HCV registry protocol. Information on psychiatric and substance abuse comorbidity was obtained using a self-report Patient Screening Questionnaire (PSQ). Questions addressed symptom criteria, diagnostic history, and prescription medication for DSM-IV diagnoses. The PSQ also included AUDIT alcohol consumption questions (AUDIT-C) in order to identify heavy drinking and/or active abuse or dependence. Severity of depression was measured using the Beck Depression Inventory (BDI-II).

Results: Of the 208 patients enrolled, 165 screened positive for Major Depressive Disorder (79%), 130 for post traumatic stress disorder (63%), 33 for bipolar disor-

der (16%), and 28 for schizophrenia (14%). Eighty-six percent (86%) of veterans screened positive for psychiatric comorbidity where 43% screened positive for two or more disorders. Forty percent (40%) of veterans had baseline BDI-II scores greater than 18. Eight percent (8%) of patients reported hazardous alcohol consumption.

Conclusions: Our results suggest that patients with HCV commonly have psychiatric and substance use comorbidities. Also symptoms or depression prior to antiviral therapy are common and have important treatment implication as inteferon-alpha induces depression in a significant proportion of HCV patients. In summary our results suggest that a multidisciplinary approach is necessary or at least highly desirable in treating patients with HCV. Early identification of untreated depression as well as other co-morbidities may aid in greater accessibility to standard HCV treatments and in a decreased likelihood of interferon-induced side effects.

### **REFERENCES:**

- 1. Bush K, Kivlahan DR, McDonell MB, et al.: The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (AC-QUIP). Alcohol Use Disorders Identification Test. Arch Intern Med 1998; 158:1789–95.
- Beck A, Steer R, Brown G: Beck Depression Inventory, San Antonio, TX. The Psychological Corporation, 1996.

### **TARGET AUDIENCE:**

Mental health clinicians, psychiatrist, epidemiologists

Poster 149

Friday, October 31 3:00 p.m.-4:30 p.m.

PROCESSING PLEASANT AND UNPLEASANT STIMULI IN PATIENTS WITH SCHIZOPHRENIA: A FUNCTIONAL MAGNETIC RESONANCE IMAGING STUDY

Pfizer Inc.

Douglas A. Bigelow, Ph.D., Associate Professor of Psychiatry and Public Health, Oregon Health Sciences University, 3181 Southwest Sam Jackson Park Road, GH-153, Portland, OR 97201; William H. Wilson, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize patterns of brain metabolic activity that are associated with viewing pleasant and unpleasant pictures by individuals with schizophrenia and by normal control subjects and discuss the relevance of this to clinical symptoms of anhedonia, affective blunting, and social withdrawal.

### **SUMMARY:**

Background: Symptoms of schizophrenia such as affective blunting and anhedonia are associated with abnormal response to affective stimuli, and may be due to anomalous neuronal processing of these stimuli. This study compares brain metabolic activity during the experience of pleasant and unpleasant pictures in subjects with schizophrenia and normal controls.

Methods: Five young adults with schizophrenia and five matched controls were scanned using Blood Oxygen Level Dependent (BOLD) fMRI while observing pleasant, unpleasant, and neutral pictures and rating the pleasantness of the pictures. Primary analysis includes linear correlation of brain activity while viewing pleasant and unpleasant pictures with mapping of areas of activation to standard Talairach brain coordinates.

Results: Subjects with schizophrenia rated the pleasantness of the pictures with more variance from population norms than did controls. Differences in brain activation of cortical and subcortical areas when viewing pleasant compared with unpleasant pictures were found in normal controls and in subjects with schizophrenia.

Conclusion: FMRI is a viable means for investigating affective stimulus processing in schizophrenia. Future studies will focus on effects of pharmacological treatment in processing affective stimuli.

This study was supported by development funds from the OHSU Department of Psychiatry, and an investigator-initiated grant from Pfizer, Inc.

### **REFERENCES:**

- Davidson RJ, Irwin W: Functional MRI in the study of emotion, in Functional MRI. Edited by Moonen CTW, Bandettini PA. Springer, Berlin, 2000, pp 487-500.
- Paradiso S, et al: Brain systems of anhedonia in schizophrenia. Schizophrenia Research 2001; 49(suppl):183.

### TARGET AUDIENCE:

Psychiatrists, nurse practitioners, pharmacists, social workers with an interest in neuroscience.

Poster 150

Friday, October 31 3:00 p.m.-4:30 p.m.

### THE EPIDEMIOLOGY OF HEPATITIS B AND HEPATITIS C AMONGST VETERANS ON A PSYCHIATRIC WARD

Donna A. Wirshing, M.D., Associate Professor, Department of Psychiatry, University of California at Los

Angeles, 1130 Wilshire Boulevard, Los Angeles, CA 90073; Michael D. Kisicki, B.A.; Itai Danovitch, M.D.; Joseph M. Pierre, M.D.; Shirley Mena, B.S.; Stephen R. Marder, M.D.; William C. Wirshing, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant will learn about the prevalence of hepatitis C and B amongst seriously mentally ill inpatients in an inpatient hospital.

### **SUMMARY:**

Objective: Hepatitis B and C are of epidemic proportion in the general community. Psychiatric patients may be at greater risk of contracting hepatitis B and C due to their lifestyle and comparative lack of access to health care. The goal of this work is to determine the prevalence of hepatitis B and C as well as associated risk factors in consecutively hospitalized veterans with psychiatric disorders.

Method: Voluntary patients acutely hospitalized at the West Los Angeles VA were approached to participate in this study. Those consenting were screened for hepatitis risk factors, hepatitis B antibody and antigen, and hepatitis C antibodies.

Results: A total of 143 hospitalized patients agreed to participate, with 129 providing complete blood work. 38% and 31% of these tested positive for hepatitis C and B, respectively. Prevalence of seropositivity in the general population ranges from 5% to 20% for hepatitis B and 1% to 2% for hepatitis C. Risk factors significantly associated with infection were snorting drugs, being in jail, IV drug use, close contact with viral hapatitis patients, tattoos, being struck with bloody objects, sex with IV drug users, and health care employment. Patients with negative serology also had significant risk behavior.

Conclusion: These preliminary findings suggest an alarming rate of hepatitis B and C infection within a psychiatric inpatient population. Attention to the risk factors and preventative measures for this vulnerable population is necessary.

### **REFERENCES:**

- 1. Meyer JM, et al: Prevalence of Hepatitis A, Hepatitis B, and HIV among Hepatitis C seropositive state hospital patients: results from Oregon State Hospital. Journal of Clinical Psychiatry, in press.
- 2. Dinwiddie SH, Shicker L, Newman T: Prevalence of Hepatitis C among psychiatric patients in the public sector. American Journal of Psychiatry 2003; 160: 172–174.

Poster 151

Friday, October 31 3:00 p.m.-4:30 p.m.

### ZIPRASIDONE IN ADOLESCENT NEUROPSYCHIATRIC PATIENTS

Lee S. Cohen, M.D., Assistant Clinical Professor, Department of Psychiatry, Columbia University, Roosevelt Hospital, 623 Warburton Avenue, Second Floor, Hastings, NY 10706; Emily J. Blaine; Laura DiGiovanni

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the risk/benefit ratio of ziprasidone in child and adolescent patients manifesting impulsive, aggressive and self injurious behaviors. The participant will gain an understanding of the cardiovascular response of children and adolescents exposed to this compound. The participant will learn about clinical response data in neuropsychiatric child and adolescent patients on ziprasidone.

### **SUMMARY:**

Currently atypical antipsychotics are regularly used in child and adolescent populations for psychotic illnesses as well as mood disorders, disruptive behavioral disorders, pervasive developmental disorders, tics and other conditions. Issues regarding efficacy and safety of these compounds in children remain unclear since the literature in child/adolescent populations regarding the use of these agents is limited.

This study examines the efficacy and cardiovascular safety of ziprasidone in neuropsychiatrically ill adolescents on an outpatient basis. Eleven consecutively treated neuropsychiatric patients in our outpatient clinic were examined for response to ziprasidone and for cardiovascular safety. Patients manifested a mean age of 14 (range 9-21 years) and were exposed to a mean dose of 83.64 mg/day of ziprasidone with a range of 40-120 mg/day. Average length of time treated with ziprasidone was 151 days. Patients had the following primary diagnoses: 4 pervasive developmental disorder NOS, 3 autistic disorder, 1 Asperger's disorder, 1 conduct disorder, and 2 oppositional defiant disorder. Clinical Global Impressions Severity of Illness at start of the study was a mean score of 5.55 (markedly-severely ill). Mean value of CGI Global Improvement at endpoint was 1.82 (much-very much improved). Nine of 11 patients were rated much improved or very much improved after clinical review by a board certified child psychiatrist.

Cardiovascular safety was examined via clinical reports and serial EKG's done at baseline and at 20–40mg dose increases of ziprasidone. Analysis was then conducted to examine pulse rate and interval changes on EKG at baseline and endpoint after maximum dosage exposure to ziprasidone. Mean Start EKG values were as follows: Vent rate=82.45 bpm, PR int=151.64 ms,

QRS duration=91.45 ms, QT/QTc 350.73/408.64 ms. Mean End EKG values were as follows: Vent rate=80 bpm, PR int=157.82, QRS duration=91.27 ms, QT/QTc=365.10/412.27 ms. There were no clinical reports of cardiovascular related adverse events. Analyses of all EKG values using t test indicated no significant change in ventricular rate or any EKG parameters with the following data: Vent rate: t(11)=0.727, p>.05, (P=.484), PR int: t(11)=-1.761, p>.05,(p=.109), QRS duration: t(11)=0.171, p>.05,(p=.867), QT: t(11)=-1.482, p>.05,(p=.169), QTc: t(11)=-0.757, p>.05,(p=.467).

This pilot study indicates that 82% of adolescents treated with ziprasidone as monotherapy(n=5) or as adjunctive treatment(n=6) manifested much or very much improvement on CGI global improvement. No significant cardiovascular adverse reactions were seen with cardiac monitoring. Ziprasidone is a potentially useful agent for neuropsychiatrically ill children and adolescents on an outpatient basis. Further controlled studies are warranted in child and adolescent populations to further delineate this compounds usefulness and safety in this age range.

### **REFERENCES:**

- 1. Ray WA, Meredith S, Thapa PB, Meador KG, Hall K, Murray KT: Antipsychotics and the risk of Sudden Cardiac Death. Arch Gen Psychiatry 2001; 58(12):1168–71.
- Vieweg WV: Mechanisms and Risks of Electrocardiographic QT Interval Prolongation when using Antipsychotic Drugs. J Clin Psychiatry 2002; 63 Suppl 9:18–24.

### **TARGET AUDIENCE:**

Child/adolescent & adult psychiatrists

Poster 151-A

Friday, October 31 3:00 p.m.-4:30 p.m.

# EFFICACY OF DIVALPROEX IN CHILDREN WITH DISRUPTIVE BEHAVIOR DISORDER

Robert B. Lehman, M.D., Pharmasite Research, 1314 Bedford Avenue, Suite 205, Baltimore, MD 21208-3737

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, participants should be familiar with disruptive behavior disorder (DBD) in children and adolescents, understand the pharmacologic approach to DBDs, and the potential role of divalproex sodium in the treatment of DBD in children and adolescents.

#### **SUMMARY:**

Objective: To evaluate the efficacy of divalproex in the management of disruptive behavior disorders in children.

Methods: Retrospective review of 20 consecutive patients treated with divalproex for problems with behavior dyscontrol in an outpatient psychiatric clinic. Patients have failed previous pharmacotherapy. Their response to treatment was graded between 1 (no response) and 4 (elimination of disruptive behaviors).

Results: Of the 20 patients, 10 had grade-4 responses to divalproex (very effective), five had grade-3 responses (moderately effective), two had grade-2 responses (mildly effective), and three had no response.

Conclusion: Divalproex appears to be effective as pharmacotherapy for behavior dyscontrol in children and adolescents. Controlled, prospective studies should be designed to evaluate the potential of this drug in pediatric populations with conduct disorders.

### **REFERENCES:**

- 1. Donovan SJ: Divalproex treatment of adolescents: a report of ten cases. J Clin Psychiatry 1997.
- Donovan SJ, Stewart JW, Nunes EV, Quitkin FM, Parides M, Daniel W, Susser E, Klein DF: Divalproex treatment for youth with explosive temper and mood lability: a double-blind, placebo-controlled crossover design. Am J Psychiatry 2000; 157:818–820.

#### TARGET AUDIENCE:

Child and adolescent psychiatrists

### **POSTER SESSION 4**

Posters 152-199

PSYCHOPHARMACOLOGY OF MOOD DISORDERS

Poster 152

Saturday, November 1 9:30 a.m.-11:00 a.m.

### SAFETY AND TOLERABILITY OF LAMOTRIGINE IN BIPOLAR I DISORDER

GlaxoSmithKline

Gregory M. Asnis, M.D., Director of Anxiety and Depression Clinic, Department of Psychiatry, Montefiore Medical Center, 111 East 210th Street, Bronx, NY 10467-2490; Charles L. Bowden, M.D., Professor of Psychiatry and Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900; Joseph R. Calabrese, M.D.; Gary S. Sachs, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss the safety and tolerability of lamotrigine in patients with bipolar disorder.

### **SUMMARY:**

Objective: Tolerability and safety are important considerations in optimizing pharmacotherapy for bipolar disorder. We examined the tolerability of lamotrigine in a large bipolar disorder clinical trial database.

Methods: Pooled safety data were analyzed from eight placebo-controlled clinical studies, in which adults with DSM-IV bipolar disorder received lamotrigine at doses of 50–500mg (n=827) or placebo (n=685), for up to 18 months.

Results: Lamotrigine was well tolerated with an adverse event profile comparable to placebo. The most common adverse event was headache (25% LTG, 21% PBO). Few patients experienced serious adverse events (8% LTG, 7% PBO), and the incidence of withdrawals due to adverse events was low (12% LTG, 10% PBO). Lamotrigine did not destabilize mood and was not associated with sexual side effects, clinically significant weight changes, or withdrawal symptoms. Serious rash was rarely (0.1%) reported.

Conclusions: Lamotrigine appears to be well tolerated as long-term maintenance treatment in bipolar 1 disorder.

This research was sponsored by a grant from GlaxoS-mithKline.

### **REFERENCES:**

- 1. Erye M, Ketter T, Kimbrell T, et al: A placebocontrolled study of lamotrigine and gabapentin monotherapy in refractory mood disorders. J Clin Psychophamacol 2000; 20:607–614.
- 2. Mackay F, Wilton L, Pearce G, et al: Safety of long-term lamotrigine in epilepsy. Epilepsia 1997; 38:881–886.

### **TARGET AUDIENCE:**

General psychiatrists.

Poster 153

Saturday, November 1 9:30 a.m.-11:00 a.m.

### MAINTENANCE TREATMENTS FOR BIPOLAR I DEPRESSION

**GlaxoSmithKline** 

Frederick K. Goodwin, M.D., Director, Psychopharmacology Research Center, George Washington University Medical Center, 2150 Pennsylvania Avenue, N.W., Washington, DC 20037; Charles L. Bowden, M.D., Professor of Psychiatry and Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Poster 154 Curl Drive, San Antonio, TX 78229-3900; Joseph R. Calabrese, M.D.; Robin White, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to compare and contrast the effectiveness of lithium and lamotrigine as maintenance treatments for bipolar I depression.

### **SUMMARY:**

Objective: Lithium, used to treat bipolar mania, is believed to have antidepressant activity. We compared lithium and lamotrigine as maintenance treatments for bipolar I depression.

Methods: Placebo, lithium (Li), and lamotrigine (LTG) were studied as maintenance treatments for 18 months in bipolar I patients who were currently or recently symptomatic. Results from two clinical trials comprising 463 patients (index depressed) and 175 patients (index manic) were examined for incidence of depressive events, HAMD-17 scores, and DSM-IV depression events by treatment group and index mood episode.

Results: In recently manic patients, fewer lamotrigine than lithium-treated patients required intervention for depression (LTG 14%, Li 22%), reported depressive adverse events (LTG 0, Li 4%), had DSM-IV depression (LTG 10%, Li 17%), or had HAMD scores > 20 (LTG 3%, Li 11%). In recently depressed patients, depressive symptoms were similar between treatment groups: Intervention for depression (LTG 34%, Li 38%), reported depressive adverse events (LTG 4%, Li 3%), DSM-IV depression (LTG 31%, Li 36%), or HAMD scores > 20 (LTG 22%, Li 18%).

Conclusions: Lamotrigine provided more protection against depressive symptoms than lithium, regardless of index mood. Results suggest that lamotrigine therapy should be considered during or shortly after stabilization of mania, before depressive symptoms occur.

This research was sponsored by a grant from GlaxoSmithKline.

### **REFERENCES:**

- 1. Burgess S, Geddes J, Hawton K, et al: Lithium for maintenance treatment of mood disorder (Cochran Review). Cochran Database Syst Rev 2001; 2: CD003013.
- 2. Calabrese J, Bowden C, Sachs G: A double-blind placebo-controlled study of lamotrigine monotherapy in out patients with bipolar I depression. J Clin Psych 1999; 60:79-88.

### **TARGET AUDIENCE:**

General psychiatrists

Saturday, November 1 9:30 a.m.-11:00 a.m.

### CONCOMITANT USE OF MOOD STABILIZERS IN BIPOLAR I DISORDER

GlaxoSmithKline

Charles L. Bowden, M.D., Professor of Psychiatry and Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900; Joseph R. Calabrese, M.D., Director, Mood Disorders Program, Case Western Reserve University, 11400 Euclid Avenue, Suite 200, Cleveland, OH 44106-3986; Gary S. Sachs, M.D.; Alan Metz, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the safety and tolerability of open-label concomitant valproate and lamotrigine therapy in bipolar I disorder.

### **SUMMARY:**

Background: Valproate reduces lamotrigine clearance, thereby increasing serum concentrations and leading to potential safety concerns. We evaluated the tolerability of concomitant lamotrigine and valproate treatment in bipolar I disorder.

Methods: Data from the preliminary phase of two large prophylaxis trials (GW 2003 and 2006) of bipolar I disorder were pooled. Lamotrigine dose was reduced to half the recommended titration rate for patients receiving valproate. Psychiatric rating scale scores and adverse events were examined.

Results: A total of 200 patients received concomitant lamotrigine and valproate therapy: the majority of patients receiving at least seven weeks of co-exposure. Mean CGI-S and GAS scores were respectively 4.4 (SD 0.7) and 48.8 (SD 9.6) at study entry and 2.9 (SD 1.3) and 66.7 (SD 17.1) at the end of the preliminary phase. The most common adverse events were headache (29%). Infection (17%), nausea (15%), and rash (14%). No cases of serious rash were reported. No significant difference in rash was observed between patients who received concomitant therapy and those who did not (14% vs. 10%, p=0.22).

Conclusion: Concomitant administration of lamotrigine and valproate, using recommended reductions in the titration schedule of lamotrigine, was well tolerated in patients with bipolar I disorder.

This research was sponsored by a grant from GlaxoSmithKline.

### **REFERENCES:**

1. Macdonald KJ. Young LT: Newer antiepileptic drugs in bipolar disorder: rationale for use and role in therapy. CNS Drugs 2002; 16(8):549-62.

2. Keck PE Jr. McElroy SL, Clinical pharmacodynamics and pharmacokinetics of antimanic and moodstabilizing medications. Journal of Clinical Psychiatry 2002; 63 Suppl 4:3–11.

### **TARGET AUDIENCE:**

General psychiatrists

Poster 155

Saturday, November 1 9:30 a.m.-11:00 a.m.

### CAN BIPOLAR DEPRESSION BE TREATED WITHOUT DESTABILIZING MOOD?

GlaxoSmithKline

Joseph R. Calabrese, M.D., Director, Mood Disorders Program, Case Western Reserve University, 11400 Euclid Avenue, Suite 200, Cleveland, OH 44106-3986; Patricia Suppes, M.D., Department of Psychiatry, University Southwestern Medical Center, Dallas, TX 75390-9070; Susan L. McElroy, M.D.; Joseph F. Goldberg, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to compare and contrast the potential for affective switch during maintenance therapy with lamotrigine compared with placebo in patients with bipolar I disorder.

### **SUMMARY:**

Objective: To assess whether randomized clinical trials of lamotrigine provide evidence for or against exacerbation of mania in bipolar I patients.

Methods: Data from eight controlled clinical trials (lamotrigine=827, placebo=685) and two 18-month prophylaxis trials (lamotrigine=227, placebo=190) were analyzed. Lamotrigine treatment ranged from three weeks to 18 months, as adjunctive or monotherapy, at daily doses of 50–500 mg.

Results: In the controlled trials, lamotrigine was not associated with an increased risk of manic/hypomanic/mixed episodes reported as adverse events (5% lamotrigine, 4% placebo), serious adverse, events (3% lamotrigine, 3% placebo), or adverse events leading to discontinuation (2% lamotrigine, 1% placebo). In prophylaxis trials, 21% of lamotrigine-treated patients had an adverse event of mania or required intervention for mania in the randomized phase compared with placebo (26%). Time to intervention for mania was longer for lamotrigine compared with placebo. Mania Rating Scale (MRS) mean scores at randomization and at the end of the treatment period were similar between lamotrigine and placebo. The percentage of patients with a MRS score >

10 at any time after randomization was 15% for lamotrigine and 12% for placebo.

Conclusions: Data from multiple clinical trials indicate that lamotrigine does not exacerbate mania when used to treat bipolar depression.

This research was sponsored by a grant from Glaxo-SmithKline

### **REFERENCES:**

- 1. Calabrese JR, Rapport DJ, Kimmel SE, et al: Controlled trials in bipolar I depression: focus on switch rates and efficacy. Eur Neuropsychopham 1999; 9(Suppl 4):S109–S112.
- Howland RH: Induction of mania with serotonin reuptake inhibitors. J Clin Psychopharmacol 1996; 16:425–427.

### **TARGET AUDIENCE:**

General psychiatrists

Poster 156

Saturday, November 1 9:30 a.m.-11:00 a.m.

### EFFECTS OF MOOD STABILIZERS ON BODY WEIGHT IN BIPOLAR I DISORDER

*GlaxoSmithKline* 

Lawrence D. Ginsberg, M.D., President and Chief Executive Officer, Red Oak Psychiatry Associates, 17115 Red Oak Drive, Suite 109, Houston, TX 77090-2607; Joseph R. Calabrese, M.D., Director, Mood Disorders Program, Case Western Reserve University, 11400 Euclid Avenue, Suite 200, Cleveland, OH 44106-3986; Charles L. Bowden, M.D.; Gary S. Sachs, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to compare and contrast the effects of mood stabilizers for bipolar I disorder on body weight.

### **SUMMARY:**

Objective: To examine the effects of mood stabilizers for bipolar I disorder on body weight.

Methods: A total of 638 patients randomized to 18 months of double-blind monotherapy with lamotrigine (n=280; 50-400mg/day fixed and flexible dose), lithium (n=167; 0.8-1.1 mEq) or placebo (n=191) were grouped by pretreatment body mass index (BMI): not obese = BMI < 30, obese = BMI ≥ 30. Mean observed change in body weight was examined through 52 weeks of treatment. Random effects mixed model with subject as a random effect and treatment, BMI category, visit, BMI category by visit interaction, and treatment by visit interaction as fixed effects was performed.

Results: After 52 weeks of treatment, mean change in body weight was significantly lower in the lamotrigine treatment group compared with placebo (p<0.011) and compared with lithium (p<0.0001). These differences were evident in both BMI categories, but were most evident in the obese category of patients: placebo + 1.46 kg, lithium +3.3 kg, and lamotrigine -2.96 kg.

Conclusions: Changes in body weight were correlated with choice of mood stabilizer and body mass index. Patients categorized as obese were at greatest risk for weight gain with lithium.

This research was sponsored by a grant from Glaxo-SmithKline.

### **REFERENCES:**

- Fagiolini A, Frank E, Houck PR, Mallinger AG, Swartz HA, Buysse DJ, Ombao H, Kupfer DJ: Prevalence of obesity and weight change during treatment in patients with bipolar I disorder. Journal of Clinical Psychiatry 2002; 63(6):528-33.
- 2. McIntyre RS: Psychotropic drugs and adverse events in the treatment of bipolar disorders revisited. Journal of Clinical Psychiatry 2002; 63 Suppl 3:15–20.

### **TARGET AUDIENCE:**

General psychiatrists

Poster 157

Saturday, November 1 9:30 a.m.-11:00 a.m.

### PHARMACOKINETICS AND SAFETY OF DIVALPROEX EXTENDED RELEASE IN THE PEDIATRIC POPULATION

Abbott Laboratories

Sandeep Dutta, Ph.D., Employee, Abbott Laboratories, 200 Abbott Park Road, Abbott Park, IL 60064; Kenneth W. Sommerville, M.D.; James C. Cloyd, Pharm.D.; Gregory Kearns, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the individual should be: (1) able to administer divalproex ER to the pediatric population in a safe and effective manner: (2) aware that, similar to adults, once-daily divalproex ER could sustain valproate concentrations over 24 hours in the pediatric population.

### **SUMMARY:**

Objective: Assess the pharmacokinetics and safety of once-daily divalproex extended-release (ER) tablets in children and adolescents and compare them to a healthy adult historical control group.

Methods: This was a multiple-dose, non-fasting, open-label, multi-center, pharmacokinetic study in child

(8–11 years) and adolescent (12–17 years) patients (bipolar disorder [N=11], migraine prophylaxis [N=9], seizure [N=7], ADHD [N=2]). Once-daily divalproex ER doses ranged from 250 mg to 1750 mg. Safety was evaluated based on adverse events (AE), physical examinations, vital signs, and laboratory assessments.

Results: Two of 29 enrolled subjects discontinued for administrative reasons and one for flu syndrome. Oncedaily divalproex ER produced sustained valproate concentrations in children and adolescents for 24 hours with mean clearances of 336 and 358 mL/h/m² respectively; not significantly different from the profile observed in adult control group (clearance = 321 mL/h/m²). AEs were generally mild to moderate in severity and similar to those reported in previous divalproex studies. The most common (≥10% prevalence) AEs reported were flu syndrome (17%, 5/29) and headache (10%, 3/29) with 33% (5/15) of children reporting AEs compared to 50% (7/14) of adolescents.

Conclusions: Similar to adults, once-daily divalproex ER can sustain valproate concentrations among children and adolescents for 24 hours. Divalproex ER was well tolerated in this pediatric population.

Funding Source: Abbott Laboratories.

### **REFERENCES:**

- 1. Cloyd JC, Fischer JH, Kriel RL, Kraus DM: Valproic acid pharmacokinetics in children. IV. Effects of age and antiepileptic drugs on protein binding and intrinsic clearance. Clinical Pharmacology & Therapeutics 1993: 53:22.
- Department of Health and Human Services, Food and Drug Administration: Coding Symbols for Thesaurus of Adverse Reaction Terms, 1985, 5<sup>th</sup> Edition.

### **TARGET AUDIENCE:**

Pediatric neurologists and pediatric psychiatrists

Poster 158

Saturday, November 1 9:30 a.m.-11:00 a.m.

### CONVERSION BETWEEN DIVALPROEX SODIUM EXTENDED RELEASE AND DIVALPROEX SODIUM DELAYED RELEASE TABLETS

Abbott Laboratories

Sandeep Dutta, Ph.D., Employee, Abbott Laboratories, 200 Abbott Park Road, Abbott Park, IL 60064; Kenneth W. Sommerville, M.D.; James C. Cloyd, Pharm.D.; Yiming Zhang, Ph.D.; Basim M. Othman, M.D.; Victor Biton, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the individual should be: (1) able to safely convert patients from their current divalproex DR dose to once-daily divalproex ER; (2) aware that the type of enzyme-inducing antiepileptic drug and the total daily divalproex DR dose DOES NOT affect the divalproex DR to ER dose-conversion ratio.

### **SUMMARY:**

Objective: Divalproex sodium extended-release tablets (ER) have 10% lower bioavailability than divalproex sodium delayed-release tablets (DR). This study evaluated the safety and bioavailability of 8% to 20% higher once-daily ER doses relative to DR Q8H regimens.

Methods: This was a multiple-dose, randomized, open-label, crossover pharmacokinetic study in adults (N=76). Total daily DR doses range was 875–4250 mg, and ER dose range was 1000–5000 mg (matched as 8% to 20% higher). Valproic acid (VPA) plasma concentration-time profiles were used to assess pharmacokinetics. Safety was evaluated based on adverse events (AE), physical examinations, vital signs, and laboratory assessments.

Results: ER QD and DR Q8H regimens were equivalent for exposure (area under the VPA concentration-time curve). ER VPA maximum concentration was significantly lower than and minimum concentration was not significantly different from, the corresponding values for the DR regimen. AEs were transient and generally mild. The most common AEs (≥3% incidence; ER vs. DR) were headache (1% vs. 4%), abdominal pain (0% vs. 3%), and viral infection (3% vs. 1%) AE incidence rate was not significantly different between ER and DR.

Conclusions: To switch patients from DR regimens to ER QD regimens the total daily ER dose has to be increased by 8% to 20%.

Funding Source: Abbott Laboratories.

### **REFERENCES:**

- DEPAKOTE<sup>®</sup> ER Tablets Product Information, 2002. Divalproex sodium Extended-Release Tablets, Abbott Laboratories, Inc., North Chicago, IL 60064, USA. Physicians' Desk Reference. 56<sup>th</sup> Ed. Medical Economics Company, Inc., Montvale, NJ, pp 436– 440.
- 2. Dutta S, Zhang Y, Selness DS, Lee LL, Williams LA, Sommerville KW: Comparison of the bioavailability of unequal doses of divalproex sodium extended-release formulation relative to the delayed-release formulation in healthy volunteers. Epilepsy Research 2002, 49: 1–10.

### **TARGET AUDIENCE:**

Neurologists and psychiatrists

Poster 159

Saturday, November 1 9:30 a.m.-11:00 a.m.

# REMISSION IN PLACEBO-CONTROLLED TRIALS OF DULOXETINE WITH AN SSRI COMPARATOR

Eli Lilly and Company

Thomas C. Lee, M.A., Scientific Communications Associate, Lilly Research, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Michael E. Thase, M.D.; Yili Lu, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that remission is the optimal outcome of acute phase antidepressant therapy for MDD and that duloxetine treatment results in high rates of remission.

#### **SUMMARY:**

Objective: Complete remission is increasingly recognized as the optimal outcome of the acute phase of antidepressant therapy. Evidence suggests that therapy with dual-reuptake inhibitors such as venlafaxine (at least at higher doses) may bring about higher rates of remission than SSRIs. Duloxetine is a dual-reuptake inhibitor that has well-established efficacy and safety in clinical trials. Here, we examine the remission rates in controlled studies of duloxetine, using analytical techniques such as odds ratios and effect sizes.

*Method:* Pooled data from six randomized, double-blind, placebo-controlled clinical trials comparing duloxetine with an SSRI in the treatment of depression were analyzed. Remission was defined as a score of  $\leq$  7 on the 17-item Hamilton Rating Scale for Depression (HAMD<sub>17</sub>).

Results: Remission rates were 43% (300/697) for duloxetine, 38.3% (162/423) for SSRIs, and 28.4% (144/507) for placebo ( $\chi^2 = 27.18$ , df = 2, p<.001). Odds ratios were 1.22 (95% confidence interval, CI: 0.95, 1.56) for duloxetine/SSRI and 1.90 (95% CI: 1.49, 2.43) for duloxetine/placebo. The effect size was 0.3 for duloxetine vs. placebo, 0.2 for SSRI vs. placebo and 0.1 for duloxetine vs. SSRI.

Conclusion: Remission rates for duloxetine were greater than placebo or SSRI in controlled clinical trials.

Funding Source: Supported by funding from Eli Lilly & Company.

### **REFERENCES:**

1. Thase ME, Entsuah AR, Rudolph RL: Remission rates during treatment with venlafaxine or selective serotonin reuptake inhibitors. Br. J. Psychiatry 2001; 178(3):234–241.

 Paykel ES, Ramana R, Cooper Z, Hayhurst H, Kerr J, Barocka A: Residual symptoms after partial remission: an important outcome in depression. Psychol Med 1995; 25(6):1171–80.

### **TARGET AUDIENCE:**

Psychiatrists and clinicians who treat depression

Poster 160

Saturday, November 1 9:30 a.m.-11:00 a.m.

### DULOXETINE IN THE LONG-TERM TREATMENT OF MAJOR DEPRESSIVE DISORDER

Eli Lilly and Company

Thomas C. Lee, M.A., Scientific Communications Associate, Lilly Research, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Joel Raskin, M.D.; David J. Goldstein, M.D., Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that duloxetine, an antidepressant that is a potent and balanced dual reuptake inhibitor of serotonin and norepinephrine, is safe and efficacious in the long-term treatment of depression.

### **SUMMARY:**

Background: Depression is a chronic, recurring disorder for which guidelines recommend long-term therapy. Evaluation of duloxetine in the long-term treatment of depression is crucial.

Methods: This was an open-label, 52-week, multinational clinical trial in MDD outpatients (age ≥18) receiving duloxetine at 80 or 120 mg/d (administered as 40 or 60 mg BID).

Results: A total of 1,279 patients had post-baseline data, of whom 520 were exposed to duloxetine for at least 360 days. Mean changes in CGI-Severity, HAMD<sub>17</sub> total score, HAMD subfactors, BDI-II, Sheehan Disability Scale (SDS), and means for PGI-Improvement all showed highly significant (p<.001) improvements at all assessment times. Estimated probabilities of response and remission at Week 52 were 91.4% and 81.8%, respectively. Adverse events led to discontinuation in 17.0% of patients. Treatment-emergent adverse events reported by >10% of patients included nausea, insomnia, headache, and somnolence. Mean changes for pulse, blood pressure, corrected QT interval, and body weight were < 2 bpm, < 1.0 mm Hg, < 1 msec, and 1.1 kg, respectively. Small mean increases were observed for some laboratory analytes; however, the incidence of laboratory values above or below normal limits was low.

Conclusion: Duloxetine is effective, safe, and well tolerated in the long-term treatment of major depression at doses of 80 and 120 mg/d.

Funding Source: Supported by funding from Eli Lilly & Company.

#### **REFERENCES:**

- Detke MJ, Lu Y, Goldstein DJ, Hayes JR, Demitrack MA: Duloxetine 60 mg once daily for major depressive disorder: a randomized double-blind placebo-controlled trial. J Clin Psychiatry 2002; 63: 308-315.
- Goldstein DJ, Mallinckrodt C, Lu Y, Demitrack MA: Duloxetine in the treatment of major depressive disorder: a double-blind clinical trial. J Clin Psychiatry 2002; 63: 225–231.

### **TARGET AUDIENCE:**

Psychiatrists and clinicians who treat depression

Poster 161

Saturday, November 1 9:30 a.m.-11:00 a.m.

# UTILIZATION AND COST OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN MEDICAID PATIENTS WITH DEPRESSION

Janssen Pharmaceutica

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the differences in cost of mental health services in Medicaid patients with depression treated with risperidone or olanzapine as augmentation to antidepressants.

### **SUMMARY:**

Objective: To compare utilization and health care costs of olanzapine and risperidone when used as augmentation agents for depression.

Methods: A retrospective analysis was conducted using a California Medicaid database (Medi-Cal 1996–2000) of patients age 18 to 65 with one year of continuous enrollment and one or more medical claims for depression. Patients with schizophrenia or psychotic depression were excluded. Patients received augmentation with either risperidone or olanzapine after at least four weeks of antidepressant treatment. Mean cost of antipsychotics and antidepressants were measured as the total

cost incurred during the treatment period and as the mean cost per month standardized for differences in treatment duration between olanzapine and risperidone. Total mental health costs were estimated by least square adjusted mean ranks.

Results: Risperidone (N=105) and olanzapine (N=130) groups were similar with respect to length of treatment, antidepressant use, and occurrence and number of outpatient and inpatient visits. Mean antipsychotic costs per month were significantly lower for risperidone (\$154.31 vs. \$258.13, p<0.0001). Significantly more risperidone subjects (62.9% vs. 39.2% for olanzapine) had total mental health care costs that were below the median (p=0.0003).

Conclusions: Relative to olanzapine, augmentation with risperidone was associated with significantly lower antipsychotic and total mental health costs.

Supported by Janssen Pharmaceutica Products, L.P.

### REFERENCES:

- 1. Greenberg PE, Stiglin LE, Finkelstein SN, Berndt ER: The economic burden of depression in 1990. J Clin Psychiatry 1993; 54:405-18.
- Ostroff RB, Nelson JC: Risperidone augmentation of selective serotonin reuptake inhibitors in major depression. J Clin Psychiatry 1999; 60:256-9.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 162

Saturday, November 1 9:30 a.m.-11:00 a.m.

### RISPERIDONE IMPROVES HEALTH-RELATED QUALITY OF LIFE AND PATIENT FUNCTIONING

Janssen Pharmaceutica

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the effect of risperidone treatment on the HRQL and functioning of hospitalized adults with bipolar I disorder.

### **SUMMARY:**

Objective: To evaluate the effect of risperidone treatment on health-related quality of life (HRQL) and functioning of hospitalized adults with bipolar I disorder.

Methods: Subjects aged 18-64 with bipolar I disorder were admitted to a psychiatric inpatient program and initiated on risperidone. HRQL was measured at admission and discharge using a validated mental health-specific instrument, the Behavior and Symptom Identification Scale (BASIS-32). Patient functioning was assessed using the Global Assessment of Functioning scale (GAF). Correlations between changes in the total score and domains of the BASIS-32 and GAF were also examined.

Results: Participants (N=91) had a mean hospital stay of 10 days and received a mean dose of 2.8 mg/day of risperidone at discharge. Significant (p<0.05) improvements were seen at discharge across all domains of the BASIS-32 and a 20.6-point improvement in the GAF (p<0.05). The greatest HRQL improvements were on the Depression/Anxiety (52.4%), Impulsive/Addictive Behavior (72.7%), and Psychosis (61.5%) domains of the BASIS-32. These three improvements significantly correlated (p<0.05) with improvements on the GAF.

Conclusion: The results suggest that hospitalized patients with bipolar I disorder treated with risperidone experienced significant improvements on important domains of HRQL and clinical measures of patient functioning.

Supported by Janssen Pharmaceutica Products, L.P.

### **REFERENCES:**

- 1. Meletiche DM, Doshi D, Lofland JH: Medical Outcomes Study Short Form 36: a possible source of utilities? Clin Ther 1999; 21:2016–26; discussion 215.
- Revicki DA, Paramore LC, Sommerville KW, Swann AC, Zajecka JM, Depakote Comparator Study Group: Divalproex sodium versus olanzapine in the treatment of acute mania in bipolar disorder: health-related quality of life and medical cost outcomes. J Clin Psychiatry 2003; 64:288–94.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 163

Saturday, November 1 9:30 a.m.-11:00 a.m.

### EFFICACY OF DULOXETINE 60 MG DAILY IN THE TREATMENT OF PAINFUL PHYSICAL SYMPTOMS IN PATIENTS WITH MAJOR DEPRESSION

Eli Lilly and Company

Alison Potts, Ph.D., Neuroscience Medical Liaison, U.S. Medical Division, Eli Lilly and Company, 41 Centre Street, Apt. 308, Brookline, MA 02446; Madelaine M. Wohlreich, M.D.; Craig Mallinckrodt, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be aware of the efficacy of duloxetine 60 mg QD for the treatment of MDD.

### **SUMMARY:**

Background: Up to 70% of depressed patients in primary care reported physical symptoms as the only reason for consulting a physician. We report the efficacy of duloxetine in alleviating painful physical symptoms in depressed patients.

Methods: Efficacy data were pooled from two identical, but independent, nine-week, randomized, double-blind trials of placebo (N=251) and duloxetine 60 mg QD (N=244). Efficacy measures included Visual Analog Scales (VAS) for pain. Patients were not specifically screened for pain. The average baseline score for overall pain was 26.

Results: Pooled over all visits, mean changes for duloxetine-treated patients corresponded to improvements of 22%–41%, compared with 5%–18% mean improvements for placebo. Differences were significant for all outcomes except headache (p=.051). In visit-wise results, significant improvements for duloxetine over placebo were observed as early as Week 1 (back pain, shoulder pain) or Week 2 (overall pain, headache, pain while awake, daily activities). Path analyses demonstrated that over half the improvement in overall pain, back pain, and shoulder pain associated with duloxetine treatment was independent of improvements in HAMD<sub>17</sub> total score.

*Conclusion:* In these studies, duloxetine (60 mg QD) demonstrated efficacy in treating painful physical symptoms in depressed patients.

Source of Funding: Eli Lilly and Company.

### **REFERENCES:**

- 1. Smith GR: The epidemiology and treatment of depression when it coexists with somatoform disorders, somatization, or pain. Gen Hosp Psychiatry 1992; 14:265–272.
- 2. Simon GE, Von Korff M, Piccinelli M, et al: An international study of the relation between somatic symptoms and depression. N Engl J Med 1999; 341:1329–1335.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

Poster 164

Saturday, November 1 9:30 a.m.-11:00 a.m.

### ONSET AND MAINTENANCE OF ANTIDEPRESSANT EFFICACY FOR DULOXETINE 60 MG DAILY

Eli Lilly and Company

Alison Potts, Ph.D., Neuroscience Medical Liaison, U.S. Medical Division, Eli Lilly and Company, 41 Centre Street, Apt. 308, Brookline, MA 02446; Craig Mallinckrodt, Ph.D.; Michael J. Detke, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be aware that duloxetine has a rapid onset of robust and sustained antidepressant efficacy across a wide range of symptom measures.

### **SUMMARY:**

Background: The ability to accelerate clinically meaningful efficacy would be a highly desirable attribute for a novel antidepressant medication. However, significant improvements in depressive symptoms are often delayed until two to four weeks of therapy. We examined the temporal pattern (onset and maintenance) of antidepressant efficacy for duloxetine when administered at its recommended starting dose of 60 mg QD.

Methods: Efficacy data were pooled from two identical, but independent, nine-week randomized, double-blind, clinical trials of duloxetine 60 mg QD (N=244) and placebo (N=251). Efficacy measures included the 17-item Hamilton Rating Scale for Depression (HAMD<sub>17</sub>) total score, HAMD<sub>17</sub> Items 1 (mood), 3 (suicide), 7 (work and activities), and 10 (anxiety), HAMD<sub>17</sub> subfactors (Maier, Core), Clinical Global Impression of Severity (CGI-S), and Patient Global Impression of Improvement (PGI-I).

Results: Mean changes for duloxetine-treated patients were significantly greater than for placebo-treated patients at Week 1 of treatment, and at all visits thereafter, for all assessed outcomes except HAMD<sub>17</sub> total score, where statistical significance began at Week 2. The estimated probabilities of improvement based on  $\geq$  1-unit change in HAMD Items 1, 3, 7, and 10, as well as CGI-S and PGI-I scores were significantly greater for duloxetine-treated patients at Week 1, and at all visits thereafter. Estimated probabilities of remission (HAMD<sub>17</sub>  $\leq$  7) and response (50% improvement) at Week 9 were 43% and 63% for duloxetine-treated patients, respectively, approximately double the corresponding placebo rates.

Conclusion: In these studies, duloxetine (60 mg QD) demonstrated rapid onset of robust and sustained antidepressant efficacy across a wide range of symptom measures

Source of Funding: Eli Lilly and Company.

#### **REFERENCES:**

- 1. Blier P: Pharmacology of rapid-onset antidepressant treatment strategies. J Clin Psychiatry 2000; 62 (Suppl15):12–17.
- 2. Montgomery SA, Bech P, Blier P, et al: Selecting methodologies for the evaluation of differences in the time to response between antidepressants. J Clin Psychiatry 2002; 63:694–699.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

Poster 165

Saturday, November 1 9:30 a.m.-11:00 a.m.

### ZIPRASIDONE IN PEDIATRIC BIPOLAR DISORDER: CASE SERIES

Pfizer Inc.

Michael S. Barnett, M.D., Private Practice, 24677 Burr Road, Lindsay, CA 93247

### **EDUCATIONAL OBJECTIVES:**

At the end of this presentation, the participant should be able to discuss the reported experience with ziprasidone in pediatric patients with bipolar disorder and describe the dose escalation protocol developed for these patients.

#### **SUMMARY:**

Background: Bipolar disorder in children and adolescents entails rapid cycling, irritability, and psychosis. Response rate with lithium is only 50%.

Methods: Four children, ages 7 to 16 years, with bipolar disorder were switched from mood stabilizers, anticonvulsants, or other atypical antipsychotics, often given concomitantly, because of poor response rates, troubling side effects, breakthrough symptoms, or concern over potential toxicity with traditional mood stabilizers. A two-week induction protocol, with gradual escalation to therapeutic doses (60 mg/day for adolescents, 40 mg/day for younger children), was employed to manage potential sedation (evening dosing) or wakefulness (morning dosing).

Results: Within three days of switching to ziprasidone, all four patients experienced resolution of hypomania, hallucinations, aggression, irritability, depression, and insomnia. One 16-year-old required adjunctive lorazepam for anxiety; the others responded to ziprasidone monotherapy. Side effects were mostly mild and transitory. Patients experiencing sedation or wakefulness at dose escalation were maintained at previous 20- or 40-mg dose level until side effects resolved.

Conclusions: In this series, ziprasidone provided an effective alternative to standard psychotropic agents used in pediatric bipolar disorder, and was given uneventfully with other agents. Its fast onset of action and good safety profile are valuable assets in pediatric patients.

The research for this poster was supported by Pfizer Inc.

### **REFERENCES:**

- 1. Geller B, Luby J: Child and adolescent bipolar disorder: a review of the past 10 years. J Am Acad Child Adolesc Psych 1997; 36:1168–1176.
- Keck PE Jr, Versiani M, Potkin S, West SA, Giller EK, for the Ziprasidone in Mania Study Group: Ziprasidone in the treatment of acute bipolar mania: a three-week, placebo-controlled, double-blind, randomized trial. Am J Psychiaty 2003; 160:741-748.

### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 166

Saturday, November 1 9:30 a.m.-11:00 a.m.

### QUETIAPINE FOR ALCOHOL USE AND CRAVING IN BIPOLAR DISORDER

AstraZeneca Pharmaceuticals

E. Sherwood Brown, M.D., Ph.D., Assistant Professor, Department of Psychiatry, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, MC-8849, Dallas, TX 75390-9070; Jason Longoria, B.S.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to better understand the role of pharmacotherapy in dual-diagnosis patients, and discuss the use of quetiapine in patients with bipolar disorder and alcohol misuse.

### **SUMMARY:**

Background: Minimal data are available on the treatment of substance abuse in bipolar disorder patients. In this study, quetiapine was examined in patients with bipolar disorder and alcohol craving.

Methods: Subjects with bipolar disorder and cocaine dependence were enrolled in a 12-week, open-label, add-on study using quetiapine. Of 17 subjects a subset of 14 had alcohol craving at baseline and were used in this analysis. Assessments included the Hamilton Depression Rating (HDRS), Young Mania Rating (YMRS), and Brief Psychiatric Rating (BPRS) Scales. Visual Analogue scales (VAS) were used to measure alcohol craving on the day of assessment (VAS-DAY) and during

the past week (VAS-WEEK). Alcohol use was determined by self-report (total drinks/week and drinking days/week). Changes in outcome measures were examined using a last observation carried forward (LOCF) technique with paired Student's t-tests on all alcohol-craving subjects who completed the baseline evaluation (intent to treat). A Pearson correlation coefficient was used to assess the relationship between changes in psychiatric symptoms scores and alcohol use/craving.

Results: VAS-DAY and drinking days in past week, HDRS, BPRS, YMRS decreased significantly from baseline to exit. No relationship was found between changes in alcohol measures and psychiatric symptoms.

Conclusions: Quetiapine was well tolerated and associated with a reduction in alcohol use in our sample.

The research for this poster was supported by Astra-Zeneca Pharmaceuticals.

### REFERENCES:

- 1. Brown ES, Nejtek VA, Perantie DC: Quetiapine in bipolar disorder and cocaine dependence. Bipolar Disorders 2002; 4:406–411.
- Longoria J, Brown ES, Pera ntie DC, Bobadilla L, Nejtek VA: Quetiapine for alcohol use and craving in bipolar disorder. J Clin Psychopharm, in press.

### **TARGET AUDIENCE:**

Mental health professionals who treat dual-diagnosis patients

Poster 167

Saturday, November 1 9:30 a.m.-11:00 a.m.

### TIAGABINE FOR MAJOR DEPRESSION WITH ANXIETY

Cephalon, Inc.

Linda L. Carpenter, M.D., Assistant Professor of Psychiatry, Brown University, 345 Blackstone Boulevard, Providence, RI 02906; Audrey R. Tyrka, M.D., Ph.D.; Jordan Schecter, B.S.; Ryan Haggerty, B.A.; Lawrence H. Price, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to review the role of GABA in the pathophysiology of mood and anxiety disorders and to appreciate the potential role of tiagabine in treating patients with major depressive disorder with considerable anxiety.

### **SUMMARY:**

Introduction: Gamma-aminobutyric acid (GABA) plays a key role in the pathophysiology and treatment of depression and anxiety. Tiagabine, a selective GABA

reuptake inhibitor (SGRI) that enhances normal GABA tone, was assessed for depression comorbid with significant anxiety.

Methods: In this eight-week, single-center, open-label study, adults with major depressive disorder and significant anxiety received tiagabine 4 mg/day (dosed bid, am/pm) during week 1. Tiagabine was individually titrated for optimum response as tolerated to maximum dose 20 mg/day. Assessments included the Hamilton Rating Scale for Depression (HAMD-D28), the Inventory of Depressive Symptoms, self-report (IDS-SR), and the Hamilton Ratings Scale for Anxiety (HAM-A).

Results: Nineteen patients were enrolled in the study and 15 met criteria for intent-to-treat analyses. Of these, six (40%) discontinued treatment and nine (60%) completed eight weeks of treatment. Tiagabine significantly reduced symptoms of depression as shown by the reduction in mean HAM-D±SEM scores from baseline (31.9±1.6) to endpoint (17.3±3.4; p<0.01). Categorical response rate was 47%. Tiagabine also significantly improved anxiety as evidenced by decreased HAM-A±SEM scores from baseline (22.7±1.3) to endpoint (12.7±2.3; p<0.01). The mean final daily dose of tiagabine was 13mg. The most commonly reported Adverse Events were dizziness and headache.

Conclusion: These results suggest the potential of the SGRI tiagabine in the treatment of depression with anxiety.

This study was funded, in part, by a grant from Cephalon, inc.

### **REFERENCES:**

- 1. Sanacora G, Mason GF, Krystal JH: Impairment of GABAergic transmission in depression: new insights from neuroimaging studies. Crit Rev Neurobiol 2000; 14:23-45.
- 2. Dodrill CB, Amett JL. Shu V, et al: Effects of tiagabine monotherapy on abilities, adjustment and mood. Epilepsia 1998; 39:33–42.

### **TARGET AUDIENCE:**

Psychiatrists/mental health professionals

Poster 168

Saturday, November 1 9:30 a.m.-11:00 a.m.

COMPARISON OF SEXUAL FUNCTIONING IN PATIENTS RECEIVING DULOXETINE OR PAROXETINE: ACUTE-AND LONG-TERM DATA

Eli Lilly and Company

Michael J. Detke, M.D., Employee, Eli Lilly and Company, One Lilly Corporate Center, DC-4025, Indianapo-

lis, IN 46285; Stephen Brannan, M.D.; Pedro L. Delgado, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should recognize that the antidepressant duloxetine has low impact on overall sexual functioning in both acute and long-term treatment phases.

### **SUMMARY:**

*Objectives:* Evaluate sexual functioning following acute- and long-term treatment with duloxetine, paroxetine or placebo.

Method: Acute-phase data obtained from four eightweek, double-blind studies, with patients randomized to duloxetine (20–60 mg BID; n=736), paroxetine 20 mg QD (n=359), or placebo (n=371). Long-term data obtained from extension phases, in which acute treatment responders received duloxetine (40 or 60 mg BID; n=297), paroxetine 20 mg QD (n=140), or placebo (n=129) for 26 additional weeks. Sexual function evaluated using the Arizona Sexual Experience (ASEX) questionnaire (McGahuey, 2000).

Results: In patients without initial sexual dysfunction, no significant difference existed in the rate of acute phase sexual dysfunction onset between duloxetine and paroxetine (p=.492), although both rates were significantly higher than placebo (p=.003 and .002, respectively). Long-term data revealed that sexual function improved (ASEX total score reduced) in 70.9% of duloxetine-treated patients between baseline and endpoint, compared with 57.6% for paroxetine (p=.060). For ASEX Questions 1 and 2, a significantly greater proportion of duloxetine-treated patients reported improvement compared to paroxetine (p=.050 and .037, respectively). No significant differences were found in Questions 3, 4, or 5.

Conclusion: In these studies, the incidence of sexual dysfunction development among patients receiving duloxetine across its dose range (40–120 mg/day) was comparable to paroxetine at the low end of its dose range (20 mg QD). On certain ASEX questions, a significantly higher percentage of duloxetine-treated patients reported improvement in sexual function.

Source of Funding: Eli Lilly and Company

### **REFERENCES:**

- 1. McGahuey CA, Gelenberg AJ, Laukes CA, et al: The Arizona Sexual Experience Scale (ASEX): Reliability and validity. J Sex Marital Therapy 2000; 26:25–40.
- Montgomery SA, Baldwin DS, Riley A: Antidepressant medications: A review of the evidence for druginduced sexual dysfunction. J Affect Disord 2002; 69:119–140.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

Poster 169

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ANTIDEPRESSANT PHARMACOTHERAPY: PRESCRIBING PRACTICE OF PSYCHIATRIC RESIDENTS

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe patterns of antidepressant prescribing, drug tolerability, treatment outcome, and adjunctive/augmentation pharmacotherapy for depressive disorders in a psychiatric resident clinic.

### **SUMMARY:**

*Objective:* To survey antidepressant prescribing practices of psychiatric residents.

Background: Several studies have surveyed antidepressant prescribing practices of general practitioners and psychiatrists, raising concerns regarding both adequacy of medication trials and rationality of drug choice. (1) Little data exist regarding pharmacotherapy by psychiatric residents. Practice habits begun in training will likely persist after graduation; (2) thus, examination of antidepressant use by residents is a logical step in improving treatment by psychiatrists in general.

Methods: Charts of new patients presenting to a psychiatric resident clinic in 2000 were reviewed. Detailed survey was made of medications prescribed to 112 patients diagnosed with major depression, dysthymia, depressive disorder NOS, adjustment disorder with depressed mood, or bipolar disorder with a depressed episode. Drug choice, maximum dose, and termination or adjustment due to adverse effects were noted. Also assigned to each trial was a numerical code for level of response ranging from -1 for worsening symptoms to +3 for remission.

Results: Most-prescribed antidepressants included sertraline (n=38), trazodone (n=29), citalopram (n=27), mirtazapine (n=24), venlafaxine (n=21), and bupropion (n=21). The most frequently used tricyclic was amitriptyline (n=7, mean highest daily dose of 110.7 mg). No use was made of monoamine oxidase inhibitors of electroconvulsive therapy. Best-tolerated agents included

trazodone and sertraline; poorest tolerated were venlafaxine (43% of trials stopped due to side effects) and mirtazapine (33% of trials stopped due to side effects). Best result was observed with sertraline (mean outcome score +0.96). Augmentation with lithium or thyroid hormone was prescribed to three patients.

Conclusion: Depressed patients in this resident clinic were treated primarily with SSRIs and other newer anti-depressants. Little use was made of TCAs, MAOIs, ECT, or augmentation with lithium or thyroid hormone. Further research is needed to determine whether more education should be focused on traditional antidepressant treatment strategies.

#### **REFERENCES:**

- 1. Peterson T, Dorling C, Neault NB, et al: A survey of prescribing practices in the treatment of depression. Prog Neuropsychopharmacol Biol Psychiatry 2002; 26(1):177–87.
- 2. Awad AG, Darby PL, Garfinkel PE: Psychopharmacology training in psychiatric residency programs: the Canadian scene. Canadian J Psychiatry 1991; 36:21–25.

Poster 170

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ADJUNCTIVE ZIPRASIDONE IN TREATMENT-RESISTANT DEPRESSION: PILOT STUDY

Pfizer Inc.

Steven J. Romano, M.D., *Employee, Pfizer Inc.*, 235 East 42nd Street, New York, NY 10017; Jay D. Amsterdam, M.D.; Richard C. Shelton, M.D.; Howard Hassman, D.O.; Murray H. Rosenthal, D.O.; David L. Dunner, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the findings of this pilot study showing the efficacy of the antipsychotic agent ziprasidone when used adjunctively with sertraline in patients with treatment-resistant depression without psychotic features.

### **SUMMARY:**

Objective: To evaluate the efficacy of adjunctive ziprasidone with sertraline in treatment-resistant major depression without psychotic features.

Methods: Patients had a history of failure to respond to at least four weeks of adequate antidepressant therapy with ≥1 non-SSRI (±SSRI) or an SSRI only. Ninety patients entered a six-week open trial of sertraline 100 to 200 mg/day. Nonresponders (≤30% improvement on

MADRS, CGI-S score ≥4, and meeting DSM-IV major depression criteria) were randomized to eight weeks of open treatment with sertraline monotherapy or combination therapy with ziprasidone 40 mg BID or 80 mg BID.

Results: At endpoint, patients with a history of non-SSRI ( $\pm$ SSRI) treatment resistance who received combination therapy demonstrated significantly greater improvement in MADRS, the primary efficacy variable (P=0.02), and in HAM-D 17 (P=0.02), CGI-S (P=0.005) and CGI-I (P=0.02) versus those who received monotherapy. Among patients with a history of SSRI resistance only, improvement with combination therapy did not reach significance versus sertraline monotherapy. No specific safety concerns were observed with combination therapy.

Conclusion: In patients with major depression and a history of non-SSRI (±SSRI) treatment failure, augmentation with ziprasidone was associated with significantly greater improvement than continuation of monotherapy in non-responders to high-dose sertraline.

Funding source: Pfizer Inc.

### **REFERENCES:**

- Thase ME, Rush AJ: Treatment-resistant depression, in Psychopharmacology: The Fourth Generation of Progress. Edited by Bloom FE, Dupfler DJ. New York, Raven Press, 1995, pp 1081–1097.
- Shelton RC, Tollefson GD, Tohen M, Stahl S, Gannon KS, Jacobs TG, Buras WR, Bymaster FP, Zhang W, Spencer KA, Feldman PD, Meltzer HY: A novel augmentation strategy for treating resistant major depression. Am J Psychiatry 2001; 158:131–134.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 171

Saturday, November 1 9:30 a.m.-11:00 a.m.

### RAPID QUETIAPINE ADMINISTRATION IN THE TREATMENT OF ACUTE MANIA

AstraZeneca Pharmaceuticals

David E. Fleck, Ph.D., Department of Psychiatry, University of Cincinnati College of Medicine, 231 Albert Sabin Way, Cincinnati, OH 45267; Eduardo Dunayevich, M.D.; Shannon E. Knepfle, R.N., B.S.N.; K. Sagar Kakani, B.S.; Kimberly B. Corey, M.A.; Stephen M. Strakowski, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize medication treatment options available to help manage the acute manic symptoms of bipolar disorder, particularly when mania occurs in association with psychotic features and depression, or is otherwise treatment resistant.

### **SUMMARY:**

Objective: Case reports suggest that quetiapine may be effective in treating otherwise medication-resistant bipolar disorder, although concerns have been raised about whether it can be rapidly titrated safely, as is often required when treating acute mania. To examine this issue empirically, we conducted a two-week, randomized, rater-blinded study to evaluate the safety and efficacy of rapid titration quetiapine as compared with divalproex sodium in adults (aged 18–64) with acute mania.

Methods: Twenty patients hospitalized for a manic or mixed episode of bipolar I disorder with psychotic features were randomly assigned to receive either rapidly-titrated quetiapine (n=11) or divalproex sodium (n=9), dosed with a loading strategy.

Results: Mean daily divalproex sodium dose was 1500mg. Quetiapine was increased from 150mg on day 1 to >400mg by day 4. Repeated measures ANOVAs with LOCF for non-completers (n=4) indicated a significant and similar reduction in overall and manic symptoms over time in both treatment groups. However, significant decreases in CGI depressive symptoms were only seen in the quetiapine group. Both treatments were well tolerated. The most common differential adverse events were tremor (33% divalproex sodium vs. 0% quetiapine), headache (22% vs. 9%), and sedation (0% vs. 18%).

Conclusion: These preliminary data suggest that rapid quetiapine administration is effective and well tolerated in treating acute mania.

The research presented was supported by AstraZeneca Pharmaceuticals, L.P.

### **REFERENCES:**

- 1. Ghaemi SN, Katzow JJ: The use of quetiapine for treatment-resistant bipolar disorder: a case series. Ann Clin Psychiatry 1999; 11:137–140.
- Dunayevich E, Strakowski SM: Quetiapine for treatment-resistant mania. Am J Psychiatry 2000; 157:1341.

### **TARGET AUDIENCE:**

Prescribing physicians who treat patients with bipolar disorder

Poster 172

Saturday, November 1 9:30 a.m.-11:00 a.m.

### ARIPIPRAZOLE VERSUS HALOPERIDOL FOR MAINTAINED TREATMENT EFFECT IN ACUTE MANIA

Bristol-Myers Squibb Company

Bruce Gaulin, Pharm.D., Medical Science Manager, Neuroscience Medical, Bristol-Myers Squibb Company, 108 Greenwich Road, Hardwick, MA 01037

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the efficacy and safety of aripiprazole for the treatment of acute manic episodes in patients with bipolar I disorder.

### **SUMMARY:**

Objective: To compare aripiprazole-treated patients with haloperidol-treated patients who continued on treatment and maintained response after 12 weeks of treatment of an acute manic episode of bipolar disorder.

Methods: This 12-week, multicenter, double-blind study randomized 347 in patients and outpatients with acute mania or mixed bipolar episodes to either aripiprazole 15 mg/day or haloperidol 10 mg/day. Treatment doses could be titrated in weeks 1–3 to improve response and/or tolerability. The primary efficacy measure was response at Week 12, defined as ≥50% improvement from baseline in Young Mania Rating Scale (Y-MRS) score, and continuation of therapy.

Results: At Week 12, significantly more patients responded and remained on aripiprazole (50%) than on haloperidol (28%; p<0.001). There were marked differences in long-term continuation rates for the two treatments (29.1% of patients remained on haloperidol compared with 50.9% on aripiprazole). The major reason for discontinuation in the haloperidol group was adverse events. Extrapyramidal syndrome was reported in 36% of haloperidol patients versus 9% with aripiprazole. Neither drug was associated with weight gain during the study period.

Conclusion: Aripiprazole treatment led to significantly higher response rates and improved tolerability over haloperidol for maintained treatment effect in acute mania at 12 weeks.

Funding source: Bristol-Myers Squibb Company.

### **REFERENCES:**

- Garfinkel PE, Stancer HC, Persad E: A comparison of haloperidol, lithium carbonate, and their combination in the treatment of mania. J Affect Disord 1980; 2:279–288.
- 2. Keck PE, Mendiwicz J, Calabrese JR, Fawcett J, Suppes T, Vestergaard PA, Carbonell C: A review of randomized controlled clinical trials in acute mania. J Affect Disord 2000; 59(suppl 1):S31–S37.

### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia. 158

Poster 173

Saturday, November 1 9:30 a.m.-11:00 a.m.

### PHARMACOLOGIC TREATMENT OF HOSPITALIZED PATIENTS WITH BIPOLAR DISORDER

Eli Lilly and Company

Barbara Gaylord, M.B.A., Pharmaceutical Research, Premier HealthCare, Inc., 2320 Cascade Point Boulevard, Charlotte, NC 28266; Zhongyun Zhao, Ph.D., Research Scientist, Outcomes Research, Eli Lilly and Company, Lilly Corporate Center, DC-4025, Indianapolis, IN 46285; Peter Feng Wang, M.D., Ph.D.; Benjamin Gutiérrez, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, participants should be able to describe recent prescribing practice and identify factors associated with inpatients with bipolar disorder.

#### **SUMMARY:**

*Objective:* To assess recent pharmacologic treatment patterns for hospitalized bipolar patients.

Methods: Using Premier's Perspective™ database, the largest U.S. hospital drug utilization database, hospitalized bipolar patients discharged between 01/1999 and 09/2001 were identified. Psychotropic treatment patterns and their relationship with diagnoses, illness severity, and patient and institution characteristics were analyzed.

Results: Of 36,339 patients (61% female, mean age 39.7 years), 28.9% were depressed, 21.6% manic, 21.0% mixed, and 28.5% other episodes. Valproate (45.9%) and olanzapine (30.2%) were most commonly prescribed (lithium, 24.9%). On average, patients received 3.87 psychotropics; 77.1% received ≥3 and 32.5% received ≥5. Only 7.2% received monotherapy. Antipsychotic + mood stabilizer combinations were used by 58.0%. Mood stabilizers or antipsychotics alone combined with other classes were used by 23.1% and 12.6% of patients, respectively. Among depressed patients, 79.1% used antidepressants versus 25.5% of manic patients. In depressed patients with psychosis, 74.5% received atypicals versus 42.8% of patients without psychosis. However, 61.5% of depressed patients received anxiolytics and 24.5% received hypnotics. Olanzapine use increased, and risperidone, valproate, and lithium use decreased from 1999-2001. Female, greater severity, and depressed/mixed diagnosis increased pharmacotherapy complexity.

Conclusions: Pharmacotherapy for hospitalized bipolar patients is complex. Combinations of  $\geq 3$  psychotropics were dominant treatment regimens.

Funding source: Eli Lilly and company.

#### **REFERENCES:**

- 1. Frye MA, Ketter TA, Leverich GS, Huggins T, Lantz C, Denicoff KD, Post RM: The increasing use of polypharmacotherapy for refractory mood disorders: 22 years of study. J. Clin Psychiatry 2000; 61:9–15.
- Lim PZ, Tunis, SL, Edell WS, Jensik SE, Tohen M: Medication prescribing patterns for patients with bipolar I disorder in hospital settings: adherence to published practice guidelines. Bipolar Disorders 2001; 3:165-173.

Poster 174

Saturday, November 1 9:30 a.m.-11:00 a.m.

### NATURALISTIC COMPARISON OF KEY SIDE EFFECTS IN THE USE OF CITALOPRAM, ESCITALOPRAM, AND SERTRALINE

Kenneth R. Gersing, M.D., Department of Psychiatry, Duke University Medical Center, Box 308, Durham, NC 27710; Connie W. Moreadith, M.S., Consultant, Department of Psychiatry, Duke University Medical Center, 1013 Mollington Court, Raleigh, NC 27614

### **SUMMARY:**

Introduction: The purpose of this study was to compare the rates of side effects reported by citalogram, escitalogram, and sertraline patients in a naturalistic setting at an academic medical center.

Methods: Data were obtained from the anonymized data repository created by CRIS, the electronic medical record developed at DUMC Department of Psychiatry. Demographic characteristics, diagnosis, and side effects recorded by physicians for patients receiving citalopram (n=1097), escitalopram (n = 324), and sertraline (n=1439) are summarized.

Results: Patients did not differ meaningfully in demographic characteristics including age, race, or gender. Major depression was diagnosed in 53%, 52%, and 46% of citalopram, escitalopram, and sertraline patients, respectively. The anxiety disorder cluster (GAD, PTSD, panic, social phobia, anxiety NOS) was diagnosed in sertraline patients (37%), compared with 44% in citalopram and 43% in escitalopram patients. Similar proportions of patients had side effects attributed to their medication by their physician (11.9% citalopram, 9.6% escitalopram, and 8.9% sertraline).

Conclusion: Overall, side effects were less commonly seen than in clinical trials, but the ranking of individual side effects was consistent with the literature. In general, the tolerability of these three antidepressants in a naturalistic setting was similar.

### **REFERENCES:**

- 1. Einbinder JS, Seully K: Using a clinical data repository to estimate the frequency and costs of adverse drug events. J Am MCO Inform Assoc 2002; 9(6 suppl): 534–53.
- 2. Schubart JL, Binbinder JS: Evaluation of a data warehouse in an academic health sciences center. Int J Med Inf 2000; 60: 319–333.

Poster 175

Saturday, November 1 9:30 a.m.-11:00 a.m.

### CITALOPRAM IN THE TREATMENT OF DYSTHYMIC DISORDER

Forest Laboratories, Inc.

David J. Hellerstein, M.D., Clinical Director, New York State Psychiatric Institute, 1051 Riverside Drive, Unit 101, New York, NY 10032; Sarai Batchelder, Ph.D., Coordinator, Mood Disorders Research, St. Lukes-Roosevelt Hospital, 910 Ninth Avenue, New York, NY 10019; Ruben A. Miozzo, M.D.; David Kreditor, M.D., Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the efficacy and tolerability of citalopram in the treatment of dysthymic disorder, based on the results of this study.

### **SUMMARY:**

Background: Our aim was to provide preliminary data on the tolerability and effectiveness of citalopram for patients with dysthymic disorder (DD).

Method: Twenty-one adult subjects meeting DSM-IV criteria for DD were enrolled in this 12-week, open-label study. Citalopram was initiated at 20 mg/day, and increased to a maximum of 60 mg/day. Response was defined as 50% or greater drop in score on the Hamilton Depression Rating Scale (HDRS) and a CGI-I score of 1 (very much improved) or 2 (much improved).

Results: Of these 21 subjects, 14 (66.7%) were treatment responders. All paired sample t-tests were highly significant, demonstrating significant average improvement on all measures of symptomatology and functioning. Scores on the 24 item HDRS decreased from 23.4±4.7 at baseline to 8.8±6.8 at Week 12 (t(19)=8.1, p<.001). The average final dose was 39 mg/day. One subject dropped out during the trial. Side effects were reported by 15 of 21 subjects (71.4%), most frequently GI symptoms (n=8), dry mouth (n=5), and sexual side effects (n=4).

Conclusion: These findings, similar to those of Dunner et al, suggest the effectiveness and high tolerability of citalopram in treating dysthymic disorder. Doubleblind prospective studies are needed comparing citalo-

pram both to placebo and to other medications, assessing both initial and sustained response to treatment.

Funding Source: Forest Pharmaceuticals, Inc.

### **REFERENCES:**

- 1. Davidson JRT, Connor KM: Citalopram: a therapeutic overview. J Clin Psychiatry 1998; 59(suppl 4):25–31.
- 2. Dunner DL, Hendricksen HE, Bea C, Budech CB, Friedman SD: Dysthymic disorder: treatment with citalopram. Depression & Anxiety 2002; 15:18–22.

### TARGET AUDIENCE:

Psychiatrists (including clinicians and researchers), and non-physician psychotherapists.

Poster 176

Saturday, November 1 9:30 a.m.-11:00 a.m.

### RAPID ANTIMANIC EFFECT OF RISPERIDONE MONOTHERAPY: A PLACEBO-CONTROLLED TRIAL

Johnson and Johnson Pharmaceutica Research and Development

Robert M.A. Hirschfeld, M.D., Professor and Chair, Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch, 301 University Boulevard, Galveston, TX 77555-0188; Paul E. Keck, Jr., M.D., Professor of Psychiatry and Pharmacology, Biological Psychiatry Program, and Vice Chair for Research, University of Cincinnati Medical School, P.O. Box 670559, 231 Bethesda Avenue, Cincinnati, OH 45267-0559; Keith Karcher, M.S.; Michelle Kramer, M.D.; Fred Grossman, D.O.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should be educated on the efficacy and safety of risperidone monotherapy for the treatment of mania in patients with bipolar disorder.

#### **SUMMARY:**

*Objective:* To evaluate the efficacy and tolerability of risperidone monotherapy in acute bipolar mania.

Methods: Patients with a DSM-IV diagnosis of bipolar I disorder, in an acute manic episode, were randomized to a flexible dose of 1–6 mg/day of risperidone (N=134) or placebo (N=125) for three weeks. Outcome measures were the Young Mania Rating Scale (YMRS) and the Clinical Global Impressions severity scale (CGI-S).

*Results:* The mean modal dose of risperidone was 4.1 mg/d. Mean ( $\pm$ SE) baseline YMRS scores were similar in the placebo and risperidone groups (29.2  $\pm$  0.5 and 29.1  $\pm$  0.4, respectively). Improvements in YMRS

scores were significantly greater in the risperidone group than in the placebo group at endpoint ( $-11.1 \pm 0.9$  vs  $-5.0 \pm 0.9$ ; P<0.001). Significant between-group differences in change scores were seen as early as day 3 after start of treatment (risperidone,  $-6.9 \pm 0.6$ ; placebo,  $-4.3 \pm 0.5$ ; P<0.001) and at weeks 1, 2, and 3. Mean improvements in CGI-S scores were significantly greater in the risperidone group than in the placebo group.

Conclusion: Risperidone was efficacious and well tolerated in the treatment of patients with acute bipolar mania, with an onset of action seen as early as day 3.

Supported by Johnson & Johnson Pharmaceutical Research and Development

#### REFERENCES:

- Ghaemi SN, Goodwin FK: Use of atypical antipsychotic agents in bipolar and schizoaffective disorders: review of the empirical literature. J Clin Psychopharmacol 1999; 19:354–61.
- Sachs GS, Grossman F, Ghaemi SN, Okamoto A, Bowden CL: Combination of a mood stabilizer with risperidone or haloperidol for treatment of acute mania: a double-blind, placebo-controlled comparison of efficacy and safety. Am J Psychiatry 2002; 159:1146-54.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 177

Saturday, November 1 9:30 a.m.-11:00 a.m.

### QUETIAPINE MONOTHERAPY FOR ACUTE BIPOLAR MANIA: RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED DATA

AstraZeneca Pharmaceuticals

Martin Jones, Ph.D., Research Scientist, Central Nervous System Research, AstraZeneca Pharmaceuticals, 1800 Concord Pike, P.O. 15437, Wilmington, DE 19850; Karin Huizar

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the efficacy and safety of quetiapine monotherapy for the treatment of mania; Reconsider available treatment options for bipolar disorder based on controlled clinical data from a large cohort of patients.

### **SUMMARY:**

Objective: To evaluate the efficacy and safety of quetiapine monotherapy for the treatment of mania. Methods: A total of 604 patients (bipolar 1 disorder, manic episode) were randomized to 12 weeks, double-blind treatment with quetiapine (flexibly dosed up to 800 mg/d). Outcomes were compared with placebo controls on several efficacy and safety endpoints. Internal controls (lithium and haloperidol) were used to assess assay sensitivity.

Results: 60.8% (127/209) of quetiapine versus 38.9% (77/198) of placebo-treated patients completed the trial. The mean last-week quetiapine dose in responders at Day 21 was 574 mg/d. A statistically significant improvement on the Young Mania Rating Scale was observed with quetiapine by Day 4 (P=0.021) that remained significant through to Day 84 (P<0.001). At the primary endpoint (Day 21) the improvement was -13.58 for quetiapine versus -7.76 for placebo (P<0.001). Adverse events (occurring at  $\geq$ 10% and at least twice the rate of placebo) were somnolence (16.3%) and dry mouth (15.8%) in the quetiapine group. Lithium was associated with tremor (18.4%) and headache (12.2%); and haloperidol with tremor (30.3%), akathisia (33.3%), and extrapyramidal syndrome (35.4%).

Conclusions: Quetiapine monotherapy is effective, fast-acting, and well tolerated in the treatment of mania. Funding Source: AstraZeneca Pharmaceuticals, Inc.

### **REFERENCES:**

- 1. Sajatovic M, Brescan DW, Perez DE, D Giovanni SK, Hattab H, Ray JB, Bingham CR: Quetiapine alone and added to a mood stabilizer for serious mood disorders. J Clin Psychiatry 2001; 62(9):728–732.
- 2. Arvanitis LA, Miller BG: Multiple fixed doses of "Seroquel" (quetiapine) in patients with acute exacerbation of schizophrenia: a comparison with haloperidol and placebo. The Seroquel Trial 13 Study Group. Biol Psychiatry 1997;42(4):233–246.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 178

Saturday, November 1 9:30 a.m.-11:00 a.m.

# TREATING DEPRESSIVE SYMPTOMS IN GERIATRIC COMPLICATED MEDICAL PATIENTS: EXPERIENCE WITH NEW ENTERIC-COATED WEEKLY FLUOXETINE

Eli Lilly and Company

Josef Kolenski, M.D., Department of Psychiatry, Essex County Hospital, 125 Fairview Avenue, Cedar Grove, NJ 07009; John M. Plewes II, M.D.; Michael G. Wilson, M.S.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to demonstrate a working knowledge of the use of convenient weekly dosing of fluoxetine for patients with substantial medical and psychiatric comorbid disorders.

### **SUMMARY:**

Objective: A new formulation of enteric-coated fluoxetine given once weekly has been shown in clinical trials to be well tolerated, effective, and associated with enhanced compliance. However, there have been few literature reports on its use in naturalistic clinical settings.

Method: Fifteen psychiatric inpatients with a confirmed diagnosis of clinical depression or obsessive-compulsive disorder participated. They were stable, in complete remission, and had been compliant on their daily antidepressant for an average of 7.3 years. Two patients began weekly dosing as part of their acute therapy. Data were extracted from patient charts, including a quantitative evaluation of the severity of their depression.

Results: All patients were successfully converted from a single daily dose to a single weekly dose. All patients including the two acute therapy patients are presently in remission. This cohort was monitored and had a cumulative exposure of 15.6 patient years on weekly dosing. A statistically significant average improvement of 3.9 points, with a standard error of 0.89, from beginning to follow-up on weekly dosing on the Geriatric Depression Rating Scale was observed (p-value <0.001). No serious adverse events or hospitalizations were reported for any patient.

Importance: In a subgroup of this population, community hospital patients with substantial medical and psychiatric comorbid disorders, it was observed that weekly doses of enteric-coated fluoxetine were tolerable and effective for long-term continuation treatment of depressive symptoms. The simple, once weekly, higher dosing of fluoxetine offers a convenient alternative for some patients and caregivers during long-term treatment of depression.

Source of Funding: Eli Lilly and Company

### **REFERENCES:**

- 1. Burke WJ, Hendricks S, McArthur D, et al: Weekly fluoxetine controls symptoms of depression [abstract]. Psychopharmacol Bull 1995; 31 (No. 3):524.
- Schimdt ME, Fava M, et al: The efficacy and safety of a new enteric-coated formulation of fluoxetine given once weekly during the continuation treatment of major depressive disorder. J Clin Psychiatry 2000; 61:851–857.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

Poster 179

Saturday, November 1 9:30 a.m.-11:00 a.m.

# THE IMPACT OF AUGMENTATION AND SWITCHING ON THE COST OF TREATING DEPRESSION

**GlaxoSmithKline** 

Anupama A. Krishnan, M.S., Scientist, Health Outcomes, GlaxoSmithKline, 5 Moore Drive, Durham, NC 27709; Li-ling Chang, Ph.D.; Susan L. Hogue, Pharm.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the particant should be able to understand the impact of switching/augmentation on the costs of depression.

#### **SUMMARY:**

Treatment of depression frequently requires the use of combination therapy or necessitates a switch between alternative antidepressants.

Objective: To estimate the impact of switching/augmentation on costs in the treatment period and one year post-treatment period.

Methods: A total of 2,655 patients diagnosed with depression between 6/95–12/96, prescribed an SSRI within 30 days of diagnosis, and enrolled in a national managed care plan were followed up for one year after discontinuation of antidepressant treatment. A treatment algorithm based on prescription refill patterns was used to identify completers, switchers, and augmenters. Log-transformed linear regression controlling for demographics, comorbidities at baseline was the primary method of analysis.

Results: 21% of the patients required use of a second antidepressant during the course of treatment. The adjusted mean one-year post-treatment costs for switchers, augmenters, and completers were \$3,415; \$4,938, and \$2,728, respectively (F=40.29, p=0.000). The costs/month during the treatment period for switchers, augmenters, and completers were \$531, \$592, and \$421, respectively (F=194.37, p=0.000).

Conclusion: Switchers and augmenters incurred higher costs in the treatment and post-treatment period as compared with completers. There is a need for new antidepressants that are effective in a heterogenous population reducing the need to switch/augment antidepressant therapy.

Funding Source: GlaxoSmithKline.

### **REFERENCES:**

- 1. McCombe JB, Nichol MB, Slimmel GL, Sclar DA, Beasley CM, Gross LS. The cost of antidepressant treatment failure: a study of antidepressant use patterns in a Medicaid population. Journal of Clinical Psychiatry 1990; 87(Suppl 6): 80–88.
- 2. Simon GE, VonKorff M, Wagner EH, Barlow W: Patterns of antidepressant use in community practice. General Hospital Psychiatry 1993; 15(6): 399–406.

### **TARGET AUDIENCE:**

Physicians and researchers

Poster 180

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ACUTE RESPONSE TO DIVALPROEX PREDICTOR OF POSITIVE MAINTENANCE OUTCOME

Abbott Laboratories

Michelle A. Collins, Ph.D., Research Scientist, Neuroscience Studies, Abbott Laboratories, 108 Downing Road, Buffalo Grove, IL 60089; Patricia J. Wozniak, Ph.D.; Charles L. Bowden, M.D.; Susan L. McElroy, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the comparative long-term benefits of divalproex and lithium for the maintenance treatment of bipolar I disorder in patients that have responded acutely to these agents.

### SUMMARY:

A paucity of data exists regarding effective longterm maintenance therapies for the treatment of bipolar disorder. One of the few long-term prophylactic trials compared the outcome of bipolar I patients treated in double-blind, randomized fashion with either divalproex, lithium, or placebo over a 12-month period after having responded acutely to one of these three treatment regimens (Bowden et al., 2000). The strength of this study is that patients were not randomized to a particular maintenance therapy based on positive acute response. Analyses reported here indicate that patients that responded to divalprex acutely and were randomized to divalproex continued in the maintenance phase for a significantly longer period of time (mean=209 days) than those patients that responded acutely to lithium and were randomized to lithium (mean=130 days;p=0.019). Significantly more acute lithium responders discontinued prematurely when treated with lithium (80.6%) compared with acute divalproex responders treated with divalproex in the maintenance phase (58.6%;p=0.041).

Additionally, acute divalproex responders were less likely to relapse into mania when treated with divalproex in the maintenance phase (19%) compared with lithium responders treated with lithium (41%;p=0.17).

Supported by Abbott Laboratories.

### **REFERENCES:**

- 1. Bowden CL, et al.: A randomized, placebo-controlled 12-month trial of divalproex and lithium in treatment of outpatients with bipolar I disorder. Arch Gen Psychiatry 2000; 57: 481–489.
- 2. Gyulai L, et al.: Maintenance efficacy of divalproex in the prevention of bipolar depression. J Clin Psychopharmacol 2003, in press.

### **TARGET AUDIENCE:**

Physicians, nurses, and mental health professionals treating patients with bipolar disorder.

Poster 181

Saturday, November 1 9:30 a.m.-11:00 a.m.

### QUETIAPINE ADJUNCTIVE THERAPY FOR ACUTE MANIA ASSOCIATED WITH BIPOLAR DISORDER

AstraZeneca Pharmaceuticals

Jamie A. Mullen, M.D., Associate Medical Director, Central Nervous System Research, AstraZeneca Pharmaceuticals, 1800 Concord Pike, Wilmington, DE 19850; Nancy Devine, M.S.; Dennis Sweitzer

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) assess the tolerability of quetiapine as ad-on therapy for the treatment of bipolar mania; (2) recognize that quetiapine in combination with lithium or divalproex monotherapy has superior efficacy in acute mania over treatment with mood stabilizer alone, and is well tolerated.

### **SUMMARY:**

Objective: Evaluate the efficacy and safety of quetiapine as adjunct therapy to mood stabilizer (MS) (lithium [Li] or divalproex [DVP]) in the treatment of acute mania.

Methods: A total of 191 patients (bipolar 1 disorder, manic episode) were randomized to 21 days, double-blind treatment with quetiapine (QTP) (up to 800 mg/d) or placebo (PBO) and either Li or DVP (target trough serum concentrations 0.7-1.0 mEq/L and 50–100  $\mu$ g/mL, respectively). Primary endpoint: change from baseline YMRS total score at Day 21 (QTP+MS vs PBO+MS: MITT, LOCF).

Results: A total of 56 of 91 patients (61.5%) randomized to QTP+MS and 49 of 100 (49.0%) randomized to PBO+MS completed the study. By final assessment, QTP+MS-treated patients had a significantly greater reduction in YMRS compared with PBO+MS (-13.76 and -9.93; P=0.021). Significantly more quetiapine-treated patients achieved a response ( $\geq$ 50% decrease from baseline YMRS score) at Day 21 (QTP+MS 54.3%: PBO+MS 32.6; P=0.005). The mean last-week quetiapine dose in responders was 580 mg/d. The most common adverse events ( $\geq$ 10%) noted in quetiapine-treated patients included somnolence, dry mouth, asthenia, and postural hypotension. Discontinuation due to adverse events was similar in each group.

Conclusions: Quetiapine as an adjunct to lithium or divalproex has superior efficacy in acute mania over treatment with mood stabilizer alone, and is well tolerated.

### **REFERENCES:**

- American Psychiatric Association. Practice guideline for the treatment of patients with bipolar disorder (revision). Am J Psychiatry 2002; 159(4 Suppl): 1-50.
- Delbello MP, Schwiers ML, Rosenberg HL, Strakowski SM: A double-blind, randomized: placebo-controlled study of quetiapine as adjunctive treatment for adolescent mania. J Am Acad Child Adolesc Psychiatry 2002: 41(1):1216–1223.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 182

Saturday, November 1 9:30 a.m.-11:00 a.m.

### ESCITALOPRAM IS EFFECTIVE AND WELL TOLERATED IN THE TREATMENT OF SEVERE DEPRESSION

Forest Laboratories, Inc.

Daniel Ventura, Ph.D., Medical Director, Forest Research, Inc., Harborside Financial Center, Jersey City, NJ 07311; Philip T. Ninan, M.D.; Jin Wang, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the effect of escitalopram in the treatment of severe depression.

### **SUMMARY:**

Introduction: Escitalopram is the most selective SSRI antidepressant, and has been shown to be more effective than citalopram in the treatment of severe major depression.

Objectives: To determine prospectively the effect of escitalopram in the treatment of severe depression.

Methods: Patients with with severe major depression (mean baseline 24-item HAMD = 30) were randomly assigned to eight weeks of double-blind treatment with 10-20 mg/day escitalopram (N = 147) or placebo (N = 153). Efficacy assessments included MADRS (primary efficacy measure), HAMD, and CGI. Response was prospectively defined in three ways: 50% decrease in MADRS, 50% decrease in HAMD, or CGI-I <= 2.

Results: Overall, 82% of patients completed the trial. For LOCF analyses, escitalopram treatment led to significant (p < 0.05) improvement versus placebo by week 2 in HAMD scores, and by week 4 in MADRS and CGI-I scores; statistically significant improvement compared with placebo was maintained at all subsequent visits. Approximately half of escitalopram-treated patients (49%–52%) at endpoint (LOCF) were responders, according to each definition, and these rates were significantly superior to placebo treatment (30%–38%; p < 0.05). Incidence of adverse events was similar to those reported previously for escitalopram treatment. Discontinuation rates due to adverse events were low (6% escitalopram, 0% placebo).

*Discussion:* Escitalopram treatment is an effective and well tolerated treatment of severe major depression.

Funding Source: Forest Laboratories.

### **REFERENCES:**

- 1. Burke WJ, Gergel I, Bose A: Fixed-dose trial of the single isomer SSRI escitalopram in depressed outpatients. J Clin Psychiatry 2002; 63:331–336.
- Gorman J, Korotzer A, Su G: Efficacy comparison of escitalopram and citalopram in the treatment of major depressive disorder: pooled analysis of placebo-controlled trials CNS Spectrums 2002; 7(Suppl 1):40-44.

### TARGET AUDIENCE:

**Psychiatrists** 

Poster 183

Saturday, November 1 9:30 a.m.-11:00 a.m.

### ZIPRASIDONE AUGMENTATION FOR MAJOR DEPRESSIVE DISORDER REFRACTORY TO SSRIS

Pfizer Inc.

George I. Papakostas, M.D., Assistant in Psychiatry, Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, 15 Parkman Street, WAC-812, Boston, MA 02114; Timothy J. Petersen, Ph.D.; Andrew A. Nierenberg, M.D.; Jessica

L. Murakami, B.A.; Jonathan E. Alpert, M.D., Ph.D.; Poster 184 Jerrold F. Rosenbaum, M.D.; Maurizio Fava, M.D.

Saturday, November 1 9:30 a.m.-11:00 a.m.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the potential role of the atypical antipsychotic agent ziprasidone when used in conjunction with selective serotonin reuptake inhibitors in the treatment of major depressive disorder.

#### **SUMMARY:**

Background: Due to their favorable side-effect profile, atypical antipsychotic agents offer important therapeutic advantages in mood disorders. Ziprasidone, due to its unique receptor-affinity profile, may be particularly useful when used in conjunction with standard antidepressants in the treatment of refractory depression. The purpose of this study is to test this hypothesis in depressed patients who had not responded to an adequate trial of selective serotonin reuptake inhibitors (SSRIs).

Methods: Eighteen patients with major depressive disorder (MDD), who had failed to experience a clinical response to an adequate trial of an SSRI were treated with open-label ziprasidone in addition to their SSRI for six weeks. Clinical response was defined as a 50% or greater decrease in depressive symptoms as measured by the 17-item Hamilton Depression Rating Scale (HAM-D-17) during the course of the trial (baselineendpoint).

Results: An intent-to-treat (ITT) analysis resulted in nine (50.0%) patients classified as responders, five (27.8%) as partial responders, and four (22.2%) as nonresponders. The overall proportion of remitters was 5/18 (27.8%).

Conclusions: These results suggest a possible antidepressant role for ziprasidone when used in conjunction with SSRIs in refractory MDD.

Funding Source: Pfizer Inc.

### **REFERENCES:**

- 1. Buckley PF: Broad therapeutic uses of atypical antipsychotic medications. Biol Psychiatry 2001; 50:912-924.
- 2. Richelson E, Souder T: Binding of antipsychotic drugs to human brain receptors, focus on newer generation compounds. Life Science 2000; 24; 68(1):29-39.

### **TARGET AUDIENCE:**

**Psychiatrists** 

### PRELIMINARY RESULTS FROM THE RISPERIDONE AUGMENTATION IN RESISTANT DEPRESSION TRIAL

Janssen Pharmaceutica

Mark Rapaport, M.D., Chair, Department of Psychiatry, Cedars-Sinai Medical Center, 8730 Alden Drive, Thalians Building, Room C-30, Los Angeles, CA 90048; Carla M. Canuso, M.D., Associate Director, Central Nervous System Clinical Development, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, NJ 08560; Amy Loescher, B.S.; Robert A. Lasser, M.D.; Georges Gharabawi, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to gain insight into both the classification and treatment of TRD.

### **SUMMARY:**

Background: Increasingly, atypical antipsychotics are seen as safe and efficacious augmenting agents in depression, supporting the development of the large, international, multicenter ARISe-RD trial.

Methods: In ARISe-RD, subjects historically failing ≥1 antidepressant plus a prospective, four- to six- week citalopram course, receive open-label risperidone augmentation for four weeks (0.25-2 mg/day), followed by a placebo-controlled relapse prevention phase for risperidone-remitters.

Results: Interim data include 41 enrolled subjects. The citalogram non-response rate was 80%. Subjects receiving risperidone augmentation (n=33) had significant improvement in HAM-D and MADRS-total scores  $(21.8\pm5.7 \text{ to } 11.0\pm7.3, 30.2\pm7.2 \text{ to } 16.0\pm10.4, \text{ respec-}$ tively; P<0.001), with mean percentage reductions of 49.9% on the HAM-D and 47% on the MADRS (P<0.001). Significant improvement was noted by Day 4 of augmentation (MADRS-total:  $-3.6\pm7.2$ , P<0.01). Improvements in global impression ratings were also present (CGI-Severity=moderate or worse: 80.0% at baseline; 31.0% at endpoint). Prospectively-defined responses of>20%, >30%, >40%, or >50% in MADRS were achieved by 81.8%, 63.6%, 54.5%, and 48.5% of patients, respectively. Mean change reductions in movement disorder ratings were present (SAS -0.15; p=0.26, BAS -0.03; p=0.87).

Conclusion: Initial results from this large-scale examination in resistant depression suggest augmentation with low-dose risperidone provides rapid, robust effects in improving depressive symptoms without evidence for movement disorders liability.

Supported by Janssen Pharmaceutica Products, L.P.

### **REFERENCES:**

- 1. Ostroff RB, Nelson JC: Risperidone augmentation of selective serotonin reuptake inhibitors in major depression. J Clin Psychiatry 1999; 60(4):256–9.
- 2. Shelton RC: Mood-stabilizing drugs in depression. J Clin Psychiatry 1999; 60 Suppl 5:37–40.

### TARGET AUDIENCE:

**Psychiatrists** 

Poster 185

Saturday, November 1 9:30 a.m.-11:00 a.m.

# CHANGES IN HEALTH CARE UTILIZATION IN PATIENTS WITH MAJOR DEPRESSION AND A COMORBID ANXIETY DISORDER AFTER TREATMENT WITH SERTRALINE, FLUOXETINE, AND PAROXETINE

James M. Russell, M.D., Director, Clinical Psychopharmacology Program, Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch, Behavioral Health Research Center, 301 University Boulevard, Mail Stop 0197, Galveston, TX 77555; David Harrison, M.A.; Roma Tretiak, M.H.A.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that comorbid anxiety symptoms associated with depression may affect health care utilization patterns and have implications regarding treatment choices.

### **SUMMARY:**

Background: Previous studies have shown a decrease in emergency room utilization in patients with panic disorder treated with sertraline, but not with fluoxetine or paroxetine. The objective of this study is to evaluate inpatient, outpatient, and emergency room utilization in patients with major depression and a comorbid anxiety disorder after they have initiated treatment with sertraline, fluoxetine, or paroxetine.

Methods: Claims records from a national medical claims database (MEDSTAT MarketScan®) of patients with depression and a comorbid anxiety disorder who began treatment with an SSRI from 1996 to 1999, following an antidepressant medication-free period of at least six months, were utilized. Inpatient, outpatient, and emergency room (ER) utilization during the six-month pre-study and subsequent six-month treatment period were compared using multivariate GLM methods.

Results: Five hundred and sixty-five patients treated with sertraline (n=181), fluoxetine (n=169), or paroxetine (n=215) met study criteria. There were no significant

differences between the groups in demographic characteristics, pre-period health care utilization; or number of comorbid medical conditions. Fluoxetine treated patients were more likely to be diagnosed with social phobia (p  $\cdot$  0.005). Non-significant increases in anxiety or depression-related inpatient utilization and significant increases in outpatient utilization were seen in all groups. Depression or anxiety-related ER visits not resulting in a hospital admission decreased from seven to three visits for sertraline-treated patients, increased from three to five visits for fluoxetine-treated patients (p=NS), and increased significantly from one to ten visits for paroxetine-treated patients (p  $\cdot$  0.05).

Conclusion: The results of this study are consistent with previous studies. Choice of SSRI in patients with major depression and a comorbid anxiety disorder may affect ER utilization.

### **REFERENCES:**

- 1. Roy-Byrne PP, Clary CM, Micell RJ, Colucci SV, Xu Yikang, Grudzinski AN: The effect of SSRI treatment of panic disorder on emergency room and laboratory resource utilization. J Clin Psychol 2001.
- Sullivan S, Roy-Byrne P, Okamoto L, Grudzinski AN: Comparison of Emergency Room and Inpatient Care Resource Utilization Among Patients Treated with Selective Serotonin Reuptake Inhibitors (SSRIs) for Panic Disorder Poster presented at APA 2001 Annual Meeting. New Orleans, La.

Poster 186

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ARIPIPRAZOLE VERSUS PLACEBO WITH ACUTE MANIA: RESULTS FROM A SECOND STUDY

Bristol-Myers Squibb Company

Gary S. Sachs, M.D., Director and Associate Professor, Department of Psychiatry, Harvard Medical School, Massachusetts General Hospital, 15 Parkman Street, WAC-812, Boston, MA 02114

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the efficacy and safety of aripiprazole in bipolar I patients experiencing an acute mania or mixed episode.

### **SUMMARY:**

Objective: To compare the efficacy and safety of aripiprazole with placebo in bipolar I patients experiencing an acute manic or mixed episode. Aripiprazole is a newly developed antipsychotic with a unique mechanism of action: potent partial agonist at D<sub>2</sub> receptors with partial

agonism at  $5HT_{1A}$  receptors, and antagonism at  $5HT_{2A}$  receptors.

Methods: This Phase III, multicenter, double-blind, placebo-controlled study randomized 272 bipolar I patients with acute mania to aripiprazole 30 mg (which could be reduced to 15 mg for tolerability) or placebo for three weeks. Patients remained hospitalized for a minimum of two weeks (three weeks if they did not meet pre-specified CGI-BP criteria) of the three-week, double-blind treatment phase. The primary efficacy outcome measure was the mean change from baseline to Week 3 (LOCF data set) in Young Mania Rating Scale (Y-MRS) total score. Additionally, response was defined as a decrease of ≥50% in Y-MRS total score from baseline.

Results: Aripiprazole produced statistically significant improvements in Y-MRS total score at endpoint compared with placebo ( $-12.5 \text{ vs} - 7.2, p \le 0.01$ ). A statistically significant difference from placebo on the Y-MRS total score was observed by Day 4. In addition, the response rate was significantly higher in the aripiprazole group compared with the placebo group (53% vs 32%, p≤0.01). Aripiprazole treatment also showed significant improvement vs placebo on the CGI-BP Severity of Illness (mania) score (p=0.009), mean CGI-BP Change from Preceding Phase (mania) score (p=0.001) and in the PANSS Hostility sub-scale score (p=0.002) at Week 3. The overall discontinuation rate due to adverse events was similar between the aripiprazole and placebo groups. Furthermore, there were no significant changes in body weight compared with placebo.

Conclusions: This is the second double-blind, placebo-controlled study that demonstrates the efficacy and safety of aripiprazole in the treatment of acute mania in patients with bipolar I disorder.

Funding Source: Bristol-Myers Squibb Company.

### **REFERENCES:**

- 1. Keck PE, McElroy SL: Redefining mood stabilization. J Affect Disord. 2003; 73:163–169.
- Strakowski SM, DelBello MP, Adler CM: Comparative efficacy and tolerability of drug treatments for bipolar disorder. CNS Drugs 2001; 15:701–718.

### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 187

Saturday, November 1 9:30 a.m.-11:00 a.m.

# OLANZAPINE VERSUS LITHIUM IN RELAPSE PREVENTION IN BIPOLAR DISORDER

Eli Lilly and Company

Susan Santos, M.S., Clinical Research Associate, Neuroscience Medical Studies, Eli Lilly and Company, One Fenno Way, Nahant, MA 01908; Mauricio Tohen, M.D., Ph.D.; Andreas Marneros, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the attendee should be able to determine the relative strengths and weaknesses of olanzapine for relapse prevention in bipolar I disorder.

### **SUMMARY:**

*Purpose:* Compare olanzapine and lithium in relapse prevention of bipolar disorder.

Methods: A total of 543 patients with bipolar I disorder, manic/mixed type, received open-label combination therapy of olanzapine and lithium for six to 12 weeks. Of these, 431 patients met symptomatic remission criteria (YMRS ≤12 and HAMD-21 ≤8) and were randomized to monotherapy with olanzapine (N=217) (5-20 mg/d) or lithium (N=214) (serum level: 6-1.2 mEq/L) for 52 weeks of double-blind treatment.

Results: Significantly more olanzapine-treated (46.5%) than lithium-treated patients (32.7%; P=.004)completed the 52-week trial. Relapse to an affective episode (YMRS ≥15 or HAMD-21 ≥15) occurred in 30.0% of olanzapine-treated and 38.8% of lithiumtreated patients (P=.055). Olanzapine-treated patients had a significantly lower rate of relapsing into a manic episode than lithium-treated patients (14.3% vs 28.0%; P<.001), and both groups were similarly effective in preventing relapse into a depressive episode (16.1% vs 15.4%; P=.895). Weight gain during the open-label phase was 2.7 kg and in the double-blind period was greater in the olanzapine group compared with the lithium group (1.8 kg vs -1.4 kg; P < .001).

Conclusion: Olanzapine and lithium appear to effectively and safely prolong remission in bipolar disorder, and olanzapine was more effective than lithium in preventing relapse into mania.

Source of Funding: Eli Lilly and Company

### **REFERENCES:**

- Bowden CL, Brugger AM, Swann AC, Calabrese JR, Janicak PG, Petty F, Dilsaver SC, Davis JM, Rush AJ, Small JG, Garza-Trevino ES, Risch SC, Goodnick PJ, Morris DD: Efficacy of divalproex vs lithium and placebo in the treatment of mania. JAMA 1994; 271:918–924.
- Judd LL, Akiskal HS, Schettler PJ, Endicott J, Maser J, Solomon DA, Leon AC, Rice JA, Keller MB: The long-term natural history of the weekly symptomatic status of bipolar I disorder. Archives of Gen Psych 2002; 59:530-537.

### **TARGET AUDIENCE:**

Clinicians treating patients with bipolar disorder.

Poster 188

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ZIPRASIDONE IN MANIA: A DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL *Pfizer Inc.*

Scott D. Segal, M.D., Segal Institute for Clinical Research, 1065 N.E. 125th Street, Suite 417, North Miami, FL 33161; Robert A. Riesenberg, M.D.; Kathleen Ice; Patricia English, Dr.P.H.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to discuss the reported findings of a 21-day study in which ziprasidone was associated with rapid, safe symptom improvement in patients with bipolar disease suffering a manic episode.

### **SUMMARY:**

*Purpose:* To compare efficacy and tolerability of ziprasidone versus placebo in patients with mania.

Methods: Patients with bipolar I disorder were randomly assigned to ziprasidone (80-160 mg/day) or placebo (2:1 ratio) for 21 days. Primary efficacy measure was mean change from baseline to endpoint in Mania Rating Scale (MRS); secondary measures included mean changes in CGI-Severity and CGI-Improvement.

Results: 137 patients treated with ziprasidone and 65 with placebo were evaluable for efficacy. Mean baseline-to-endpoint change in MRS score was -ms11.16 with ziprasidone and -5.78 with placebo (P=0.001). Mean change in CGI-S was -1.06 with ziprasidone and -0.41 with placebo (P<0.001); mean change in CGI-I was 2.89 and 3.60 (P<0.001), respectively. Significant improvements versus placebo were noted from Day 2 in MRS and CGI-S, and from Day 4 in CGI-I; improvements were maintained for study's duration. Treatment-emergent AEs common with ziprasidone were somnolence, headache, EPS, and dizziness; all were mild to moderate.

Conclusions: Ziprasidone demonstrated superiority to placebo in improving mania and global illness severity in patients with bipolar disorder. Rapid improvement in mania (within two days) was observed with ziprasidone but not with placebo. Ziprasidone was well tolerated, with few AE-related doscontinuations.

Funding Source: Pfizer Inc.

### **REFERENCES:**

- Keck PE, Versiani M, Potkin S, West S, Giller E, Ice K, and the Ziprasidone in Mania Study Group: Ziprasidone in the treatment of acute bipolar mania: a three-week, placebo-controlled, double-blind, randomized trial. Am J Psychiatry 2000; 160:741–748.
- 2. Murrwy S, Sui CO, Romano SJ: Optimal dosing of ziprasidone: analysis of clinical trial data. Presented

at the 156th annual meeting of the American Psychiatric Association, May 17–22, 2003; San Francisco, California.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 189

Saturday, November 1 9:30 a.m.-11:00 a.m.

ANTIDEPRESSANT TREATMENT
PATTERNS AMONG U.S. CHILDREN AND
ADOLESCENTS DIAGNOSED WITH
DEPRESSION BETWEEN 1989–2000:
COMPARISON WITH GUIDELINES FROM
THE AMERICAN ACADEMY OF CHILD
AND ADOLESCENT PSYCHIATRY

Tracy L. Skaer, Pharm.D., Professor of Health Policy and Administration, Department of Pharmacology, Washington State University, P.O. Box 646510, Pullman, WA 99164-6510; David A. Sclar, Ph.D.; Linda M. Robison, M.S.P.H.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) recognize the upward trend in the diagnosis of depression among children and adolescents between 1989–2000, (2) recognize the upward trend in the prescribing of antidepressant pharmacotherapy for the treatment of depression among children and adolescents between 1989–2000, (3) recognize changes in the type of antidepressants being prescribed.

### **SUMMARY:**

Purpose: To use a single national data source to discern trends in the prevalence of office-based visits resulting in a diagnosis of depression among children and adolescents age 5–18 years, trends in the prescribing of antidepressants for its treatment, and comparison with AACAP guidelines.

Methods: Data from the U.S. National Ambulatory Medical Care Survey were used for the analysis. The number and rate of office-based physician visits resulting in a diagnosis of depression (ICD-9-CM codes 296.2-296.36; 300.4; or 311), and the prescribing of antidepressants (by type) were discerned for the years 1989–2000. Trend analyses were conducted using three four-year time intervals: 1989–92; 1993–96; 1997–00.

Results: Over the time frame examined, the U.S. population-adjusted rate of office visits documenting a diagnosis of depression more than doubled, from 12.1 per 1,000 children and adolescents age 5–18, to 29.4 per 1,000. The percent of patients prescribed an antidepressant increased from 39.6% to 59.5%; receipt of an SSRI

increased from 16.0% to 38.9%; and receipt of a TCA declined from 21.5% to 3.1%.

Conclusion: Data reveal significant growth in the rate of children and adolescents diagnosed with depression in the U.S., and concordance with AACAP guidelines.

### **REFERENCES:**

- Skaer TL, Robison LM, Sclar DA, Galin RS: Treatment of depressive illness among children and adolescents in the United States. Curr Ther Res 2000; 61(10):692-705.
- Practice parameters for the assessment and treatment of children and adolescents with depressive disorders. AACAP. J Am Acad Child Adolesc Psychiatry 1998; 37(10 Suppl):63S-83S.

### **TARGET AUDIENCE:**

Child and adolescent psychiatrists; mental health policy stakeholders.

Poster 190

Saturday, November 1 9:30 a.m.-11:00 a.m.

AN OPEN-LABEL PROSPECTIVE TRIAL EVALUATING THE THERAPEUTIC EFFICACY, SAFETY, AND TOLERABILITY OF ONCE-DAILY DIVALPROEX EXTENDED RELEASE IN PATIENTS WITH CHRONIC AFFECTIVE AND PSYCHOTIC DISORDERS WHO ARE STABLE ON MULTIPLE DAILY DOSES OF DELAYED RELEASE DIVALPROEX Abbott Laboratories

Steven Clark Stoner, Pharm.D., Clinical Associate Professor of Pharmacy, University of Missouri-Kansas City, Schools of Pharmacy and Medicine, Northwest Missouri Psychiatric Rehabilitation Center, 3505 Frederick Avenue, St. Joseph, MO 64506; Beth M. Dubisar, Pharm.D., Assistant Professor of Pharmacy Practice, University of Missouri-Kansas City, Schools of Pharmacy and Medicine, Northwest Missouri Psychiatric Rehabilitation Center, 709 Mall Boulevard, Savanna, GA 31406

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate an ability to devise a plan to safely convert mood disorder-treated patients from delayed-release to extended-release divalproex. Additionally, the participant should gain an understanding and awareness of important outcome variables.

### **SUMMARY:**

The primary objectives of this four-week study were to evaluate the efficacy, safety, and tolerability of extended-release divalproex.

Psychiatrically stable patients were eligible if experiencing adverse health events related to delayed-release divalproex. Efficacy was monitored with the BPRS and safety/tolerability was monitored with the SAFTEE.

Ten subjects [mean age = 39.4 years] with a mood or thought disorder, eight with substance abuse histories, were enrolled. Frequently reported adverse health events prior to conversion were sedation, stomach upset, and tremor. At study conclusion no differences were seen in total BPRS score or individual BPRS items, though a trend was identified in decreased somatic complaints (p = 0.057). No significant differences were found in valproic acid serum concentrations between equivalent dosage adjusted delayed and extended-release divalproex (90.5 mg/L vs. 95.5 mg/L [p = 0.493]). At study conclusion, significant decreases in LDL (p = 0.010) and potassium (p = 0.043) were identified. Statistical differences were seen for decreased complaints of sedation (p = 0.022), stomach/abdominal discomfort (p =0.045), and tremor (p = 0.004).

Patients receiving delayed-release divalproex for mood or thought disorders can successfully be converted to extended-release divalproex and maintain psychiatric stability.

Funding: Abbott Laboratories.

### **REFERENCES:**

- 1. Dutta S, Zhang Y, Selness DS, et al: Comparison of the bioavailability of unequal doses of divalproex sodium extended-release formulation relative to the delayed-release formulation in healthy volunteers. Epilepsy Research 2002; 49:1–10.
- Depakote ER<sup>®</sup>Tablets Product Information, 2003, Divalproex Sodium Extended-Release Tablets, Abbott Laboratories, Inc., North Chicago, IL 60064, USA. Physician's Desk Reference. 57<sup>th</sup> Ed. Medical Economics Company, Inc., Montvale NJ, Supplement A.

### TARGET AUDIENCE:

Psychiatrists, clinical pharmacists, psychiatric nurses

Poster 191

Saturday, November 1 9:30 a.m.-11:00 a.m.

# DOES THE ALLEVIATION OF PAINFUL PHYSICAL SYMPTOMS ASSOCIATED WITH DEPRESSION LEAD TO HIGHER REMISSION RATES?

Eli Lilly and Company

Patrick Toalson, R.Ph., Medical Liaison, Neuroscience Medical Studies, Eli Lilly and Company, 6116 Rosemont

Court, Birmingham, AL 352421; Maurizio Fava, M.D.; Poster 192 Madelaine M. Wohlreich, M.D.

ter 192 Satur

Saturday, November 1 9:30 a.m.-11:00 a.m.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be aware that depressed patients treated with duloxetine whose painful physical symptoms resolved demonstrated higher rates of remission.

#### **SUMMARY:**

Background: Depression is a chronic disease consisting of emotional/psychological and physical symptoms. Treating both symptoms may lead to a higher percentage of patients achieving remission.

*Methods:* Efficacy data were pooled from two nineweek, double-blind clinical trials of duloxetine 60 mg QD (N=244) and placebo (N=251). Efficacy measures included the HAMD<sub>17</sub> total score, HAMD<sub>17</sub> Maier subfactor, CGI-S, PGI-I, and Visual Analog Scales (VAS), which assessed various types of pain and overall pain reported (VASOVER).

Results: Higher endpoint scores for overall pain were associated with lower estimated probabilities of remission both before and after accounting for core emotional depressive symptoms (Maier subscale) (p≤.0001). The Week 9 means for VASOVER were 13.0 for remitters (last observed value for HAMD<sub>17</sub> ≤ 7) compared with 22.7 for non-remitters (p<.001), respectively. The remission rate for pain responders (improvement in VASOVER from baseline to last observation ≥50%) was twice the rate of pain non-responders (36.2% vs. 17.8%, p<.0001). Lower endpoint pain scores were associated with favorable outcomes on the CGI-S and PGI-I. Furthermore, early favorable responses in VASOVER were associated with favorable endpoint outcomes.

Conclusion: These results suggest that depressed patients treated with duloxetine 60 mg QD whose painful physical symptoms resolved demonstrated higher rates of remission.

Source of Funding: Eli Lilly and Company.

### **REFERENCES:**

- Fava M: Somatic symptoms, depression, and antidepressant treatment. J Clin Psychiatry 2002; 63:305–307.
- 2. Kroenke K, Price RK: Symptoms in the community. Prevalence, classification, and psychiatric comorbidity. Arch Intern Med 1993; 153:2474–2480.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

### DULOXETINE FOR THE LONG-TERM TREATMENT OF MAJOR DEPRESSIVE DISORDER IN PATIENTS IN MEXICO

Eli Lilly and Company

Patrick Toalson, R.Ph., Medical Liaison, Neuroscience Medical Studies, Eli Lilly and Company, 6116 Rosemont Court, Birmingham, AL 35242; Madelaine M. Wohlreich, M.D.; Pedro L. Delgado, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should recognize that duloxetine was an effective, safe, and well tolerated medication for the long-term treatment of depression in Hispanic patients.

### **SUMMARY:**

Background: The long-term safety and efficacy of duloxetine, a selective and balanced serotonin and nor-epinephrine reuptake inhibitor, was evaluated in the treatment of depressed Hispanic patients.

Methods: A subset of depressed Hispanic patients living in Mexico (N=242) was obtained from an open-label, single-arm, multinational clinical trial of duloxe-tine (age  $\geq$  18, N = 1282). Patients received duloxetine 80 to 120 mg day (administered 40 to 60 mg BID) for up to 52 weeks.

Results: Mean changes in all efficacy outcomes at all measurement times showed highly significant (p<.001) improvements. The observed case remission rates (HAMD<sub>17</sub>  $\leq$  7) at Weeks 6, 28, and 52 were 67.4%, 87.5%, and 91.4%, respectively. Adverse events most frequently leading to discontinuation were somnolence (2.9%) and vomiting (1.2%). The most common adverse events were somnolence and nausea. No clinically meaningful changes were observed for pulse, blood pressure, electrocardiograms, and laboratory analytes.

Conclusion: In this study, duloxetine was shown to be an effective, safe, and well-tolerated long-term treatment for depression in Hispanic patients.

Source of Funding: Eli Lilly and Company

### **REFERENCES:**

- 1. Kirmayer LJ: Cultural variations in the clinical presentation of depression and anxiety: implications for the diagnosis and treatment. J Clin Psychiatry 2002; 62(suppl 13):22–28.
- 2. Marcos LR, Cancro R: Pharmacotherapy of Hispanic depressed patients: clinical observations. Am J Psychother 1982; 36:505–512.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

170

Poster 193

Saturday, November 1 9:30 a.m.-11:00 a.m.

### TIAGABINE AS AUGMENTATION THERAPY FOR ANXIETY

Cephalon, Inc.

Thomas L. Schwartz, M.D., Assistant Professor of Psychiatry, State University of New York Upstate Medical Center, 713 Harrison Street, Syracuse, NY 13210; Nouman Azhar, M.D., Clinical Assistant Instructor, Department of Psychiatry, State University of New York, Upstate Medical Center, 713 Harrison Street, Syracuse, NY 13210; Juhi Hussein, M.D.; Nikhil D. Nihalani, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session participants will understand the novel use of tiagabine in treating anxiety.

### **SUMMARY:**

Objective: Gamma-aminobutyric acid (GABA), the main CNS inhibitory neurotransmitter, is involved in anxiety and sleep. Tiagabine is a selective GABA reuptake inhibitor (SGRI) that enhances normal GABA tone and has been shown to reduce anxiety and improve sleep. This study examined tiagabine as augmentation therapy for anxiety disorders.

Methods: This eight-week, open-label study evaluated 17 patients with anxiety who were stable on current medications (75% of patients were taking SSRIs) and still symptomatic. Tiagabine was initiated at 4 mg/day and then adjusted for optimum response. Assessments included the Hamilton Rating Scale for Anxiety (HAM-A), Beck Anxiety Inventory (BAI), and Pittsburgh Sleep Quality Index (PSQI).

Results: The mean HAM-A ± SEM score was significantly reduced from 18.24 (mean average) at baseline to 7.82 at endpoint (P<0.0001). Furthermore, the mean HAM-A psychic anxiety subscale score was reduced significantly from 11.59 at baseline to 5.94 at endpoint (P<0.0001); the mean HAM-A somatic anxiety subscale score decreased significantly from 6.65 at baseline to 1.88 at endpoint (P<0.0001). Moreover, following treatment with tiagabine, seven patients (59%) achieved remission (HAM-A≤7) at endpoint. Tiagabine also significantly improved sleep quality, as shown by a decrease in mean PSQI score from  $10.6 \pm 1.2$  at baseline to 5.9  $\pm$  0.84 at endpoint (P<0.0001). The mean dose for tiagabine was approximately 10 mg/day. The most commonly reported adverse events were dizziness (n=8), somnolence (n=4).

Conclusions: These findings support the role of the SGRI tiagabine as augmentation therapy in patients with anxiety that remain symptomatic or are unsatisfactorily treated with current medications.

Source of funding: Cephalen, Inc.

### **REFERENCES:**

- 1. Schwartz TL: The use of tiagabine augmentation for the treatment resistant anxiety disorder: a case series psychopharmacology Bulletin 2002; 36(52):53-57.
- 2. Schacter SC: Pharmacology and clinical experience with Tiagabine. Expert Opinion on Pharmacotherapy 2001;2(1): 179–187.

### **TARGET AUDIENCE:**

**Psychiatrist** 

Poster 194

Saturday, November 1 9:30 a.m.-11:00 a.m.

### INADEQUATE ANTIDEPRESSANT USE PREDICTS PREMATURE STATIN DISCONTINUATION

Wyeth Pharmaceuticals

Jeffrey B. Weilburg, M.D., Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114; Kathleen M. O'Leary, B.A., Data Analyst, Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, 50 Staniford Street, Fourth Floor, Boston, MA 02114; Richard W. Grant, M.D.; Randall S. Stafford, M.D., Ph.D.; James B. Meigs, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the potential impact of antidepressant treatment adequacy on adherence to statin medications.

### **SUMMARY:**

Background: Patients with depression have lower rates of adherence to treatment regimens for comorbid medical disorders than do patients without depression.

Objective: We hypothesized that patients receiving adequate antidepressant treatment are more likely to adhere to treatment regimens for comorbid chronic medical disorders than are patients receiving inadequate treatment.

Methods: Persistence (a measure of adherence) with statin therapy was assessed using pharmacy claims (7/1/99–6/30/02) from patients in an HMO and cared for by physicians affiliated with Partners Community Health Care. Patients who received both antidepressants and statins were considered. Antidepressant trials were defined as inadequate if they were below minimum guideline standards for dose and duration. Persistence with statin therapy at six-months and 12-months after statin initiation for patients receiving adequate vs. inadequate antidepressant treatment was determined.

Results: Persistence with statin treatment for > 6 months was greater among patients with adequate vs. inadequate antidepressant treatment (86% vs. 78%, N = 893, p = .002). Persistence for > 12 months was also greater among adequately vs. inadequately treated patients (80% vs. 70%, N=773, p = .001).

Conclusions: Failure to meet minimum guideline standards for antidepressant use (i.e. inadequate antidepressant treatment) is associated with decreased adherence with statin treatment. Antidepressant treatment adequacy may be a factor that influences patient adherence to treatment for other medical disorders and should be further evaluated.

Funding Source: Wyeth Pharmaceuticals

### **REFERENCES:**

- Wang PS, Bohn RL, Knight E, Glynn RJ, Mogun H, Avorn J: Noncompliance with antihypertensive medications: the impact of depressive symptoms and psychosocial factors. J Gen Intern Med 2002; 17(7):504-511.
- Benner JS, Glynn RJ, Mogun H, Neumann PJ, Weinstein MC, Avorn J: Long-term persistence in use of statin therapy in elderly patients. JAMA 2002; 288(4):455-461.

### TARGET AUDIENCE

Psychiatrists and clinicians

Poster 195

Saturday, November 1 9:30 a.m.-11:00 a.m.

# ZIPRASIDONE IN ADJUNCTIVE TREATMENT OF ACUTE BIPOLAR MANIA

Pfizer Inc.

Richard H. Weisler, M.D., Department of Psychiatry, University of North Carolina, 700 Spring Forest Road, Suite 125, Raleigh, NC 27609; Judith Dunn, Ph.D.; Patricia English, Dr.P.H.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported findings regarding the concomitant use of ziprasidone and lithium in patients with bipolar disease experiencing a manic episode.

### **SUMMARY:**

*Purpose:* We evaluated efficacy and tolerability of ziprasidone versus placebo in patients with bipolar mania receiving lithium.

Methods: This 21-day, double-blind trial randomized inpatients with bipolar I disorder and MRS≥14 to ziprasidone (80–160 mg/day) or placebo. Lithium dosage was

adjusted to maintain serum levels of 0.8–1.2 mEq/L. Primary efficacy variables were MRS and CGI-S. Secondary variables were MRS Manic Syndrome and Behavior and Ideation scales, HDS, CGI-I, and PANSS Total, Positive, and Negative subscales. Between-group differences in change rates and LS mean change were compared using ANCOVA.

Results: Day 4 change rates were significantly greater with ziprasidone (n=102) than with placebo (n=103) for MRS, CGI-S, CGI-I, Behavior and Ideation, and HDS. Day 14 change rates for all efficacy variables were comparable; however, ziprasidone patients demonstrated significantly greater LS mean changes in PANSS Total, Positive, and Negative subscales at Days 14 and 21. Ziprasidone plus lithium was well tolerated; discontinuations for AEs were ≤5% in both groups.

Conclusions: Patients given ziprasidone plus lithium exhibited significantly greater change rates in mania and related psychopathology at Day 4 than placebo recipients, suggesting that the combination may effect earlier clinical improvement than lithium alone. Ziprasidone was generally well tolerated.

Funding Source: Pfizer Inc.

### **REFERENCES:**

- 1. Keck PE, Versiani M, Potkin S, West S, Giller E, Ice K, and the Ziprasidone in Mania Study Group: Ziprasidone in the treatment of acute bipolar mania: a three-week, placebo-controlled, double-blind, randomized trial. Am J Psychiatry 2000; 160:741–748.
- Murray S, Siu CO, Romano SJ: Optimal dosing of ziprasidone: analysis of clinical trial data. Presented at the 156<sup>th</sup> annual meeting of the American Psychiatric Association, May 17–22, 2003; San Francisco, California.

### TARGET AUDIENCE:

Psychiatrists and psychiatric nurses

Poster 196

Saturday, November 1 9:30 a.m.-11:00 a.m.

### SAFETY PROFILE OF DULOXETINE VERSUS PAROXETINE

Eli Lilly and Company

Jimmy Xu, Ph.D., Scientific Communications Associate, Lilly Research, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285; Pierre Van Tran, M.D.; Yili Lu, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the evidence supporting the safety and tolerability of duloxetine, a potent and balanced dual reuptake inhibitor of serotonin and nonrepinephrine, in the treatment of major depressive disorder and how it compares with the SSRI paroxetine.

### **SUMMARY:**

Objective: To compare the safety and tolerability of antidepressant duloxetine, a dual-reuptake inhibitor of serotonin and norepinephrine, over a wide dose range with the SSRI paroxetine in patients with major depressive disorder.

Method: Data from four eight-week, randomized, double-blind, placebo-controlled studies were pooled to compare the safety and tolerability of duloxetine at doses ranging from 40 mg-120 mg/d with paroxetine 20 mg/d.

Results: In the pooled database (placebo N=371; duloxetine N=736; paroxetine N=359), 4% of placebo, 8% of duloxetine, and 6.1% of paroxetine patients discontinued due to adverse events with no statistically significant difference between duloxetine and paroxetine. The only significant difference between duloxetine and paroxetine in treatment-emergent adverse events was for decreased appetite (duloxetine: 4.2%; paroxetine: 1.4%). Nausea rates were 3.8% for placebo, 14.4% for duloxetine, and 12% for paroxetine. Changes in blood pressure measures and laboratory analytes were similar between duloxetine and paroxetine treatment groups. 1.6% of placebo, 1.5% of duloxetine, and 0.28% of paroxetine patients had three consecutive elevations of either systolic or diastolic blood pressure.

Conclusion: The safety and tolerability profile of duloxetine administrated over a wide dose range compares very favorably with a low dose of paroxetine. Duloxetine is a safe and well-tolerated antidepressant.

Funding Source: Eli Lilly and Company

### **REFERENCES:**

- Detke MI, Lu Y, Goldstein DJ, Hayes JR, Demitrack MA: Duloxetine 60 mg once daily for major depressive disorder: a randomized double-blind placebo-controlled trial. J Clin Psychiatry 2002; 63:308–315.
- Goldstein DJ, Mallinckrodt C, Lu Y, Demitrack MA: Duloxetine in the treatment of major depressive disorder: a double-blind clinical trial. J Clin Psychiatry 2002; 63:225–231.

### **TARGET AUDIENCE:**

Psychiatrists and clinicians who treat depression

Poster 197

Saturday, November 1 9:30 a.m.-11:00 a.m.

## ANALYSIS OF TREATMENT-EMERGENT MANIA WITH CLOZAPINE-FLUOXETINE COMBINATION

Eli Lilly and Company

Jeffrey M. Zucker, M.S., Regional Research Manager, Neuroscience Medical Studies, Eli Lilly and Company, 3875 Stable Court, Doylestown, PA 18901; Paul E. Keck, Jr., M.D.; Sara Ann Corya, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to compare the rates of treatment-emergent mania in bipolar depressed patients treated with olanzapine/fluoxetine combination, olanzapine, or placebo.

#### **SUMMARY:**

Objective: Treatment-emergent mania is often associated with bipolar depression in patients treated with antidepressants without mood stabilizers. This study compares treatment-emergent mania rates in bipolar depressed patients treated with olanzapine/fluoxetine combination (OFC), olanzapine, or placebo.

Methods: In this eight-week, double-blind treatment, patients with bipolar depression (baseline MADRS total scores ≥20) were randomized to OFC (6/25, 6/50, or 12/50 mg/day, n=86), olanzapine (5–20 mg/day, n=370), or placebo (n=377), followed by an optional six-month, open-label extension phase (n=562).

Results: In the acute phase, treatment-emergent mania (baseline YMRS <15 and ≥15 at any subsequent visit) did not differ between groups (OFC 6.4%, olanzapine 5.7%, placebo 6.7%, p=.861). Subjects on OFC ( $-1.38\pm5.59$  SD) and olanzapine ( $-0.55\pm5.91$  SD) had greater decreases in YMRS than those on placebo ( $0.57\pm6.09$  SD)(p=.027 and p<.001, respectively). In the extension phase (OFC n=404), OFC subjects' treatment-emergent mania rate was 4.7% (n=19) at anytime and only 4.0% (n=16) at endpoint. YMRS mean change from baseline ( $3.51\pm.69$  SD) to endpoint ( $0.03\pm5.42$  SD) for OFC was not significant.

Conclusions: Neither OFC nor olanzapine had a greater risk of acute treatment-emergent mania than placebo. The rate of treatment-emergent mania for OFC was low during a six-month, open-label extension.

Source of Funding: Eli Lilly and Company

### REFERENCES:

- Goodwin FK, Jamison KR: Manic-Depressive Illness. Oxford, New York, 1990, pp 630–663.
- Peet M: Induction of mania with selective serotonin re-uptake inhibitors and tricyclic antidepressants. Br J Psychiatry 1994; 164:549–550.

### TARGET AUDIENCE:

Psychiatrists and other mental health professionals who treat mania.

Poster 198

Saturday, November 1 9:30 a.m.-11:00 a.m.

# LONG-TERM USE OF OLANZAPINE OR OLANZAPINE-FLUOXETINE COMBINATION FOR BIPOLAR DEPRESSION

Eli Lilly and Company

Jeffrey M. Zucker, M.S., Regional Research Manager, Neuroscience Medical Studies, Eli Lilly and Company, 3875 Stable Court, Doylestown, PA 18901; Mauricio Tohen, M.D., Ph.D.; Terence A. Ketter, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the attendee should be able to discuss the efficacy of olanzapine and olanzapine/fluoxetine combination in maintenance treatment of bipolar depression and will have information regarding the use of MADRS and YMRS scores in treatment decisions.

### **SUMMARY:**

Background: Olanzapine/fluoxetine combination (OFC) has shown efficacy in treating bipolar depression. Present analyses examined six-month maintenance data for subjects who achieved remission of depressive symptoms following acute treatment.

Methods: A total of 377 subjects with bipolar depression completed eight weeks of randomized, double-blind treatment using olanzapine (OLZ, n=179), placebo (n=145), or OFC (n=55). Of these, 192 were in remission (MADRS ≤ 12) upon entering open-label treatment, at which time they were switched from their acute-phase treatment to 5–20mg/day open-label OLZ. After one week on OLZ, subjects could be switched to OFC as needed. Primary efficacy measure was the Montgomery-Åsberg Depression Rating Scale (MADRS). Manic symptoms were monitored using the Young Mania Rating Scale (YMRS). Time to relapse (MADRS >15) was estimated using Kaplan-Meier survival analysis.

Results: Of the 192 remitters, 120 (62.5%) remained free from relapse over the six-month, open-label period. For the 72 subjects (37.5%) who relapsed, median time to relapse was 194 days. Mean MADRS total score at open-label endpoint was 7.93 (SD 9.24, n=192) using a last-observation-carried-forward (LOCF) methodology.

Conclusion: This open-label study suggests that OLZ and OFC may represent treatment options in the long-term management of bipolar depression. Further studies are necessary to replicate these findings using appropriate controls and double-blind methodology.

Source of Funding: Eli Lilly and Company.

### **REFERENCES:**

1. Tohen M, Vieta E, Ketter TA, et al: Olanzapine in the treatment of bipolar depression. The International

- Journal of Neuropsychopharmacology 2002:5(Suppl 1):S109.
- 2. Kaplan E, Meier P: Nonparametric estimation from incomplete observations. J Am Stat Assoc 1958; 53:457-481.

### **TARGET AUDIENCE:**

Psychiatrists and other mental health professionals who treat depression

Poster 199

Saturday, November 1 9:30 a.m.-11:00 a.m.

### EFFICACY OF TEMAZEPAM 7.5 MG VERSUS TEMAZEPAM 15 MG IN THE TREATMENT OF TRANSIENT INSOMNIA

Mallinckrodt Pharmaceuticals

Milton K. Erman, M.D., Clinical Professor of Psychiatry, University of California at San Diego Medical School, Medical Director, San Diego Center, and Director of Medical Research, Pacific Sleep Medicine Services, 161 Thunder Drive, Suite 106, Vista, CA 92083; Stephen M. Goldfinger, M.D., Liaison, APA Institute Scientific Program Committee, and Chair, Department of Psychiatry, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize patients with predisposition to transient insomnia and be better aware of treatment options for this condition.

### **SUMMARY:**

This Phase-IV, prospective, randomized, multicenter study compares clinical similarities of emazepam 7.5 mg and 15 mg in subjects with transient insomnia. Single, oral doses of temazepam 7.5 mg and 15 mg are being administered in the sleep laboratory. A total of 130 subjects will be enrolled with equal distribution between treatment arms.

Transient insomnia may develop in individuals with normal sleep histories who experience an acute or situational stress. This may occur in relation to work or family stresses, the impact of sleeping in unfamiliar surroundings, or as a consequence of jet lag or shift work.

In this study, transient insomnia will be induced by a combination of the First Night Effect (first night of sleep in the laboratory for subjects naïve to the laboratory environment) with Sleep Phase Advance (lights out time two hours earlier than subject's routine bedtime, as determined by a sleep diary). This approach produces predict-

ably disturbed sleep in individuals with tendencies to transient insomnia.

The primary objective is to examine the efficacy of temazepam 7.5 mg and 15 mg with respect to latency to persistent sleep (LPS) and total sleep time (TST). The secondary objective is to examine the effects of these two medication doses with respect to number of sleep interruptions; (number of sleep stage shifts from sleep to wake); subjective effects as measured by the Leeds Sleep Evaluation Questionnaire (LSEQ); and performance measured using the Digit Symbol Substitution Test (DSST).

Funding Source: Mallenkradt Pharmaceuticals.

### **REFERENCES:**

- 1. Erman M, Erwin C, Gengo F, et al: Comparative efficacy of zolpidem and temazepam in transient insomnia. Human Psychopharmacology 2001; 16:169–176.
- 2. Erman M: Insomnia, in Conn's Current Therapy, 52nd edition, WB Saunders, 2000, pp 32–35.

### **TARGET AUDIENCE:**

All practicing psychiatrists

### POSTER SESSION 5

Posters 200-250

PHARMACOTHERAPY OF PSYCHIATRIC DISORDERS

Poster 200

Saturday, November 1 3:00 p.m.-4:30 p.m.

## QUETIAPINE IN REDUCING THE SYMPTOMS OF BORDERLINE PERSONALITY DISORDER

AstraZeneca Pharmaceuticals

Adityanjee, M.D., Director, Schizophrenia Program, University of Minnesota Medical School, VA Medical Center, One Veteran's Drive, Minneapolis, MN 55417

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to summarize interim data from this ongoing study of the effects of quetiapine in reducing the symptoms of borderline personality disorder.

### **SUMMARY:**

Objective: To assess the effects of quetiapine in patients with borderline personality disorder.

Methods: Men and women with borderline personality disorder and dysthymia, and without schizophrenia, bi-

polar disorder, or current major depressive disorder, were eligible to participate in this ongoing, eight-week, open-label, dose-finding study. Quetiapine dosages (25–300 mg/d) were increased over weeks 1 to 4 and maintained over weeks 5 to 8. Weekly evaluations included the Hopkins Symptoms Check List-90 (HSCL-90), Global Assessment of Functioning (GAF), a modified Brief Psychiatric Rating Scale (BPRS), and the Barratt Impulsivity Scale (BIS). Neuropsychological tests were administered before and after treatment.

Results: Of 10 patients enrolled thus far, data available for seven show significant improvements on HSCL-90 (P<0.05 weeks 2–8 vs baseline, unadjusted; P<0.0102 on hierarchical linear modeling [mixed model analysis with F test]), GAF (P<0.05 week 4 vs baseline; P<0.0001 week 8 vs baseline; P<0.0003 on ANOVA), and BPRS (P<0.05 weeks 2–8 vs baseline; P<0.0022 on ANOVA). Improvements were also noted on BIS, neuropsychological tests, and self-reporting of hostility. No serious adverse events were reported.

Conclusions: Quetiapine reduced the symptoms of borderline personality disorder, with minimal adverse events.

Funding Source: Supported by AstraZeneca Pharmaceuticals, L.P.

### **REFERENCES:**

- 1. Hilger E, Barnas C, Kasper S: Quetiapine in the treatment of borderline personality disorder. World J Biol Psychiatry 2003; 4:42–44.
- 2. Soloff PH: Psychopharmacology of borderline personality disorder. Psychiatr Clin North Am 2000; 23:169–192.

### TARGET AUDIENCE:

Meeting attendees

Poster 201

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ESCITALOPRAM 10 MG DAILY IS EFFECTIVE IN THE TREATMENT OF GENERALIZED ANXIETY DISORDER

Forest Laboratories, Inc.

Wayne K. Goodman, M.D., Department of Psychiatry, University of Florida, P.O. Box 100256, Gainesville, FL 33136; Anjana Bose, Ph.D., Research Department, Forest Laboratories, Inc., Harborside Financial Center, Jersey City, NJ 07311; Qin Wang, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the efficacy and tolerability

of escitalopram in the treatment of generalized anxiety disorder.

### **SUMMARY:**

Introduction: Three recently conducted randomized, double-blind, placebo-controlled trials of escitalopram in generalized anxiety disorder (GAD) patients were all positive. Results using pooled data across the three studies are presented below.

Methods: All trials were of virtually identical design. The dose of escitalopram was fixed at 10 mg/day for the first four weeks and could be increased to 20 mg/day after four weeks. The primary efficacy variable was HAMA total score. The HAMA psychic anxiety subscale, and the CGI-I and CGI-S were secondary efficacy variables.

Results: At baseline, patients in the placebo group (N=419) and the escitalopram group (N=421) were demographically indistinguishable, with mean HAMA scores of approximately 23, indicative of moderate to severe GAD. By visit LOCF and OC analyses of the primary and secondary efficacy variables revealed significantly greater improvement (p<0.05) in the escitalopram group relative to placebo beginning at the end of week 1 and continuing through the end of week 4 (while the escitalopram dose was fixed at 10 mg/day) and through study endpoint (week 8).

Conclusion: Escitalopram 10 mg/day is effective and well tolerated in the treatment of GAD.

Supported by Forest Laboratories.

### **REFERENCES:**

- 1. Burke WJ, Gergel I, Bose A: Fixed-dose trial of the single isomer SSRI escitalopram in depressed outpatients. J Clin Psychiatry 2002; 63:331–336.
- Davidson, J, Bose A, Su G: Escitalopram in the treatment of generalized anxiety disorder. Presented at the 2002 Anxiety Disorders Association of America National Conference; March 21–24, 2002, Austin, Texas.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 202

Saturday, November 1 3:00 p.m.-4:30 p.m.

ESCITALOPRAM IN THE TREATMENT OF GENERALIZED ANXIETY DISORDER: A DOUBLE-BLIND, PLACEBO-CONTROLLED, FLEXIBLE-DOSE STUDY Forest Laboratories. Inc.

Jonathan R.T. Davidson, M.D., Professor, Department of Psychiatry, Duke University Medical Center, Box

3812, Durham, NC 27710; Anjana Bose, Ph.D., Research Department, Forest Laboratories, Inc., Harborside Financial Center, Jersey City, NJ 07311; Hongie Zheng, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the efficacy of escitalopram in the treatment of generalized anxiety disorder.

### **SUMMARY:**

Objective: This study was designed to evaluate the efficacy and tolerability of escitalopram in the treatment of generalized anxiety disorder (GAD).

Method: Outpatients >= 18 years meeting DSM-IV criteria for GAD with baseline HAMA scores >= 18 were randomly assigned to double-blind treatment with escitalopram (10–20 mg/day) or placebo for eight weeks, following a one-week single-blind placebo lead-in period. The primary efficacy variable was mean change from baseline in total HAMA score at week 8.

Results: A total of 315 patients received treatment with escitalopram (N=158) or placebo (N=157). The escitalopram group showed statistically significant, and clinically relevant, greater improvement at endpoint compared with placebo in all prospectively defined efficacy parameters. Mean changes from baseline to week 8 on the HAMA total score using a LOCF approach were -11.3 for escitalopram and -7.4 for placebo (p < 0.001). Treatment with escitalopram was well tolerated, with low rates of reported adverse events, and an incidence of discontinuation due to adverse events not statistically different from placebo (8.9% vs. 5.1%; p = 0.27).

Conclusion: Escitalopram is effective, safe, and well tolerated in the treatment of patients with GAD.

Supported by Forest Laboratories.

### **REFERENCES:**

- 1. Burke WJ, Gergel I, Bose A: Fixed-dose trial of the single isomer SSRI escitalopram in depressed outpatients. J Clin Psychiatry 2002; 63:331–336.
- Davidson J, Bose A, Su G: Escitalopram in the treatment of generalized anxiety disorder. Presented at the 2002 Anxiety Disorders Association of America National Conference; March 21–24, 2002, Austin, Texas.

Poster 203

Saturday, November 1 3:00 p.m.-4:30 p.m.

### MARKED INCREASE IN ADIPOSITY DURING OLANZAPINE VERSUS RISPERIDONE AND PLACEBO TREATMENT IN DOGS

Janssen Pharmaceutica

Marilyn Ader, Ph.D., Associate Professor, Department of Physiology and Biophysics, University of Southern

California, Keck School of Medicine, 1333 San Pablo Street, MMR-624, Los Angeles, CA 323-442-19; Stella P. Kim, B.S., Doctoral Student, Department of Physiology and Biophysics, University of Southern California, Keck School of Medicine, 1333 San Pablo Street, MMR-626, Los Angeles, CA 323-442-19; Karyn J. Catalano, M.S.; Viorica Lonut, M.D.; Katrin Hucking, M.D.; Joyce M. Richey, Ph.D.; Mori Kabir, Ph.D.; Richard N. Bergman, Ph.D.

### **SUMMARY:**

Objective: Atypical antipsychotics are associated with substantial weight gain, but their effects on adiposity and the influence of underlying disease are unknown. We compare the effects of olanzapine, risperidone, and placebo on body weight and adiposity in normal dogs.

Methods: Dogs were treated with olanzapine (N=10, 15 mg/d), risperidone (N=10, 5 mg/d), or placebo (N=6) for four weeks. Trunk adiposity (total, visceral, and subcutaneous fat) were measured by abdominal MRI at baseline and after treatment. Body weight was measured twice weekly.

Results: Total adiposity increased more with olanzapine than either risperidone or placebo ( $+18.5\pm1.8$  vs  $+9.9\pm2.7$  cm<sup>3</sup> (p=0.018) and  $+7.5\pm2.8$  cm<sup>3</sup> (p=0.009), respectively). Similarly, during olanzapine, subcutaneous fat depots were substantially increased ( $+9.8\pm1.5$  vs  $+4.0\pm1.8$  cm<sup>3</sup>; p=0.024), and visceral depots marginally increased ( $+8.7\pm0.9$  vs  $+5.9\pm1.3$  cm<sup>3</sup>; p=0.091), compared with risperidone effects. Adiposity changes were similar between risperidone and placebo (p=0.33). Effects on adiposity were not reflected in modest changes in body weight (olanzapine:  $+5.9\pm1.2\%$ , p=0.001; placebo:  $+4.8\pm1.0\%$ , p=0.006; risperidone:  $+3.9\pm2.1\%$ , p=0.09).

Conclusions: Olanzapine caused profound increases in visceral and subcutaneous adiposity that were not predicted from observed weight changes alone; risperidone increased adiposity similar to placebo. These findings may have important implications for Type 2 diabetes risk in psychiatric patients.

This research was supported by Janssen Pharmaceutica Products, L.P.

### **REFERENCES:**

- Allison DB, Mentore JL, Mentore JL, Heo M, Chandler LP, Cappelleri JC, et al: Antipsychotic-induced weight gain: a comprehensive research synthesis. Am J Psychiatry 1999; 156:11686–96.
- 2. Lean MEJ, Pajonk FG: Patients on atypical antipsychotic drugs: another high-risk group for type 2 diabetes. Diabetes Care 2003; 26:1597–1605.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 204

Saturday, November 1 3:00 p.m.-4:30 p.m.

### OLANZAPINE IN DUAL DIAGNOSIS PATIENTS

Eli Lilly and Company

Mark J. Albanese, M.D., Medical Director, Department of Addiction Psychiatry, Cambridge Hospital, Cambridge Health Alliance, 26 Central Street, Somerville, MA 02143

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) better diagnose psychiatric patients with comorbid substance use disorders, and (2) correctly prescribe olanzapine for dual diagnosis patients.

### **SUMMARY:**

Introduction: Studies suggest that the atypical antipsychotics may be effective in treating dual-diagnosis patients. This poster reports on our preliminary results with olanzapine.

Method: Twenty-one patients admitted to a short-term, post-detoxification residential substance abuse program were treated with olanzapine in an open-label, nonblinded, naturalistic trial. All patients were followed clinically and assessed using the Clinical Global Impressions scale (CGI). Mean olanzapine dose was 11 mg/day. Mean period of follow-up was 21 days. Mean period of abstinence before assessment was 49 days.

Results: (1) 18 patients were improved or much improved; three exhibited no change; none worsened. (2) Most patients had bipolar disorder or major depression with psychotic features. (3) Most patients had alcohol, cocaine, or polysubstance dependence. (4) In 17 patients, olanzapine was combined safely with other medications. (5) One patient complained of weight gain and sedation; no adverse effects, extrapyramidal side effects or tardive dyskinesia were noted; olanzapine was discontinued in no patient (6) 14 patients completed treatment; no patient relapsed.

Conclusion: In this uncontrolled trial, olanzapine appears to be safe and effective, both alone and in combination with other medications, in the treatment of dual-diagnosis patients.

The research in this Poster was supported by Eli Lilly and Company.

### **REFERENCES:**

1. Albanese MJ, Khantzian EJ, Murphy SL, Green AI: Decreased substance use in chronically psychotic patients treated with clozapine [letter]. Am J Psychiatry 1994; 151:780–781.

2. Albanese MJ: Safety and efficacy of risperidone in substance abusers with psychosis [letter]. Am J Addict 2001; 10:190–191.

#### TARGET AUDIENCE:

General psychiatrists, addiction psychiatrists

Poster 205

Saturday, November 1 3:00 p.m.-4:30 p.m.

### A PROSPECTIVE REVIEW OF ZIPRASIDONE AT A STATE HOSPITAL

Peter D. Anderson, Pharm.D., Clinical Pharmacist, Pharmacy Department, Taunton State Hospital, P.O. Box 4007, Taunton, MA 02780; David N. Osser, M.D., Associate Professor of Psychiatry, Harvard Medical School, and Director of Psychopharmacology, Taunton State Hospital, P.O. Box 4007, Taunton, MA 02780

### **EDUCATIONAL OBJECTIVES:**

measured by CGI of improvement.

At the conclusion of this session, the participant should be able to appreciate the potential value of ziprasidone for treatment-resistant patients in a tertiary care setting.

### **SUMMARY:**

Purpose: To access outcome and safety parameters with ziprasidone in a tertiary care state hospital setting. *Methods:* New patients started on ziprasidone between May 2001 and November 2002 were assessed prospectively at baseline, 30-days, and 60-days. Outcome was

Results: Data were collected on 27 patients, 10 females, and 17 males, with a mean age of 34. The diagnosis includes schizophrenia (16), schizoaffective disorder (5), psychotic depression (2), PTSD (2), bipolar I (1), and psychosis NOS (1). The mean weight change was -2.2 lbs. Five patients had a CGI of 1 (very much improved), four had a CGI of 2, nine had a CGI of 3, seven had a CGI of 4 (no change), none had a CGI of 5, and two had a CGI of 1. Twelve patients were clozapine-eligible: three (25%) responded with a CGI of 1. Weight loss was correlated with effectiveness, r=0.54 (p < 0.02). No patients experienced significant QTc prolongation.

Conclusion: Ziprasidone appears to be a viable treatment option for many treatment-resistant patients. The effectiveness of ziprasidone is correlated with weight loss in this patient sample. This contrasts with evidence from other studies that improvement with olanzapine and clozapine is associated with weight gain. Further studies are needed to confirm these findings.

### **REFERENCES:**

1. Czobor P, Volavka J, Sheitman B, et al: Antipsychotic-induced weight gain and therapeutic response:

- a differential association. J Clin Psychopharmacol 2002; 22:1244–251.
- 2. Kaye NS: Ziprasidone augmentation of clozapine in 11 patients. J Clin Psychiatry 2003; 64(2):215–215.

### **TARGET AUDIENCE:**

Prescribing clinicians, pharmacists

Poster 206

Saturday, November 1 3:00 p.m.-4:30 p.m.

### LOW OR ABSENT PAIN AND INJECTION-SITE EFFECTS WITH LONG-ACTING RISPERIDONE

Janssen Pharmaceutica

Judith Kando, Pharm.D., Central Nervous System Clinical Development, Janssen Pharmaceutica Products, L.P., 1125 Trenton-Harbourton Road, Titusville, MA 08560; Cynthia A. Bossie, Ph.D.; Robert A. Lasser, M.D.; Georges Gharabawi, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that treatment with long-acting risperidone, a novel aqueous-based formulation, may present fewer adverse injection site effects (i.e., pain, redness/induration, swelling) than conventional depots while providing the advantages of an atypical anti-psychotic.

### **SUMMARY:**

Introduction: Conventional depot antipsychotics can improve medication adherence but are compromised by injection-site reactions secondary to oil-based formulations. Long-acting risperidone, a novel aqueous-based formulation, may present less injection-site effects while providing the advantages of an atypical antipsychotic.

Method: Two studies (open-label 50-week; double-blind 12-week) assessed long-acting risperidone (25–75 mg every two weeks). Patients completed a visual analogue scale for pain (0 mm = none, 100 mm = unbearable) after each injection. Investigators rated injection-site pain, redness, swelling, and induration as absent, mild, moderate, or severe.

Results: Patient pain ratings were low at all assessments, decreasing from the first to final injection (50-week study: 18.4±0.8 to 10.7±0.6). No effect of prior treatment (oral risperidone, conventional depot) was apparent. Data were similar in the 12-week study with comparable ratings among groups (final injection: placebo 12.7+2.3; 25 mg 9.6+1.3; 50 mg 14.3+2.5; 75 mg 9.7+1.8). In the 12-week study, investigators rated redness, swelling, and induration as absent in 97% to 100% of assessments, and pain as absent in 78% to 100%. No

differences were seen between long acting risperidone and placebo groups.

Conclusion: Patient-rated pain was low and investigator ratings of site pain, swelling, induration, or redness were infrequent with long-acting risperidone.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

- Fleischhacker WW, Ferdekens M, Yang X, et al: Long-term safety of long-acting risperidone microspheres. American College of Neuropsychopharmacology 40<sup>th</sup> annual meeting. Waikoloa, Hawaii, December 9–13, 2001. Scientific Abstract, page 398.
- 2. Bloch Y, Mendlovic S, Strupinsky S, et al: Injections of depot antipsychotic medications in patients suffering from schizophrenia: do they hurt? J Clin Psychiatry 2001; 62:855–9.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 207

Saturday, November 1 3:00 p.m.-4:30 p.m.

### QUETIAPINE AUGMENTATION IN TREATMENT-RESISTANT OCD

AstraZeneca Pharmaceuticals

Ann M. Bogan, M.D., Resident, Department of Psychiatry, Stanford University, P.O. Box 448, San Mateo, CA 94401; Helen W. Chuong, M.S.; Lorrin K. Koran, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss augmentation with atypical neuroleptics in treatment-resistant OCD.

#### **SUMMARY:**

Objective: Many patients with obsessive-compulsive disorder (OCD) are treatment resistant to serotonin reuptake inhibitors (SRIs). In such cases, evidence supports augmentation with an atypical neuroleptic. We describe an open-label study of augmentation with the atypical neuroleptic quetiapine in treatment-resistant OCD.

Method: In an eight-week trial, 16 outpatient adults with a primary DSM-IV diagnosis of OCD treatment resistant to at least one adequate SRI trial received quetiapine augmentation (dose 50 to 200 mg/day). Fourteen subjects completed the trial. One withdrew due to adverse effects; one withdrew due to protocol violation. Behavioral ratings including the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) were obtained.

Results: The subjects' mean Y-BOCS score was  $27.7\pm7.0$  (range, 13 [obsessions only] -39) at baseline and  $23.3\pm8.4$  (range, 6-36) at endpoint. Y-BOCS scores

decreased a mean of 16.3% ±22.7. The responder rate (≥25% decrease in Y-BOCS score) was 31.3%. All participants experienced at least one adverse event, but most were mild. The most common adverse effects were sedation (11/16) and fatigue (9/16).

Conclusion: Quetiapine augmentation may benefit SRI-resistant OCD. Despite the history of treatment resistance in our subjects, nearly one-third responded. Our responder rate (31.3%) falls within the range reported in other atypical neuroleptic augmentation trials (30% to 100%). Large-scale, double-blind, placebo-controlled trials comparing different atypical neuroleptic augmentors in treatment-resistant OCD are needed.

Supported by AstraZeneca Pharmaceuticals, Inc.

### **REFERENCES:**

- 1. Denys D, van Megen H, Westenberg H: Quetiapine addition to serotonin reuptake inhibitor treatment in patients with treatment-refractory obsessive-compulsive disorder: an open label study. J Clin Psychiatry 2002; 63:700–703.
- Koran LM: Obsessive-Compulsive and Related Disorders in Adults: A Comprehensive Clinical Guide. Cambridge, Cambridge University Press, 1999.

### **TARGET AUDIENCE:**

General psychiatrists who treat adult patients with OCD

Poster 208

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ZIPRASIDONE FOR ELDERLY DEMENTIA: CASE SERIES

Pfizer Inc.

Alan L. Berkowitz, M.D., Department of Psychiatry, Pomerado Hospital, 15615 Pomerado Road, Poway, CA 92064

### **EDUCATIONAL OBJECTIVES:**

At the end of this presentation, the participant should be able to discuss the reported findings regarding the clinical efficacy and safety of ziprasidone in elderly patients with dementia-related behavioral disturbances or depression-related psychosis and describe methods developed for managing treatment-associated sedation by dosage adjustment.

### **SUMMARY:**

Background: We evaluated use of ziprasidone in frail, elderly patients with dementia-related behavioral problems (irritability, agitation, combativeness, depression, mood lability).

Methods: We conducted a chart review of 62 elderly patients (64–92 years old) admitted to an inpatient psychiatric facility with diagnoses of mood and behavior disturbances secondary to multi-infarct dementia, Alzheimer's disease, schizoaffective disorder, bipolar disorder, and major depression. All patients had ≥1 major medical illness, including in some cases atrial fibrillation or congestive heart failure.

Results: Most patients received antipsychotic therapy before hospital admission. Treatment with various psychotropic agents (haloperidol, olanzapine, risperidone, paroxetine, fluvoxamine, lamotrigine, oxcarbazepine, divalproex sodium, topiramate), often given concomitantly, failed to resolve symptoms or caused intolerable side effects. Ziprasidone, in combination with other psychotropics, minimized behavioral symptoms, agitation, depression, and cognitive decline sufficiently to enable discharge. Sedation, the most common side effect of ziprasidone, generally responded to 20-mg dose reductions and tended not to recur with reinstitution of higher doses. There were no significant QTc findings or recorded postural hypotension or syncope.

Conclusions: In summary, ziprasidone proved effective, safe, and well tolerated in most elderly patients with dementia-related psychosis and behavioral disturbances when other atypical antipsychotics failed to relieve symptoms or caused intolerable side effects.

The research for this poster is supported by Pfizer Inc.

### **REFERENCES:**

- Conn DK, Lieff S: Diagnosing and managing delirium in the elderly. Can Fam Physician 2001; 47:101–108.
- Arató M, O'Connor R, Meltzer HY on behalf of the ZEUS Study Group: A one-year, double-blind, placebo-controlled trial of ziprasidone 40, 80, and 160 mg/day in chronic schizophrenia: the Ziprasidone Extended Use in Schizophrenia (ZEUS) study. Int Clin Psychopharmacol 2002; 17:207–215.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 209

Saturday, November 1 3:00 p.m.-4:30 p.m.

## TREATMENT OF BORDERLINE PERSONALITY DISORDER IN AN INPATIENT SETTING

Kelsey Carignan, B.A., Department of Psychiatry, University of Minnesota, 1922 Johnson Street, N.E., Minneapolis, MN 55418; Beverly Long, M.A., Behavioral Psychologist, Anoka Metro Rehabilitation Training Center,

3301 Seventh Avenue, North, Anoka, MN 55418; S. Charles Schulz, M.D.; Suzanne T. Witterholt, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate awareness of the medications given to these severely ill patients with borderline personality disorder and recognize the treatments associated with the most improvement.

### **SUMMARY:**

The goal of this research project was to examine the pharmacotherapy treatment of a group of severely ill inpatients with borderline personality disorder, most of whom had other comorbid psychiatric disorders, at a state-run treatment facility in MN. We examined the records of 91 patients treated between 1994 and 2001, in hopes of generating hypotheses for future research on the treatment of this population. We found that patients were on an average of 2.9 psychotropic medications at discharge. The 91 patients were given a total of 48 different combinations of medication types, the most common being an atypical antipsychotic and an (non-SSRI, non-tricyclic) antidepressant. We compared the medications given to patients who improved the most versus the least (based on GAF scores and behavior). Finally, we considered medications and measures of improvement for patients enrolled in a psychosocial treatment program shown to be efficacious in parasuicidal patients versus those treated in scattered beds. A preliminary analysis revealed a greater improvement in the DBT and pharmacotherapy group.

### **REFERENCES:**

- Schulz SC, Camlin KL: Treatment of borderline personality disorder: potential of the new Antipsychotic medications. Jrnl Prac Psych and Behav Hlth 1999; 247–255.
- 2. Frankenburg RF, Zanarini, MC: Clozapine treatment of borderline patients: a preliminary study. Comp Psych 1993; 34:402–405.

### **TARGET AUDIENCE:**

Psychiatrists, psychologists, nurses, social workers, students

Poster 210

Saturday, November 1 3:00 p.m.-4:30 p.m.

### TIAGABINE FOR PTSD

Cephalon, Inc.

Kathryn M. Connor, M.D., Department of Psychiatry, Duke University Medical Center, DUMC-Box 3812, Trent Drive, Room 4082, Durham Hill, NC 27710

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the benefits of tiagabine in the treatment of posttraumatic stress disorder (PTSD).

### **SUMMARY:**

Objective: Preliminary results suggest a potential benefit of agents that enhance  $\gamma$ -aminobutyric acid (GABA) neurotransmission in treating PTSD. Tiagabine, a selective GABA reuptake inhibitor (SGRI), increases synaptic GABA availability by blocking the reuptake of GABA via transporter inhibition. This study evaluated tiagabine in the treatment of PTSD.

Methods: This 12-week, open-label, pilot study enrolled 18 subjects with PTSD. Tiagabine was initiated at 2 mg bid with food and increased by 4 mg/w until optimal response (efficacy/tolerability) was achieved (maximum dose of 16 mg/d). Efficacy assessments included measures of PTSD, sleep quality, depression and anxiety, resilience, and disability.

Results: In an ITT LOCF analysis of the first 18 of 27 subjects enrolled, significant improvement was observed in the mean Short PTSD Rating Interview score, decreasing from 22.2 at baseline to 10.3 at Week 12 (P<0.0001). Also in the ITT sample, a significant and rapid onset of effect was demonstrated with tiagabine by the end of Week 1 on the sleep-related items of the Davidson Trauma Scale (P<0.05). Stronger results were seen in the 12 subjects completing the study, with significant improvements observed in all outcome measures (P<0.05). Treatment with tiagabine was well tolerated.

Conclusions: Tiagabine is associated with rapid onset of improvement in PTSD and associated comorbidity and impairment. These findings suggest that the SGRI tiagabine may be effective therapy for PTSD.

This study and presentation were supported by Cephalon, Inc., West Chester, PA.

### **REFERENCES:**

- 1. Berigan T: Treatment of posttraumatic stress disorder with tiagabine. Can J Psychiatry 2002; 47:788.
- 2. Ginsberg DL: Tiagabine treatment of posttraumatic stress disorder. Primary Psychiatry 2003; 10:18-19.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 211

Saturday, November 1 3:00 p.m.-4:30 p.m.

## DO TEXAS MEDICATION ALGORITHM PROJECT SCORES MEASURE ATYPICAL EFFICACY?

Larry H. Dizmang, M.D., Chief Psychiatrist, Mental Health Services Delivery System, Health Care Services

Division, Department of Corrections, California Medical Facility, 1600 California Drive, Vacaville, CA 95696; Karen K. Alexander, Ph.D., Senior Psychologist, Mental Health Services Delivery System, Health Care Services Division, Department of Corrections, California Medical Facility, 1600 California Drive, Vacaville, CA 95696; David Silbaugh, Ph.D.; John A. Chiles, M.D.

### **SUMMARY:**

The California Medical Facility provides mental health services to a population of 1,000 severely mentally ill men within a correctional environment. This program has successfully implemented the evidence-based TMAP program to improve treatment of approximately 300 schizophrenic patients. Utilizing TMAP rating scales for both positive and negative symptoms, we have implemented a medication treatment algorithm.

Preliminary evaluation of outcome data allowed for a comparative ranking of atypical antipsychotic medications, according to the presence of positive and negative symptoms. These findings are interpreted to represent desperately needed long-term efficacy comparisons. Findings indicate that average positive symptom scores exceed average negative symptom scores in this population. Patients treated with clozapine and risperidone had the lowest positive symptom ratings of all atypical antipsychotics, suggesting that these medications may be the drugs of choice for schizophrenics with a prison population.

This poster will graphically display the outcome rankings of atypical antipsychotics based on positive and negative symptom scores. These scores will be invaluable to physicians who work with similar patient populations. The principle investigator will be prepared to discuss possible implications of these findings.

### **REFERENCES:**

- 1. Maples NJ, Bow-Thomas CC, Velligan DI, Miller AL, Chiles JA, Prihoda TJ, Sui DW: The reliability, validity and sensitivity of brief positive and negative symptom measures in schizophrenia. Schizophrenia Research 2001; 49:17–18.
- 2. Jemelka R., Trupin E., Chiles J: The mentally ill in prisons: a review. Hospital and Community Psychiatry 1989; 40 481–91.

Poster 212

Saturday, November 1 3:00 p.m.-4:30 p.m.

### OVERDOSE FATALITY WITH ATYPICAL ANTIPSYCHOTIC MEDICATIONS

Dale A. D'Mello, M.D., Associate Professor, Department of Psychiatry, Michigan State University, Saint Lawrence Hospital, 1210 West Saginaw, Lansing, MI 48915; David E. Lyon, D.O., Resident, Department of

Psychiatry, Michigan State University, Saint Lawrence Hospital, 1210 West Saginaw, Lansing, MI 48915 Poster 213

Saturday, November 1 3:00 p.m.-4:30 p.m.

### **EDUCATIONAL OBJECTIVES:**

Appreciate the fact that whereas atypical antipsychotics are substantially safer than their predecessors, instances of overdose fatalities occur.

#### **SUMMARY:**

One in every 10 patients with schizophrenia dies by suicide. Many of these do so with drug overdose. Atypical antipsychotics are considered to be safer in overdose than their predecessors. However, reports of overdose related mortality have recently emerged.

*Purpose:* The purpose of the present study was to review the published literature regarding atypical antipsychotic overdose, and estimate the risk of fatality.

Method: The authors performed a comprehensive literature search of electronic databases using the terms overdose, fatality, toxicity, antipsychotics, clozapine, risperidone, olanzapine, ziprasidone, and aripiprazole. They examined the annual fatality reports of the Toxic Exposure Surveillance System (TESS).

Results: The search yielded a total of 51 published articles. The TESS yielded 46 reported deaths from overdose between 1999 and 2001: 18 with olanzapine, 12 with risperidone, 12 with quetiapine, four with clozapine, and none with ziprasidone. There was only one published report of an overdose fatality with clozapine, one with risperidone, five with olanzapine, one with quetiapine, and none with either ziprasidone or aripiprazole. Prolongation of the QTc was reported following overdose with all compounds.

Conclusions: In the event of overdose, the atypical antipsychotics appear to be safer than typical compounds. Nevertheless, rare instances of overdose fatality have been described.

### **REFERENCES:**

- 1. Trenton A, Currier G, Zwemer F: Fatalities associated with therapeutic use and overdose of atypical antipsychotics. CNS Drugs 2003; 17:307–324.
- 2. Burns MJ: The Pharmacology and Toxicology of Atypical Antipsychotic Agents. J Toxicol Clin Toxicol 2001; 39:1-14.

### **TARGET AUDIENCE:**

Psychiatrists, nurses, psychologists, social workers

## INTRAMUSCULAR ZIPRASIDONE IN GERIATRIC PATIENTS WITH ACUTE PSYCHOSIS

Pfizer Inc.

Bijan Etemad, M.D., Department of Psychiatry, University of Pennsylvania Health System, 3400 Spruce Street, 11th Floor, Gates Building, Philadelphia, PA 19104

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should know how to use IM ziprasidone in the treatment of elderly patients with acute psychosis.

### **SUMMARY:**

*Objective:* To study the efficacy and tolerability of IM ziprasidone in geriatric patients with acute psychotic symptoms.

Methods: Records of geriatric patients admitted with Axis 1 diagnoses of acute exacerbation of schizophrenia/schizoaffective disorder and treated with IM ziprasidone were reviewed. ECGs were obtained two to six hours after dosing.

Results: Eleven patients (mean age 76.2 years) were admitted with acute psychotic symptoms and behavioral manifestations. Patients had multiple comorbidities and were receiving numerous medications, including other antipsychotics. Single doses of 20-mg IM ziprasidone were administered. Within 20 to 30 minutes, patients exhibited behavioral improvements. Patients were calmed (but not sedated), more receptive to direction by staff, and more socially interactive. Command auditory hallucinations had ceased or were less severe. All patients required ≥2 IM doses PRN; seven required daily IM doses for four days, and four required BID or more frequent doses for six days. No worsening of cardiac symptoms or ECG changes was observed, and no QTc interval >450 msec was noted during IM dosing. All patients underwent successful transition to oral ziprasidone.

Conclusion: IM ziprasidone was rapidly effective and well tolerated in geriatric patients with acute schizophrenia and behavioral problems. These findings corroborate those in nongeriatric patients.

Funding source: Pfizer Inc.

### **REFERENCES:**

 Brook S, Lucey JV, Gunn KP for the Ziprasidone IM Study Group: Intramuscular ziprasidone compared with intramuscular haloperidol in the treatment of acute psychosis. J Clin Psychiatry 2000; 61:933–941. Romano SJ: Cardiovascular safety profile of ziprasidone: review of clinical development data. Presented at the 154<sup>th</sup> annual meeting of the American Psychiatric Association, May 5–10, 2001; New Orleans, Louisiana.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 214

Saturday, November 1 3:00 p.m.-4:30 p.m.

### DONEPEZIL HAS SIGNIFICANT BENEFITS ON BEHAVIOR IN PATIENTS WITH SEVERE ALZHEIMER'S DISEASE Pfizer Inc.

Howard Feldman, M.D., Department of Neurology, University of British Columbia Hospital, Vancouver, Canada, S-192 2211 Nesbrook Mall, Vancouver, BC, Canada V6T 2B5; Elias M. Schwam, Ph.D.; Serge Gauthier, M.D.; John Ieni, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should appreciate that the significant benefits of donepezil treatment on behavioral symptoms of patients with Alzheimer's disease, extend into the severe stage of the disease (sMMSE score 5-12).

### **SUMMARY:**

Objective: To investigate the effects of donepezil on behavior in patients with severe AD.

Methods: In this randomized, double-blind trial, 145 patients classified as having severe AD (sMMSE score 5-12) received donepezil, 5 mg/day for the first 28 days and 10 mg/day thereafter per the clinician's judgment (n=72), or placebo, for 24 weeks (n=73). Behavioral symptoms were assessed using the 12-item Neuropsychiatric Inventory (NPI).

Results: Baseline patient demographics were similar between treatment groups. Mean NPI baseline scores ( $\pm$  SD) were 20.65  $\pm$  18.47 for donepezil- and 20.55  $\pm$  18.39 for placebo-treated patients. Mean change from baseline scores on the NPI total improved throughout the study for the donepezil group and were significantly different from placebo at Weeks 4, 18, 24, and at Week 24 LOCF (mean difference = 6.9. P=0.0062). Benefits in 11/12 NPI items were observed with donepezil, compared with placebo at Week 24 LOCF, with significant differences for depression (P=0.035), anxiety (P=0.038) and apathy (P=0.012). For 8 NPI items more patients treated with donepezil showed a reduction in baseline symptoms (depression and anxiety P<0.05). Adverse

events were similar between groups and generally rated as mild or moderate.

Conclusions: These data suggest donepezil is a safe and effective treatment for improving neuropsychiatric symptoms in patients with severe AD.

### **REFERENCES:**

- 1. Feldman H, Gauthier S, Hecker J, Vellas B, Subbiah P, Whalen E: A 24-week, randomized, double-blind study of donepezil in moderate to severe Alzheimer's disease. Neurology 2001: 57:613–620.
- 2. Gauthier S, Feldman H, Hecker J, Vellas B, Ames D, Subblah P, Whalen E, Emir B: Efficacy of donepezil on behavioral symptoms in patients with moderate to severe Alzheimer's disease. International Psychogeriatrics 2002; 14:389–404.

Poster 215

Saturday, November 1 3:00 p.m.-4:30 p.m.

## ATOMOXETINE VERSUS PLACEBO FOR TREATING PEDIATRIC NOCTURNAL ENURESIS

Eli Lilly and Company

Margaret Ferguson, Pharm.D., Medical Liaison, Neuroscience Medical Affairs, Eli Lilly and Company, 2443 Massachusetts Avenue, Apt. 3, Cambridge, MA 02140; Calvin Summer, M.D.; Douglas K. Kelsey, M.D., Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to acknowledge the benefit of atomoxetine for childhood nocturnal enursis.

### **SUMMARY:**

Objective: Nocturnal enuresis is a condition in children older than five years of age who are incontinent of urine at night. Atomoxetine, a potent inhibitor of the presynaptic norepinephrine transporter, is used to treat ADHD. This study tested the hypothesis that a specific noradrenergic agonist, such as atomoxetine, will provide significant therapeutic benefit for nocturnal enuresis.

Methods: The effects of atomoxetine for improving nocturnal enuresis were studied in 87 pediatric subjects using an outpatient, multicenter, randomized, double-blind, parallel, placebo-controlled study. Efficacy was determined by measuring the mean number of dry nights per week using an intent-to-treat analysis of the primary outcome measure, the Dry Night Log-Parent Report (DNL-PR), a daily parent diary.

Results: Baseline and endpoint DNL-PR data were available from 42 atomoxetine-treated and 41 placebotreated subjects. Atomoxetine increased the average number of dry nights per week by 1.47 compared with

.60 for placebo (p=.01). Fifteen of the atomoxetine-treated subjects had an increase of at least two dry nights per week compared with only six of the placebo-treated subjects (p=.042). There were no significant differences in adverse events between the groups.

Conclusion: Atomoxetine produced a significant increase in dry nights in children with nocturnal enuresis.

Source of Funding: Eli Lilly and Company.

### **REFERENCES:**

- 1. Michelson D, Faries D, Wernicke J, Kelsey D, Kendrick K, Sallee FR, Spencer T, and the Atomoxetine ADHD Study Group: Atomoxetine in the treatment of children and adolescents with ADHD: a randomized, placebo-controlled, dose-response study. Pediatrics 2001; 108:e83.
- Michelson D, Allen AJ, Busner J, Casat C, Dunn D, Kratochvil C, Newcorn J, Sallee FR, Sangal RB, Saylor K, West S, Kelsey D, Wernicke J, Trapp NJ, Harder D: Once-daily atomoxetine treatment for children and adolescents with attention-deficit/hyperactivity disorder: a randomized, placebo-controlled study. Am J Psychiatry 2002; 159:1896–1901.

### **TARGET AUDIENCE:**

General psychiatrists, child psychiatrists, and pediatricians

Poster 216

Saturday, November 1 3:00 p.m.-4:30 p.m.

### INJECTABLE ZIPRASIDONE IN THE PSYCHIATRIC EMERGENCY SERVICE

Pfizer Inc.

Andrew J. Francis, Jr., M.D., Ph.D., Associate Professor, Department of Psychiatry and Behavioral Sciences, State University of New York at Stony Brook, Health Sciences Center, T-10, Stony Brook, NY 11794; Steven G. Klotz, M.D.; Horacio Preval, M.D.; Robert Southard, R.N.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant will understand the reported findings on the use and benefits of injectable ziprasidone in rapidly managing patients with severe agitation due to psychiatric illness or alcohol or substance abuse.

### **SUMMARY:**

Objective: Injectable atypical neuroleptics may supplant benzodiazepines and/or butyrophenone. Published studies of IM ziprasidone excluded severe psychiatric agitation (AGIT) and agitation from alcohol (ETOH) or other substances (SUBS).

Method: We determined BARS agitation scores (min=1, max=7) and duration of physical restraint in a naturalistic study of IM sedatives in our psychiatric emergency service over three months. Dosages were 20 mg for ziprasidone, and varied for conventional IM sedatives (86% haloperidol and/or lorazepam).

Results: Baseline BARS scores were high for AGIT (n=40), ETOH (n=10), and SUBS (n=19) (means, 6.5, 6.9, 6.5; P=NS). Ziprasidone decreased agitation scores rapidly (means, 5.7, 5.3, 5.6 at 15 min and 3.2, 3.3, 3.0 at 45 min [P<0.01]). At 2 hr, mean scores were 2.5, 2.1, and 2.3. For conventional sedatives (n=7), scores were 6.4 at baseline, 5.4 at 15 min, 3.3 at 45 min, and 2.7 at 2 hr (P=NS from ziprasidone). Restraint duration decreased from 91  $\pm$  4 min to 45  $\pm$  4 min with ziprasidone (P<0.01). None of 17 EKGs showed prolonged QTc; one dystonic reaction occurred with ziprasidone.

Conclusion: Ziprasidone IM appears effective for severe agitation, including alcohol- or substance-induced intoxication. It may lead to reduced time in restraints compared with conventional agents.

Research funded by Pfizer Inc.

#### **REFERENCES:**

- 1. Currier GW, Trenton A: Pharmacological treatment of psychotic agitation. CNS Drugs 2002; 16:219–228.
- 2. Daniel DG, Potkin SG, Reeves KR, Swift RH, Harrigan EP: Intramuscular (IM) ziprasidone 20 mg is effective in reducing acute agitation associated with psychosis: a double-blind, randomized trial. Psychopharmacology 2001; 155:128–134.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 217

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ZIPRASIDONE IN YOUTHS WITH COMORBID EPILEPSY AND PSYCHIATRIC ILLNESS

Pfizer Inc.

Joseph M. González-Heydrich, M.D., Assistant Professor of Psychiatry, and Medical Director for Outpatient Services, Harvard Medical School, Children's Hospital of Boston, 300 Longwood Avenue, Fegan 8, Boston, MA 02115

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should appreciate that ziprasidone may be used safely in young people with comorbid epilepsy and psychiatric illness who are receiving other medications.

### **SUMMARY:**

*Purpose:* Because of fear of seizure exacerbation, patients with epilepsy often do not receive adequate treatment for psychiatric disorders. We studied ziprasidone's safety and effectiveness in outpatients with comorbid epilepsy and psychiatric illness.

Methods: We retrospectively reviewed outpatient medical records for individuals <24 years old with epilepsy and treated with ziprasidone. Response was defined as a CGI-Improvement score of 1 or 2 at last visit and absence of AEs leading to discontinuation.

Results: Eight youths (mean age  $14.9\pm6.6$  years) with multiple psychiatric diagnoses met review criteria. Mean ziprasidone dosage was  $1.8\pm0.6$  mg/kg/day; treatment duration was  $6.3\pm7.6$  months. Target symptoms included severe aggression, psychosis, and mixed/rapid-cycling mania. Seizure type was partial complex in seven patients and primary generalized in one patient. Four patients had intractable seizures and four well-controlled seizures. Seven patients were taking anti-epileptic drugs along with ziprasidone. Four patients met criteria for response. Mean CGI-Severity score decreased from  $5.2\pm1.0$  to  $4.2\pm1.2$  on ziprasidone (P<0.05). AEs were mild to moderate. Reasons for discontinuation were worsening aggression, hypersensitivity reaction, and lack of efficacy. Seizures did not worsen in any patient.

Conclusions: In youths with epilepsy and psychiatric illness ziprasidone was associated with clinically significant global improvement without seizure exacerbation. Funding Source: Pfizer Inc.

### **REFERENCES:**

- 1. Dunn DW, Austin JK: Behavioral issues in pediatric epilepsy. Neurology 1999; 53:S96–S100.
- Gonzalez-Heydrich J, DeMaso DR, Irwin C, Steingard RJ, Kohane IS, Beardslee WR: Implementation of an electronic medical record system in a pediatric psychopharmacology program. Int J Med Inf 2000; 57:109–116.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 218

Saturday, November 1 3:00 p.m.-4:30 p.m.

### MEMANTINE IS SAFE AND WELL TOLERATED BY PATIENTS WITH MODERATE TO SEVERE ALZHEIMER'S DISEASE

Forest Laboratories, Inc.

Stephen M. Graham, Ph.D., Director, Forest Laboratories, Inc., Harborside Financial Center, Plaza V, Jersey City, NJ 07311; Grace S. Lee, B.A.; Ivan Gergel,

M.D.; Margaret A. Goetz, M.P.H.; Yvonne Wirth, M.D.; Albrecht Stöffer, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the tolerability and safety of memantine for the treatment of moderate to severe Alzheimer's disease.

#### **SUMMARY:**

Memantine, a moderate-affinity, uncompetitive NMDA-receptor antagonist, is a novel Alzheimer's disease (AD) therapy approved in >40 countries. Safety data from 734 patients (66% female, mean age: 75 years, mean Mini-Mental State Examination [MMSE]: 9) diagnosed with moderate to severe AD (365 placebo; 369 memantine 10-20 mg/day) in three 12-28 week, doubleblind, placebo-controlled trials were pooled based on Hachinski Ischemia Scale (≤4) and MMSE (≤14), A greater percentage of placebo patients than memantine patients discontinued (25% vs 16%, respectively) and reported adverse events (AEs) as the reason (13% vs 8%, respectively). The profiles of AEs, vital signs, and clinical laboratory values were similar between treatment groups and to a larger dementia population. Only dizziness, headache, confusion, fall, and urinary incontinence (all <7% of memantine patients) were reported in >5% of memantine patients at an incidence greater than placebo. Other AEs reported by >5% of memantine patients, but at an incidence less than placebo, included influenza-like symptoms, diarrhea, agitation, and urinary tract infection. There were no clinically important mean changes from baseline to endpoint in vital signs or clinical laboratory parameters. These pooled analyses demonstrated that memantine has a tolerability profile similar to placebo and is safe for moderate to severe AD patients.

### Funding Source: Forest Laboratories, Inc.

### **REFERENCES:**

- 1. Memantine in moderate-to-severe Alzheimer's disease. NEJM 2003; 348(14):1333–1341.
- 2. Farlow MR, Tariot PN, Grossberg GT, Gergel I, Graham S, Jin J: Memantine/donepezil dual therapy is superior to placebo/donepezil therapy for treatment of moderate to severe Alzheimer's disease. Neurology 2003; 60(Suppl 1):A412.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 219

Saturday, November 1 3:00 p.m.-4:30 p.m.

### **TARGET AUDIENCE:**

Meeting attendees

## OPEN-LABEL QUETIAPINE TRIAL IN YOUTHS WITH DEVELOPMENTAL DISORDERS

AstraZeneca Pharmaceuticals

Roger J. Jou, M.D., Resident, Department of Psychiatry, University of Pittsburgh, P.O. Box 42316, Pittsburgh, PA 15203; Antonio Y. Hardan, M.D.; Benjamin Harden, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to (1) recognize that quetiapine may be beneficial to children and adolescents with developmental disorders, and (2) identify the potential side effects encountered with the use of this medication in this population.

### **SUMMARY:**

Objective: To examine the efficacy and safety of quetiapine in children and adolescents with autism and/or mental retardation.

*Method:* A retrospective chart review was conducted in a specialized outpatient clinic to identify individuals with these developmental disorders.

Results: Fourteen patients were identified, and nine were found to be responders based on the Clinical Global Impression-Global Improvement scale scores. Significant improvements were observed in the conduct, hyperactivity, and inattention subscales of the Connors' Parent Rating Scale in the autistic subgroup and on the conduct subscale in the mental retardation subgroup. Sedation was the most common adverse event, with no patients requiring treatment termination.

Conclusions: The results of this pilot study suggest that quetiapine may be beneficial to individuals with autism and/or mental retardation; however, larger double-blind, placebo-controlled trials using more comprehensive assessment scales are warranted to further assess the safety and efficacy of quetiapine in this population.

Funding Source: Support contributed by AstraZeneca Pharmaceuticals, L.P. and NIMH grant MH 64027.

### **REFERENCES:**

- 1. Adityanjee, Schulz SC: Clinical use of quetiapine in disease states other than schizophrenia. J Clin Psychiatry 2002; 63(suppl 13):32–38.
- 2. Martin A, Koenig K, Scahill L, Bregman J: Case report: open-label quetiapine in the treatment of children and adolescents with autistic disorder. J Child Adolesc Psychopharmacol 1999; 9; 99–107.

Poster 220

Saturday, November 1 3:00 p.m.-4:30 p.m.

## TOPIRAMATE FOR BULIMIA NERVOSA: OPEN-LABEL FOLLOW-UP OF A CONTROLLED TRIAL

Ortho-McNeil Pharmaceuticals. Inc.

Scott P. Hoopes, M.D., Medical Director, Clinical Trials, Mountain West, 315 North Allumbaugh Street, Boise, ID 83704; Dawson W. Hedges, M.D.; Frederick Reimberr, M.D.

### **EDUCATIONAL OBJECTIVES:**

Review the long-term efficacy and safety of topiramate for bulimia nervosa.

### **SUMMARY:**

Objective: Assess the efficacy and safety of topiramate (TPM) for treatment of bulimia nervosa in a tenweek, double-blind (DB), placebo-controlled study with a 40-week, open-label extension (OLE).

Methods: Patients receiving ≥1 dose TPM and providing ≥1 efficacy evaluation during the DB and/or OLE were analyzed. For patients receiving TPM during DB and OLE, the DB baseline was used; for patients receiving TPM during OLE only, the end of DB represented baseline. TPM was titrated by 25 mg/wk to 400 mg/day or maximum tolerated dose.

Results: Forty-three patients received TPM for a median duration of 125 days and median final dose of 100 mg/day. The primary outcome, mean weekly binge and/ or purge days, declined from a baseline of 4.5 to 0.8 at Month 10. 11/14 patients were rated very much or much improved on CGI-I and PGI-I scores at Month 10. Eating Disorder Inventory improved for Drive for Thinness, Body Dissatisfaction, and Bulimia subscales; Eating Attitudes Test improved for Dieting and Bulimia/Food Preoccupation. HAM-A fell from 6.2 at baseline to 2.1. Most common adverse events were paresthesia, flu-like symptoms, fatigue, concentration/attention difficulty.

Conclusions: Topiramate appears to be associated with long-term improvement in eating behaviors and attitudes in patients with bulimia nervosa.

This study was supported by Ortho-McNeil Pharmaceuticals.

### **REFERENCES:**

1. Barbee JG: Topiramate in the treatment of severe bulimia nervosa with comorbid mood disorders: A case series. Int J Eat Disord 2003; 33:468–472.

2. Felstrom A, Blackshaw S. Am J Psychiatry 2002; 159:1246–1247.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 221

Saturday, November 1 3:00 p.m.-4:30 p.m.

### DIVALPROEX AS ADJUNCTIVE THERAPY TO ATYPICAL ANTIPSYCHOTIC MEDICATIONS

Abbott Laboratories

Robert L. Horne, M.D., Clinical Associate Professor, Department of Psychiatry, University of Nevada School of Medicine, Lake Mead Hospital, 2915 West Charleston Boulevard, Suite 4, Las Vegas, NV 89102; Cedric M. Cunanan, B.S.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to treat residual depression and irritability in patients who are being treated with atypical antipsychotic medication.

### **SUMMARY:**

Multiple medications have been used as adjuncts to atypical antipsychotics in patients who have residual symptoms, including depression and irritability. This open-label study investigated the ability of divalproex to reduce residual depression and irritability in partial responders to antipsychotics. Subjects were 49 patients  $(\bar{x} \text{ age} = 37)$  stabilized on an antipsychotic for at least a month (range 1-10). DSM-IV diagnoses were: schizophrenia, N=32 (65%), schizoaffective N=6 (12%), bipolar disorder N=8 (16%), major depressive disorder N= 3, (6%). Antipsychotics used were: clozapine N=11, risperidone N=21, olanzapine N=10, and quetiapine N= 7. Psychopathology was measured at baseline and after four weeks via Patient Target Complaints, Brief Psychiatric Rating Scale, and Clinical Global Improvement. Twelve patients identified depression alone, 14 identified irritability alone, and 23 identified both as a symptom in which they wanted improvement. Divalproex DR was begun at 20 mg/kg and adjusted by blood level (x̄ dose=938mg, \(\bar{x}\) level=84mcg/ml). There were no significant differences in response among antipsychotic medications. There was significant improvement in depression ( $\bar{x}$  change PTC -5.0+2.6 p<.0001), in Irritability  $(\bar{x} \text{ change PTC } -3.8\pm2.6 \text{ p<}.0001), \text{ in Total BPRS } (\bar{x} \text{ p<}.0001)$ Change= -7.9+7.1, p<.0001), and CGI-S ( $\bar{x}$  change=  $1.7\pm0.9$ , p<.0001). CGI-C: very much improved: 20%, much improved: 51%, minimally improved: 10%, unchanged: 18%. When response is defined more strictly

as ≥30% reduction in BPRS, 25% responded. Thus, divalproex may be a useful adjunct to atypical antipsychotics in treating both depression and irritability.

Funding Source: Abbott Laboratories.

### **REFERENCES:**

- Casey D, Daniel D, Wasser A, Tracy K, Wozniak P. Sommerville K: Effect of divalproex combined with olanzapine or risperidone in patients with an acute exacerbation of schizophrenia. Neuropsychopharmacology 2003; 28: 182–192.
- Bowden CL, Calabrese JR, McElroy SL, et al: A randomized, placebo-controlled, 12-month trial of divalproex and lithium in treatment of outpatients with bipolar I disorder. Divalproex Maintenance Study Group. Arch Gen Psychiatry 2000; 57: 481-9.

### TARGET AUDIENCE:

**Psychiatrists** 

Poster 222

Saturday, November 1 3:00 p.m.-4:30 p.m.

## USE OF ORALLY DISINTEGRATING OLANZAPINE FOR CONTROL OF ACUTE AGITATION

Shahid Hussain, M.D., Instructor, Department of Psychiatry, Wayne State University, 4201 St. Antoine, Detroit, MI 48201; Victor C. Ajluni, M.D., Assistant Professor, Department of Psychiatry, Wayne State University, 4201 St. Antoine, Detroit, MI 48201; Alireza Amirsadri, M.D.; Luay M. Haddad, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should be able to appreciate the potential utility of Zyprexa Zydis in the emergency psychiatric setting.

#### **SUMMARY:**

*Background:* Agitation is a common presentation to psychiatric emergency rooms and demands quick assessment and treatment.

Methods: A case series in an inner-city psychiatric emergency center where patients were assessed for level of agitation using standard methods. Funding was departmental. Patients requiring medications for behavioral control were offered choice of either oral or intramuscular medication. Patients accepting oral medication were given orally disintegrating olanzapine, unless contraindicated. Treatment was started in almost all cases with 20 mg. of olanzapine after a modified five-item PANSS (hostility, uncooperativeness, hallucinatory behavior, excitement, poor impulse control) had been com-

pleted. Patients were reevaluated at 20-minute intervals for one hour. Sedation was measured on a 0 to III scale.

Results: Forty-seven patients were assessed. Orally disintegrating olanzapine led to a marked decline in the total and individual item scores by 60 minutes. Decline in hallucinatory behavior was seen to be least rapid, whereas hostility tended to decline quicker. Sixty-one percent of the subjects were either asleep or moderately drowsy at the end of 60 minutes.

Conclusion: This study suggests that orally disintegrating olanzapine is an effective compound for use in the emergency psychiatric setting. A head-to-head comparison with better established treatment alternatives may allow for broader acceptance.

### **REFERENCES:**

- 1. Chue et al: Dissolution profile, tolerability & acceptability of the orally disintegrating Olanzapine tablet in patients with schizophrenia. Can J Psych 2002; 47(8):771-774.
- 2. Allen MH: Managing the agitated psychotic patient: a reappraisal of the evidence. J Clin Psychiatry 2000; 61(suppl 14):11–20.

#### **TARGET AUDIENCE:**

Psychiatrists dealing with acutely agitated patients.

Poster 223

Saturday, November 1 3:00 p.m.-4:30 p.m.

### TOPIRAMATE FOR THE TREATMENT OF ALCOHOL DEPENDENCE

Ortho-McNeil Parmaceuticals, Inc.

Bankole A. Johnson, M.D., Ph.D., Professor, Department of Psychiatry, University of Texas Health Sciences Center at San Antonio, 7703 Floyd Curl Drive, MS-7793, San Antonio, TX 78229-3900; Nassima Ait-Daoud, M.D., Assistant Professor, Department of Psychiatry, University of Texas Health Sciences Center at San Antonio, 7703 Floyd Curl Drive, MS-7793, San Antonio, TX 78229-3900; Charles L. Bowden, M.D.; Jennie Ma, Ph.D.; John Roache, Ph.D.; Norman R. Rosenthal, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to discuss the efficacy of an anticonvulsant-type medication for treating alcoholism.

### **SUMMARY:**

Midbrain and cortical brain reward systems that modulate dopamine function are critical to establishing and maintaining alcohol-seeking behavior. Additionally, chronic alcoholics develop long-term GABA/glutamate neuronal changes that result in negative affect with abstinence. Alcohol-seeking behavior may, therefore, be maintained by alcohol's rewarding effects and the desire to avoid abstinence-induced negative affect. Based upon this knowledge, we hypothesized that topiramate, a substituted fructopyranose derivative, would reduce alcohol-induced reward, and dampen neuronal hyperexcitability following abstinence. Briefly, these effects are probably due to topiramate-induced facilitation of central GABAergic function and the inhibition of chronic alcohol-mediated supersensitivity of AMPA/kainate glutamate receptors. As a proof-of-concept test of this hypothesis, we showed, in a double-blind, randomized clinical trial (N=150), that topiramate (up to 300 mg/ day) was superior to placebo as an adjunct to medication compliance management at significantly reducing the amount and severity of drinking, and the objective measure of alcohol consumption, plasma GGT. Importantly, topiramate recipients also had significantly greater improvement in global well-being and on psychosocial functioning. Average effect sizes for the therapeutic difference between topiramate and placebo were in the medium range. We propose that topiramate is a novel and promising medication for treating alcoholism.

Supported in part by funding from Ortho-McNeil Pharmaceutical.

### **REFERENCES:**

- 1. Johnson BA, Ait-Daoud N: Neuropharmacological treatments for alcoholism: scientific basis and clinical findings. Psychopharmacology 2000; 149:327–44.
- Weiss F. Porrino LJ: Behavioural neurobiology of alcohol addiction: recent advances and challenges. J Neurosci 2002; 22:3332-3337.

### **TARGET AUDIENCE:**

Psychiatrists, psychologists, primary care physicians

Poster 224

Saturday, November 1 3:00 p.m.-4:30 p.m.

## ATOMOXETINE OPEN-LABEL TRIAL IN YOUTHS WITH AUTISM SPECTRUM DISORDERS

Roger J. Jou, M.D., Resident, Department of Psychiatry, University of Pittsburgh, P.O. Box 42316, Pittsburgh, PA 15203; Antonio Y. Hardan, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize that multiple pharmacologic options exist for treating youths with autism spectrum disorders, recognize that atomoxetine is potentially effective for treating disruptive behaviors in this population, and recognize the limitations of this study and interpret its results considering these methodological limitations.

### **SUMMARY:**

Objective: The authors assessed the effectiveness and tolerability of once-daily atomoxetine administration in treating children and adolescents with autism spectrum disorders.

Method: A retrospective chart review was conducted in an outpatient clinic specialized in treating children and adolescents with developmental disabilities. All patients treated with atomoxetine were identified. Response to treatment was judged using the Global Improvement item of the Clinical Global Impressions scale (CGI-GI) and the Conners Parent Scale (CPS).

Results: Ten consecutive patients were identified (eight males, two females; mean age =  $11.5\pm2.5$  years). Mean duration of treatment was  $7.1\pm4.0$  weeks with a mean dose of  $32.8\pm8.6$  mg. Seven patients were judged as treatment responders. Adverse events included one patient experiencing increased mood swings leading to the discontinuation of atomoxetine and another constipation which was successfully treated with docusate sodium.

Conclusion: The results of this pilot study suggest that atomoxetine might be beneficial to individuals with developmental disorders. Prospective open-label or double-blind, placebo-controlled trials over longer treatment periods using more comprehensive assessment scales are warranted for further assessment of efficacy and safety.

#### REFERENCES:

- 1. Posey DJ, McDougle CJ: The pharmacotherapy of target symptoms associated with autistic disorder and other pervasive developmental disorders. Harvard Review of Psychiatry 2000; 8:45–63.
- 2. Hardan A, Stahl R: Psychopathology in children and adolescents with developmental disorders. Res Dev Disabil 1997; 18:369–382.

### **TARGET AUDIENCE:**

Child and adolescent psychiatrists

Poster 225

Saturday, November 1 3:00 p.m.-4:30 p.m.

## TOPIRAMATE EXPERIENCE IN A PSYCHIATRIC CLINIC WEIGHT MANAGEMENT PROGRAM

Ortho-McNeil Pharmaceuticals, Inc.

Renu Kotwal, M.D., Assistant Professor of Clinical Psychiatry, University of Cincinnati College of Medicine,

231 Albert Sabin Way, Cincinnati, OH 45267; Susan L. McElroy, M.D.; Shishuka S. Malhotra, M.D.

### **EDUCATIONAL OBJECTIVES:**

Review the long-term efficacy and safety of topiramate for weight management at a psychiatric clinic.

### **SUMMARY:**

Objective: Assess long-term effectiveness of topiramate (TPM) in a psychiatric weight management program.

Methods: Naturalistic review of all patients seen for weight management between 2000–2002 who were assessed by structured clinical interview for eating and/ or mood disorders and treated with TPM as primary/ adjunctive therapy. Topiramate was titrated by 25 mg/ wk to median daily dose of 127 mg. Efficacy was assessed by mean weekly binge episodes, CGI-Severity, and weight/BMI.

Results: A total of 148 patients (98% eating spectrum disorder ± mood disorders; 74% adjunctive TPM therapy), mean age 45 ± 10 years, and mean baseline weight/BMI 111 ± 29 kg and 40 kg/m², were followed for a median treatment duration of 110 days (range 1–688). Patients on topiramate experienced significant reductions in mean weekly binge frequency to 1.2 binges/week, a 48% change from baseline. Shift analysis of CGI-Severity showed 37% of patients at final visit improved to a normal or borderline-normal rating compared to 0.7% at baseline. Patients lost an average of 4.7 kg and BMI decreased 1.7 kg/m². Correlations with associated mood disorders will be shown. Most common adverse events included paresthesia, fatigue, dry mouth, and taste perversion.

Conclusions: Topiramate appeared effective for outpatient weight management in patients with obesity associated with eating/mood disorders.

This study was supported by Ortho-McNeil Pharmaceutical, Inc.

### **REFERENCES:**

- 1. McElroy SL, Arnold LM, Shapira NA, et al: Am J Psychiatry 2003; 160:255–261.
- 2. Shapira NA, Goldsmith TD, McElroy SL. J Clin Psychiatry 2000; 61:368–372.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 226

Saturday, November 1 3:00 p.m.-4:30 p.m.

### DULOXETINE IN THE TREATMENT OF THE PAIN ASSOCIATED WITH DIABETIC NEUROPATHY

Eli Lilly and Company

Thomas C. Lee, M.A., Scientific Communications Associate, Lilly Research, Eli Lilly and Company, Lilly Cor-

porate Center, Indianapolis, IN 46285; David J. Poster 227 Goldstein, M.D., Ph.D.; Yili Lu, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the role of serotonin and norepinephrine in the mediation of endogenous analgesic mechanisms and understand that duloxetine, a potent and balanced dual-reuptake inhibitor of serotonin and norepinephrine, is efficacious in the treatment of pain associated with diabetic neuropathy.

### **SUMMARY:**

Objective: To examine the efficacy and safety of duloxetine, a balanced dual-reuptake inhibitor of serotonin (5-HT) and norepinephrine (NE) (Bymaster et al., 2001), in the treatment of pain associated with diabetic neuropathy. Both 5-HT and NE are thought to inhibit pain via spinal chord pathways (Basbaum and Fields, 1984).

Methods: In a 12-week, multicenter, double-blind study, 457 patients with diabetic neuropathy were randomly assigned to treatment with duloxetine 60 mg BID, 60 mg QD, 20 mg QD, or placebo. The primary efficacy measure was the weekly mean score of the 24-Hour Average Pain Severity on the 11-point Likert scale.

Results: Duloxetine 60mg QD and BID demonstrated statistically significant improvement compared with placebo on the 24-Hour Average Pain Severity score, beginning one week after randomization and continuing through the acute phase. Duloxetine also separated from placebo on nearly all of the secondary measures. Safety and tolerability were very good, with less than 20% discontinuation due to adverse events.

Conclusion: This study provides definitive evidence that duloxetine at 60 mg QD and 60 mg BID was safe and effective in the treatment of pain associated with diabetic neuropathy.

Funding Source: Supported by funding from Eli Lilly & Company.

### **REFERENCES:**

- 1. Basbaum AI, Fields HL: Endogenous pain control systems: brainstem spinal pathways and endorphin circuitry. Annu Rev Neurosci 1984; 7:309-338.
- 2. Bymaster FP, Dreshfield-Ahmad LJ, Threlkeld PG, et al: Comparative affinity of duloxetine and venlafaxine for serotonin and norepinephrine transporters in vitro and in vivo, human serotonin receptor subtypes and other neuronal receptors. Neuropsychopharmacology 2001; 25:871-880.

### **TARGET AUDIENCE:**

Prescribing psychiatrists and clinicians

Poster 227 Has Been Moved to Friday, October 31, From 3:00 p.m.-4:30 p.m. Its New Poster Number Is 151-A.

Poster 228

Saturday, November 1 3:00 p.m.-4:30 p.m.

### UTILIZATION OF ZIPRASIDONE IN **ELDERLY NURSING FACILITY** RESIDENTS

Pfizer Inc.

Antony D. Loebel, M.D., Medical Director, Pfizer Inc., 235 East 42nd Street, Eighth Floor, New York, NY 10017; Joan A. Mackell, Ph.D.; Sharon B. Dybicz, Pharm.D.; W. Gary Erwin, Pharm.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants should be able to discuss the reported findings on ziprasidone utilization in elderly patients requiring antipsychotic medications in skilled nursing facilities.

### **SUMMARY:**

Objective: To determine patterns of ziprasidone utilization in U.S. geriatric skilled nursing facilities (SNFs).

Methods: Omnicare's prescription claims data repository provided information on patients ≥65 years old who received ziprasidone between January 2001 and November 2002. Ziprasidone utilization by age group, average daily dose (ADD), need for titration, and concomitant medication use was evaluated.

Results: Increased use of ziprasidone in the 948 patients evaluated was reported in more recent compared with earlier observation months (136 for March 2002. 215 for June 2002, and 255 for September 2002). At last available dosing, ADD was 56.6 mg. Mean age was 78 years, and ADDs by age group were 67 mg (65-74 years old), 53.6 mg (75–84 years old), and 45.2 mg ( $\geq$ 85 years old). Among the 25% of patients requiring dose titration, average maximum ADD was 58.8 mg, and maximum ADDs by age group were 64.3 mg (65-74 years-old), 55.7 mg (75–84 years old), and 56.0 mg ( $\geq$ 85 years old). Concomitant medications were anxiolytics (35.9% of patients), SSRIs (34.1%), and miscellaneous antidepressants (29.9%).

Conclusions: Ziprasidone may be a useful option in elderly patients requiring antipsychotic therapy. It may be coadministered with anxiolytics and antidepressants, and dose titration is not usually required.

Funding Source: Pfizer Inc.

### POSTER SESSIONS

### **REFERENCES:**

- 1. Byerly MJ, Weber MT, Brooks DL, Snow LR, Worley MA, Lescouflair E: Antipsychotic medications and the elderly: effects on cognition and implications for use. Drugs Aging 2001; 18:45–61.
- Hirsch SR, Kissling W, Bauml J, Power A, O'Connor R: A 28-week comparison of ziprasidone and haloperidol in outpatients with stable schizophrenia. J Clin Psychiatry 2002; 63:516-523.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 229

Saturday, November 1 3:00 p.m.-4:30 p.m.

### CLINICAL EXPERIENCE WITH ARIPIPRAZOLE IN THE ELDERLY

Subramoniam Madhusoodanan, M.D., Clinical Professor, Department of Psychiatry, State University of New York, Health Sciences Center, 327 Beach 19th Street, Far Rockaway, NY 11691; Olivera J. Bogunovic, M.D., Department of Psychiatry, State University of New York at Buffalo, TLC Health Network, 845 Routes 5 and 20, Irving, NY 14081; Sanjay Gupta, M.D.; Ronald Brenner, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be familiar with the use and safety profile of aripiprazole in elderly patients with psychotic disorders.

### **SUMMARY:**

Aripiprazole is a quinolinone derivative with partial agonist activity at dopamine D2 and serotonin 5HT1A receptors and is also an antagonist at 5HT2A receptors.

Objective: To study the safety and efficacy of aripiprazole in elderly patients with psychosis.

Methods: Data were collected retrospectively in 10 elderly patients with psychotic disorders.

Results: Seven patients had a diagnosis of schizophrenia and three patients had a diagnosis of schizoaffective disorder. All patients had concurrent medical illness and were on concomitant medications. The mean dose of aripiprazole was 17.5 mg/day. Seven patients responded to treatment, 2 did not respond and 1 had a partial response. Treatment was discontinued in the two patients who did not respond to treatment. Side effects observed were, vomiting (n-2), diarrhea (n=2), postural hypotension (n=4) and sleepiness (n=1).

Conclusion: Aripiprazole appears to be a relatively safe and effective medication for elderly patients with psychosis.

### **REFERENCES:**

- 1. McGaven JK, Goa KL: Aripiprazole. CNS Drugs 2002; 16:779–786.
- 2. Inoue A, Miki S, Kikuchi T, Morita S, Ueda H, Misu Y, Nakata Y: Aripirazole, a novel antipsychotic drug, inhibits quinpirole evoked GTP-ase activity but does not up regulate dopamine receptor D2 following repeated treatment in the rat striatum. Eur J Pharmacol 1997; 321:105–111.

### **TARGET AUDIENCE:**

Adult and geriatric psychiatrists

Poster 230

Saturday, November 1 3:00 p.m.-4:30 p.m.

## THE EFFICACY OF OLANZAPINE AND HALOPERIDOL IN THE TREATMENT OF PTSD WITH SECONDARY PSYCHOSIS

Eli Lilly and Company

Gina M. Manguno-Mire, Ph.D., Assistant Professor, Department of Psychiatry and Neurology, Tulane University Medical Center, 1440 Canal Street, TB-53, New Orleans, LA 70112; Frederick J. Sautter, Ph.D., Professor, Department of Psychiatry and Neurology, Tulane University Medical Center, 1440 Canal Street, TB-53, New Orleans, LA 70112; Janet E. Johnson, M.D.; Stefanie Washington, M.A.; Madeline M. Uddo, Ph.D.; Karin E. Thomson, Ph.D.; Nazmul Talukdar, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand factors related to the pharmacological treatment of PTSD with secondary psychosis.

### **SUMMARY:**

Approximately 20% to 40% of individuals diagnosed with severe posttraumatic stress disorder (PTSD) demonstrate clinically significant positive psychotic symptoms. Research exists to support the finding of an increased prevalence of PTSD with secondary psychosis among some ethnic minorities. We examined the relative efficacy of olanzapine (n=7) and haloperidol (n=8) in a sample of 15 male, predominantly African-American combat veterans with chronic PTSD and secondary psychosis. At the end of a six-week, randomized, doubleblind trial, patients maintained on olanzapine (n=6) reported significant reductions in core symptoms in PTSD and evidenced global improvements in psychiatric functioning, compared with patients treated with haloperidol (n=4). Reductions in psychotic symptomatology were comparable. There was no clinical improvement for either group on measures of depression or interpersonal/ occupational functioning. Treatment-related dropout occurred more frequently for patients on haloperidol, primarily due to EPS. Patients on olanzapine were more likely to remain in treatment, although follow-up evaluations revealed that subsequent treatment discontinuation was associated with exacerbations in depressive symptoms. Preliminary evidence for the utility of olanzapine in patients with PTSD and secondary psychosis has been obtained; however, future studies should evaluate how results generalize to other populations and what role comorbid depression plays in successful long-term treatment planning.

This study was funded by a grant from Eli Lilly & Co.

#### **REFERENCES:**

- 1. Hammer MB, Frueb C, Ulmer HG, Arana GN: Psychotic features and illness severity in combat veterans with chronic posttraumatic stress disorder. Biol Psychiatry 1999; 45:846–52.
- Sautter FJ, Brailey K, Uddo MM, et al: PTSD and comorbid psychotic disorder: comparison with veterans diagnosed with PTSD or psychotic disorder. J Trauma Stress 1999; 12:73–88.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 231

Saturday, November 1 3:00 p.m.-4:30 p.m.

## LONG-TERM USE OF TOPIRAMATE IN THE TREATMENT OF BINGE EATING DISORDER

Ortho-McNeil Pharmaceuticals, Inc.

Susan L. McElroy, M.D., Professor, Department of Psychiatry, University of Cincinnati College of Medicine, 231 Albert Sabin Way, ML 559, Cincinnati, OH 45267; Lesley M. Arnold, M.D.; Nathan A. Shapiro, M.D., Ph.D.; Judy Capece

### **EDUCATIONAL OBJECTIVES:**

To review the long-term efficacy and safety of topiramate for binge-eating disorder.

### **SUMMARY:**

Objective: Assess long-term effectiveness of topiramate (TPM) in a psychiatric weight management program.

Methods: Naturalistic review of all patients seen for weight management between 2000–2002 who were assessed by structured clinical interview for eating and/or mood disorders and treated with TPM as primary/adjunctive therapy. Topiramate was titrated by 25 mg/wk to median daily dose of 200 mg. Efficacy was as-

sessed by mean weekly binge episodes CGI-Severity, and weight/BMI.

Results: A total of 148 patients (89% eating spectrum disorder ± mood disorders; 74% adjunctive TPM therapy), mean age 45 ± 10 years, and mean baseline weight/BMI 111 ± 26 kg and 40 kg/m², were followed for a median treatment duration of 110 days (range 1–688). Patients on topiramate experienced significant reductions in mean weekly binge frequency to 1.2 binges/week, a 48% change from baseline. Shift analysis of CGI-Severity showed 37% of patients at final visit improved to a normal or borderline-normal rating compared with 0.7% at baseline. Patients lost an average of 4.7kg and BMI decreased 1.7 kg/m². Correlations with associated mood disorders will be shown. Most common adverse events included paresthesia, fatigue, dry mouth, taste perversion.

Conclusions: Topiramate appeared effective for outpatient weight management in patients with obesity associated with eating/mood disorders.

This study was supported by Ortho-McNeil Pharmaceutical, Inc.

### **REFERENCES:**

- 1. McElroy SL, Arnold LM, Shapira NA, et al: Am J Psychiatry 2003; 160:255-261.
- 2. Shapira NA, Goldsmith TD, McElroy SL: J Clin Psychiatry 2000; 61:368-372.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 232

Saturday, November 1 3:00 p.m.-4:30 p.m.

### FACTORS ASSOCIATED WITH PRESCRIBING STIMULANTS IN CHILDREN AND ADOLESCENTS

Melissa E. Abraham, Ph.D., M.S., Instructor, Department of Psychiatry, Harvard Medical School, Outpatient Psychiatric Service, Massachusetts General Hospital, 15 Parkman Street, WAC-812, Boston, MA 02114; John S. Lyons, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should learn about potential clinical factors associated with the prescribing practices of stimulant medications in a Medicaid population of children and adolescents. This descriptive study will raise questions for the participant about the appropriateness of stimulant prescribing practices in a system of care.

### **SUMMARY:**

Attention deficit hyperactivity disorder (ADHD) is a common childhood disorder that has engendered much media coverage and public debate. The primary focus of the public debate is whether stimulant medication is prescribed to children who do not need it, or not prescribed to children in whom it is indicated. The present study uses a randomly selected sample of 1,592 children in a statewide mental health system to examine the factors associated with stimulant prescribing patterns, examining a variety of program types, across a range of levels of care. Logistic regression stratified by program type demonstrated that children with ADHD who do not receive stimulant treatment have fewer caregiver resources, are less likely to be in the custody of child welfare, and are less likely to have a comorbid diagnosis of PTSD than those who do receive stimulant medication. Children without ADHD but who receive stimulant treatment are more likely to be male, older, have symptoms of ADHD, have a diagnosis of oppositional defiant disorder, and to have more difficulties in caregiver functioning than other children without ADHD. Findings are discussed in terms of clinical decision-making, practice parameters, and future research.

### **REFERENCES:**

- 1. Zito JM, Safer DJ, dosReis S, et al: Psychotropic practice patterns for youth: a 10-year perspective. Arch Pediatr Adol Med 2003; 157:17–25.
- Angold A, Erkanli A, Egger HL, Costello EJ: Stimulant treatment for children: a community perspective. JAACA 2000; 39:975–984.

### **TARGET AUDIENCE:**

Child psychiatry, pharmacoepidemiology

Poster 233

Saturday, November 1 3:00 p.m.-4:30 p.m.

### QUETIAPINE IN THE TREATMENT OF DELUSIONAL DISORDERS

AstraZeneca Pharmaceuticals

Mark Opler, Ph.D., M.P.H., Epidemiology Department, Columbia University, 722 West 168th Street, New York, NY 10032; Lewis A. Opler, M.D., Ph.D.; Jamie A. Mullen, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize that quetiapine is associated with symptom improvement in patients with delusional disorder.

### **SUMMARY:**

Objective: To determine whether the second-generation antipsychotic quetiapine has efficacy in treating patients with delusional disorder.

Methods: Changes in ratings on the Positive and Negative Syndrome Scale (PANSS) were analyzed by using a two-tailed t test for patients who met Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria for delusional disorder who participated in the Quetiapine Experience With Safety and Tolerability (QUEST) study.

Results: Ten patients with delusional disorder treated with quetiapine were identified: eight men and two women (mean age=46.3 years; mean duration of treatment=94.7 days). Two patients were excluded from the analysis because they did not meet illness severity or dosing criteria. The remaining eight patients showed significant decreases from baseline on PANSS total (-19.5, P=0.007), PANSS positive scale (-4.13, P=0.002), and PANSS delusions item scores (-1.38, P=0.028). Changes on the PANSS negative scale failed to achieve statistical significance (-3.25, P=0.087).

Conclusion: Quetiapine treatment was associated with improvement in symptom severity in 8 patients with delusional disorder. Further studies are needed testing the efficacy of quetiapine in the treatment of delusional disorder.

Funding Source: Supported by AstraZeneca Pharmaceuticals, L.P.

### **REFERENCES:**

- Mullen J, Jibson MD, Sweitzer D: A comparison of the relative safety, efficacy, and tolerability of quetiapine and risperidone in outpatients with schizophrenia and other psychotic disorders: the quetiapine experience with safety and tolerability (QUEST) study. Clin Ther 2001; 23:1839–1854.
- Opler LA, Klahr DM, Ramirez PM: Pharmacological treatment of delusions. Psychiatric Clin North Am 1995; 18:379–391.

### **TARGET AUDIENCE:**

IPS meeting attendees

Poster 234

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ARIPIPRAZOLE IN PEDIATRIC CONDUCT DISORDER: A PILOT STUDY

Bristol-Myers Squibb Company

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the pharmacokinetics, pharmacodynamics, and safety of aripiprazole in children and adolescents with conduct disorder.

### **SUMMARY:**

Objective: To assess the multiple-dose pharmacokinetics, pharmacodynamics, and safety profile of aripiprazole in children and adolescents with conduct disorder.

Methods: Children (n=12, 6-12 years) and adolescents (n=11, 13-17 years), with a DSM-IV diagnosis for conduct disorder or oppositional defiant disorder and a score of 2 or 3 (mild or moderately severe) on the Rating of Aggression Against People and/or Property (RAAPP) were enrolled in an open-label, 15-day study. Aripiprazole doses based on baseline weight (<25kg=1mg, 25-50kg=2mg, 50-70kg=5mg, and >70kg=10mg) were administered on Day 1 through Day 14. Doses could be reduced at investigator's discretion. Safety, pharmacokinetic, and pharmacodynamic assessments were performed at predetermined times.

Results: Steady state aripiprazole concentrations were attained within 14 days in both children and adolescents, similar to adults. Aripiprazole apparent oral clearance is similar in adolescents and adults. Improvement in RAAPP scores and CGI-Severity scores occurred in both children and adolescents. No serious adverse events were reported and no subjects discontinued due to an adverse event.

Conclusion: Short-term administration of aripiprazole was generally safe, well tolerated, and apparently beneficial in reducing aggressive behavior in children and adolescents with conduct disorder. The pharmacokinetics of aripiprazole in this patient population was similar to that in adults.

Funding Source: Bristol-Myers Squibb Company

### **REFERENCES:**

- Findling RL, Schulz SC, Reed MD, Blumer JL: The antipsychotics: a pediatric perspective. Pediatr Clin North Am 1998; 45(5):1205–32.
- Findling RL, McNamara NK, Gracious BL: Paediatric uses of atypical antipsychotics. Expert Opinion on Pharmacotherapy 2000; 1:935–945.

### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia. Poster 235

Saturday, November 1 3:00 p.m.-4:30 p.m.

### DIFFERENTIAL RISK OF DIABETIC KETOACIDOSIS WITH EXPOSURE TO RISPERIDONE OR OLANZAPINE

Janssen Pharmaceutica

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the increased risk of developing diabetic ketoacidosis is higher in patients receiving olanzapine than those receiving risperidone.

### **SUMMARY:**

Objective: To assess the risk of diabetic ketoacidosis (DKA) in patients using risperidone and olanzapine.

Methods: Retrospective cohorts were evaluated for presence of DKA diagnoses (ICD-9, 250, 1x) using California Medicaid data. Potentially attributable DKA cases were defined as those occurring within 45 days following an antipsychotic dispensation. Relative risk of DKA was evaluated using chi-square analysis.

Results: The risk of DKA per 10,000 patients was 190.2 in diabetics, 48.8 in schizophrenia/bipolar, 35.5 in atypical antipsychotic users, and 33.1 in initial antipsychotic users (i.e., no atypical for six months prior). Of 102,632 patients who used at least one atypical antipsychotic (risperidone or olanzapine), 86 potentially attributable cases were identified (31 risperidone and 55 olanzapine). The relative risk of development of DKA for olanzapine versus risperidone patients was 1.8 (p= 0.0096). For patients that developed DKA, there were no significant differences between olanzapine and risperidone patients for race, history of diabetes, conventional antipsychotics or diabetogenic drugs.

Conclusion: The risk of DKA was significantly greater for patients with exposure to olanzapine than for risperidone. Additional study is needed to confirm these findings.

Supported by Janssen Pharmaceutica Products, L.P.

#### **REFERENCES:**

1. Ananth J, Venkatesh R, Burgoyne K, Gunatilake S: Atypical antipsychotic drug use and diabetes. Psychother Psychosom 2002; 71(5):244–254.

### **POSTER SESSIONS**

2. Haupt DW, Newcomer JW: Hyperglycemia and antipsychotic medications. J Clin Psychiatry 2001; 62 Suppl 27:15-26.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 236

Saturday, November 1 3:00 p.m.-4:30 p.m.

### EFFECTS OF OPEN-LABEL QUETIAPINE ON SLEEP IN PTSD

AstraZeneca Pharmaceuticals

Mark B. Hamner, M.D., Director, Department of Psychiatry, Ralph H. Johnson VA Medical Center, and PTSD Clinic, 109 Bee Street, Charleston, SC 29403; Sophie Robert, Pharm.D.; Samet Kose, M.D.; Helen G. Ulmer, M.S.N.; Sarah E. Deitsch, Ph.D.; Jeffrey P. Lorberbaum, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to characterize the effectiveness of quetiapine in improving sleep quality in combat veterans with posttraumatic stress disorder.

### **SUMMARY:**

Objective: To analyze data on sleep from a recent clinical trial of quetiapine in patients with posttraumatic stress disorder (PTSD).

Methods: Combat veterans with PTSD received openlabel quetiapine for six weeks, primarily as an adjunct to antidepressant therapy. Quetiapine was initiated at 25 mg at bedtime, with dose adjustment guided by tolerability and clinical response. Primary outcome measures (Clinician Administered PTSD Scale and measures of psychosis and depression) have been previously reported. Effects on sleep were measured with the Pittsburgh Sleep Quality Index (PSQI) and a PTSD-specific addendum (PSQI-A).

Results: Of 20 enrolled patients, 19 were evaluated for efficacy and 18 completed the study. Mean total daily dose of quetiapine was 100 mg (range, 25–300 mg/d). Mean global PSQI and PSQI-A scores, and several subscale scores, decreased significantly from baseline to endpoint. Change in global PSQI scores and subscale scores such as sleep quality, latency, and duration retained significance with Bonferroni correction. The most common adverse event, mild sedation, was reported by seven patients and led to discontinuation in one patient.

Conclusions: This open-label trial suggests that quetiapine may improve sleep quality in patients with PTSD.

Funding Source: Supported by AstraZeneca Pharmaceuticals, L.P.

### **REFERENCES:**

- 1. Harvey AG, Jones C, Schmidt DA: Sleep and post-traumatic stress disorder: a review. Clin Psychol Rev 2003; 23:377–407.
- Hamner MB, Deitsch SE, Brodrick PS, Ulmer HG, Lorberbaum JP: Quetiapine treatment in patients with posttraumatic stress disorder: an open trial of adjunctive therapy. J Clin Psychopharmacol 2003; 23:15-20.

### TARGET AUDIENCE:

Meeting attendees

Poster 237

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ARIPIPRAZOLE FOR PSYCHOSIS OF ALZHEIMER'S DISEASE

Bristol-Myers Squibb Company

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the efficacy of aripiprazole in patients with psychosis associated with Alzheimer's dementia.

### **SUMMARY:**

Objective: To evaluate the efficacy and safety of aripiprazole in patients with psychosis of Alzheimer's disease (AD).

Methods: In a ten-week, multicenter trial, 208 outpatients with psychotic symptoms associated with (AD) (mean age 81.5y, baseline MMSE = 14.2 were randomized to placebo or flexible doses of aripiprazole, initiated at 2 mg/day for two weeks, with option to increase to 15 mg/day. Efficacy was assessed by Neuropsychiatric Inventory (NPI), Psychosis subscale, and Brief Psychiatric Rating Scale (BPRS).

Results: Mean dose of aripiprazole was 10 mg/day (range 1–17 mg). At week 10, NPI Psychosis score (mean baseline 12.3 aripiprazole and 12.1 placebo) was improved with both aripiprazole and placebo (–6.55 vs –5.52, P=0.17). Patients treated with aripiprazole experienced improvement in the BPRS Total score and a significant improvement in BPRS psychosis (hallucinations and delusions) subscore compared with placebo (–1.93 vs –1.27, P=0.03). Discontinuation rates due to adverse events were 8% with aripiprazole and 7% with placebo. Somnolence was mild and not associated with falls or

accidental injury. There were no significant differences in ECG abnormalities, vital signs, labs, or weight.

Conclusions: Aripiprazole improved symptoms of hallucinations and delusions in community-living AD patients. Aripiprazole was well tolerated in this elderly population.

Funding Source: Bristol-Myers Squibb Company.

### **REFERENCES:**

- Katz IR, Jeste DV, Mintzer JE, Clyde C, Napolitano J, Brecher M: Comparison of risperidone and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. Risperidone Study Group. J Clin Psychiatry 1999; 60(2):107-115.
- Doody RS, Stevens JC, Beck C, Dubinsky RM, Kaye JA, Gwyther L, Mohs RC, Thal LJ, Whitehouse PJ, DeKosky ST, Cummings JL. Practice parameter: management of dementia (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001; 56(9):1154-1166

### **TARGET AUDIENCE:**

Psychiatrists and other clinicians who treat schizophrenia.

Poster 238

Saturday, November 1 3:00 p.m.-4:30 p.m.

# THE SELECTIVE GABA REUPTAKE INHIBITOR TIAGABINE FOR THE TREATMENT OF GENERALIZED ANXIETY DISORDER

Cephalon, Inc.

Douglas R. Dolnak, M.D., Department of Psychiatry, University of California at San Diego, 8950 Villa La Jolla Drive, #2243, La Jolla, CA 92037-0985; Murray H. Rosenthal, D.O.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the benefits of tiagabine in the treatment of patients with generalized anxiety disorder (GAD).

### **SUMMARY:**

Objective: GABA, the predominant inhibitory neurotransmitter in the CNS, plays a key role in anxiety and sleep. Tiagabine, a selective GABA reuptake inhibitor (SGRI), selectively increases synaptic GABA availability by blocking the reuptake of GABA via transporter inhibition. This study evaluated tiagabine therapy in patients with GAD. Methods: This ten-week, open-label, positive-controlled, blinded-rater study randomized patients to tiagabine or paroxetine. Tiagabine was initiated at 4 mg/d (2 mg bid) and paroxetine (20 mg qd) during Week 1. Doses were increased for optimal response. Assessments included the Hamilton Rating Scale for Anxiety (HAMA) and the Pittsburgh Sleep Quality Index (PSQI).

Results: Forty patients were randomized to tiagabine (n=20) or paroxetine (n=20). Mean approximate final daily doses were 10 mg tiagabine (bid) and 27 mg paroxetine (qd). Tiagabine and paroxetine significantly reduced anxiety, as shown by mean HAM-A scores (both P<0.0001) and improved sleep quality as evidenced by mean PSQI scores (P<0.0001 and P<0.01, respectively) compared with baseline. Both were well tolerated; three patients discontinued because of adverse events (n=1, tiagabine; n=2, paroxetine).

Conclusions: The SGRI tiagabine (and paroxetine) reduced anxiety and improved sleep quality in patients with GAD. This suggests that tiagabine may be a therapeutic option for the treatment of anxiety disorders.

This study and presentation were supported by Cephalon, Inc., West Chester, Pa.

### **REFERENCES:**

- 1. Lydiard RB: The role of GABA in anxiety disorders. J Clin Psychiatry 2003; 64:21–27.
- 2. Mathias S, Wetter TC, Steiger A, et al: The GABA reuptake inhibitor tiagabine promotes slow wave sleep in normal elderly subjects. Neurobiol Aging 2001; 22:247–253.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 239

Saturday, November 1 3:00 p.m.-4:30 p.m.

### ECONOMIC MODEL OF INTRAMUSCULAR ZIPRASIDONE AND HALOPERIDOL IN ACUTE AGITATION Pfizer Inc.

James M. Russell, M.D., Director, Clinical Psychopharmacology Program, Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch, Behavioral Health Research Center, 301 University Boulevard, Mail Stop 0197, Galveston, TX 77555; Joan A. Mackell, Ph.D.; Meagan C. Leaderer, M.P.H.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants should be able to discuss the reported findings explaining why costs are lower with IM ziprasidone than with IM

haloperidol when managing patients with acute agitation who present to emergency departments.

### **SUMMARY:**

*Purpose:* To examine the cost-effectiveness of treating acute psychotic agitation with IM ziprasidone versus IM haloperidol.

Methods: A model was developed including patient data, costs of ED treatment, drug costs, and additional ED costs for managing acute EPS and dystonia. Data were obtained from a randomized comparison of IM ziprasidone and IM haloperidol in the treatment of patients with acute psychotic agitation. Costs were summed and divided by 100 to calculate overall per-patient costs.

Results: Incidences of EPS and dystonia on Day 1 were 1.11% and 0% for ziprasidone and 2.38% and 14.29% for haloperidol. Additional ED costs to manage EPS/dystonia for 100 patients were \$510.60 for IM ziprasidone and \$7,668.20 for IM haloperidol. IM anticholinergic costs for 100 patients were \$3.33 and \$50.01, respectively. The overall cost per patient for treatment with IM ziprasidone was \$344.92, compared with \$377.70 for IM haloperidol.

Conclusions: Despite higher drug acquisition costs, use of IM ziprasidone to treat acute psychotic agitation in the ED is more cost effective than use of IM haloperidol. Cost savings result directly from lower rates of acute EPS and dystonia with IM ziprasidone, leading to lower ED costs to manage patients with acute psychotic agitation.

Funding Source: Pfizer Inc.

### **REFERENCES:**

- Brook S, Lucey JV, Gunn KP: Intramuscular ziprasidone compared with intramuscular haloperidol in the treatment of acute psychosis. J Clin Psychiatry 2000; 61:933–41.
- Daniel DG, Potkin SG, Reeves KR: Intramuscular (IM) ziprasidone is effective in reducing acute agitation associated with psychosis: a double-blind, randomized trial. Psychopharmacology 2001; 155:128-134.

### **TARGET AUDIENCE:**

Psychiatrists and psychiatric nurses

Poster 240

Saturday, November 1 3:00 p.m.-4:30 p.m.

## ONCE-DAILY ATOMOXETINE IN CHILDHOOD ADHD: CONTINUOUS SYMPTOM RELIEF

Eli Lilly and Company

Patrick Toalson, R.Ph., Medical Liaison, Neuroscience Medical Studies, Eli Lilly and Company, 6116 Rosemont Court, Birmingham, AL 35242; Kory Schuh, Ph.D.; Calvin Sumner, M.D.; Douglas K. Kelsey, M.D., Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, the participant should realize that a new once-daily treatment of child-hood ADHD is available that is safe and effective throughout the day and into the evening and early morning.

### **SUMMARY:**

Objective: We assessed the efficacy throughout the day, including evening and early morning, of atomoxetine administered once daily in children with attention-deficit/hyperactivity disorder (ADHD).

Methods: Children (n=197) with ADHD, aged 6-12 years, were randomized in a 2:1 ratio to eight weeks of once-daily atomoxetine or placebo treatment. ADHD symptoms were assessed using parent and investigator rating scales. Parent assessments of children's home behaviors in the evening and early morning were collected using the Daily Parent Rating of Evening and Morning Behavior—Revised (DPREMB-R) and the Conners' Global Index: Parent Evening Scale (CGI-PE).

Results: Once-daily atomoxetine (final mean daily dose of 1.3 mg/kg) was significantly more effective than placebo in treating core symptoms of ADHD. Efficacy outcomes into the evening hours in atomoxetine-treated patients were superior to those of placebo-treated patients as assessed by the DPREMB-R and CGI-PE. The DPREMB-R showed significant reduction of symptoms in the morning and onset of effect significantly different than placebo after the first day on medication. Discontinuations due to adverse events were <5% for both groups.

Conclusion: Once-daily administration of atomoxetine provided safe, rapid and continuous ADHD symptom relief that lasted into the evening and early morning. Source of Funding: Eli Lilly and Company.

### **REFERENCES:**

- Michelson D, Faries D, Wernicke J, Kelsey D, Kendrick K, Sallee FR, Spencer T, and the Atomoxetine ADHD Study Group: Atomoxetine in the treatment of children and adolescents with ADHD: a randomized, placebo-controlled, dose-response study. Pediatrics 2001; 108:e83.
- Michelson D, Allen AJ, Busner J, Casat C, Dunn D, Kratochvil C, Newcorn J, Sallee FR, Sangal RB, Saylor K, West S, Kelsey D, Wernicke J, Trapp NJ, Harder D: Once-daily atomoxetine treatment for children and adolescents with attention deficit/hyperactivity disorder: a randomized, placebo-controlled study. Am J Psychiatry 2002; 159:1896–1901.

### **TARGET AUDIENCE:**

General psychiatrists, child psychiatrists, and pediatricians

Poster 241

Saturday, November 1 3:00 p.m.-4:30 p.m.

### SAFETY AND TOLERABILITY OF THE ANTIDEPRESSANT VENLAFAXINE EXTENDED RELEASE IN SEVERELY MEDICALLY AND SURGICALLY ILL PATIENTS

Subhdeep Virk, M.D., Clinical Instructor, Department of Psychiatry, State University of New York Upstate Medical Center, 713 Harrison Street, Syracuse, NY 13210; Thomas L. Schwartz, M.D.; Shefali Jindal, M.D.; Michael Wade

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, participants will better understand the hypertensive side-effect risks of Venlafaxine XR.

#### **SUMMARY:**

*Objective:* To determine if Venlafaxine XR, an FDAapproved antidepressant, is safe for use in severely medically and surgically ill depressed patients.

Method: Charts of 16 patients, admitted to medical and surgical inpatient services and placed on Venlafaxine XR by the Psychiatry Consultation Service, were retrospectively evaluated for dose and duration of drug treatment, blood pressure changes, medication changes, and side effects.

Results: There was 50% to 75% improvement in depressive symptoms with statistically insignificant mean elevations in systolic (2.375 mmHg) and diastolic blood pressure (3.375mmHg).

Conclusion: Venlafaxine XR appears to be a safe and tolerable agent in medical-surgical depressed inpatients.

### **REFERENCES:**

- Fieghner JP: Cardiovascular safety in depressed patients: focus on venlafaxine. J of Clin Psych 1995; 56:547-579.
- 2. Thase ME: Effects of venlafaxine on blood pressure: a meta-analysis of original data from 3744 depressed patients. J of Clin Psychopharmacology 1998; 19:9-14.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 242

Saturday, November 1 3:00 p.m.-4:30 p.m.

### PSYCHOSIS AND ITS TREATMENT IN PTSD

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize prevalence of psychosis and use of antipsychotic agents in those with posttraumatic stress disorder.

### **SUMMARY:**

Posttraumatic stress disorder (PTSD) is a complex disorder that manifests with variety of symptoms ranging from mild anxiety to moderate depression to severe psychosis. To study the prevalence of psychosis and its treatment in those with PTSD, medical records of 384 patients with a diagnosis of PTSD who have been treatment for at least 180 days were reviewed. There were 376 male patients (age=54.93±8.17 years) and eight female patients (age=46.38±5.97 years). 88 (22.91%) patients had exhibited some features of psychosis. Of these, 45 patients had a psychiatric comorbidity (like depressive disorder or bipolar disorder or alcohol/substance abuse) that might account for psychosis. The other 43 (11.19% of the total study patients) patients presented with psychosis as manifestations of PTSD. Of this later group, 65.12% of patients received quetiapine as compared with 25.58% receiving risperidone, 4.65% receiving olanzapine and 4.65% receiving typical antipsychotic agents (p<0.001; quetiapine vs. olanzapine/ typical antipsychotic agents; p<0.05; quetiapine vs. risperidone). This data show that a significant number of patients with PTSD suffers from psychosis. In this particular patient population quetiapine was more widely used as a preferred antipsychotic agent. More work needs to be done to evaluate efficacy of antipsychotic agents (especially the atypical ones) in treatment of PTSD.

### REFERENCES:

- 1. David D, Kutcher GS, Jackson EI, Mellman TA: Psychotic symptoms in combat-related posttraumatic stress disorder. J Clin Psychiatry 1999; 60(8):555-6.
- 2. Hamner MB, Deitsch, Ulmer HG, et al: Quetiapine treatment in posttraumatic stress disorder: A preliminary open trial of add-on therapy. European Neuropsychopharmacology 2001; 11 Suppl 3:S263.

### TARGET AUDIENCE:

Psychiatrists, therapists, case managers

Poster 243

Saturday, November 1 3:00 p.m.-4:30 p.m.

## USE OF HIGHER-DOSE QUETIAPINE IN ELDERLY PATIENTS: A CHART REVIEW STUDY

AstraZeneca Pharmaceuticals

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### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize that dosages of quetiapine > 200 mg/d were effective and safe in treating elderly demented patients with psychosis and agitation in an inpatient setting.

### **SUMMARY:**

Objective: To evaluate the efficacy and safety of quetiapine at dosages ≥200 mg in elderly patients.

Methods: Charts of patients ≥65 years were reviewed at a single psychiatric inpatient unit over a period of 15 months.

Results: Twenty-eight patients were analyzed (mean age 78.5 years; 71% female). Mean quetiapine dosage on discharge was 450 mg/d, and average dosage increase during admission was 262 mg/d. Mean improvement in Clinical Global Impression scores was 56.5% (from moderately-markedly ill to much improved). Ten patients experienced a fall during the course of hospitalization (20 episodes); 18 episodes were associated with a second antipsychotic and/or benzodiazepine, and four episodes occurred in patients not taking quetiapine. Only one patient reported falling while taking quetiapine alone. Five patients experienced sedation unexplained by dosages of as-needed medication. Two patients developed extrapyramidal symptoms while taking quetiapine, but both were also receiving routine doses of haloperidol.

Conclusions: Quetiapine in dosages ≥200 mg/d was efficacious and apparently safe in treating elderly demented patients with psychosis and agitation in an inpatient setting. Additional prospective studies are needed.

Funding Source: Support contributed by AstraZeneca Pharmaceuticals, L. P.

### **REFERENCES:**

- 1. Bullock R, Saharan A: Atypical antipsychotics: experience and use in the elderly. Int J Clin Pract 2002; 56:515–525.
- 2. Madhusoodanan S, Brenner R, Alcantra A: Clinical experience with quetiapine in elderly patients with psychotic disorders. J Geriatr Psychiatry Neurol 2000; 13:28–32.

### **TARGET AUDIENCE:**

Meeting attendees

Poster 244

Saturday, November 1 3:00 p.m.-4:30 p.m.

### NEWER ANTIDEPRESSANTS: IMPACT ON WEIGHT AND LIPIDS

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Plaza #5606, Omaha, NE 68154; Shriram Ramaswamy, M.D.; William A. Marcil, M.D.; Aref Rasheed, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the importance of weight changes/lipid change with antidepressants.

### **SUMMARY:**

Objective: Weight gain and lipid changes as an adverse effect associated with the use of most antidepressant drugs have not been well studied so far. Previous studies have demonstrated unclear relationship between newer antidepressants and weight gain. We hypothesized that almost all newer antidepressants are associated with weight gain and increase in lipid levels.

Methods: A total of 76 patients were randomly chosen from outpatient clinics. They were divided into a group on antidepressants for more than a year (Group A) and another without antidepressants (Group B). They were age matched. Body mass index (BMI), antidepressants (fluoxetine, citalopram, mirtazepine, paroxetine, venlafaxine and bupropion), lipid panel (Total Cholesterol, LDL, and HDL) and random glucose was noted. Data from medical records were analyzed by using t-test. Patients on antipsychotics were excluded. Group B included patients with multiple medical diagnosis.

Results: In group A; 29% were on sertraline, 24% on citalopram, 5% on bupropion/mirtazepine, 15% on venlafaxine, and 18% on paroxetine. The mean age in Group A was 54 years and 59 in Group B. 95% of patients in group A were diagnosed as having DSM-IV major depression/depression NOS. Mean BMI in Group A was 31.5 and 27.5 in Group B, (P<0.002). The mean total cholesterol, LDL values were higher in Group A than Group B, but statistically not significant. No difference in random glucose was noted.

Conclusion: Patients on newer antidepressants are prone for weight gain and increases in cholesterol. Nutritional counseling should be encouraged. More controlled studies with larger sample size are warranted.

#### **REFERENCES:**

- 1. Sonawallah SB, Papakostas GI, Petersen TJ, Yeung AS, Smith MM, et al: Elevated cholesterol levels associated with nonresponse to fluoxetine treatment in major depressive disorder. Psychosomatics 2002; 43(4):310–6.
- 2. Papakostas GI, Petersen T, Sonawall SB, Merens W, Iosifescu DV, et al: Serum cholesterol in treatment-resistant depression. Neuropsychobiology 2003; 47(3):146-51.

### **TARGET AUDIENCE:**

Psychiatrists, psychologists, PA, nurse practitioners

Poster 245

Saturday, November 1 3:00 p.m.-4:30 p.m.

### A DOUBLE-BLIND TRIAL OF OLANZAPINE REDUCES CUE-ELICITED COCAINE CRAVING AND RELAPSES

David A. Smelson, Psy.D., Department of Mental Health and Behavioral Sciences, Veterans Affairs of New Jersey Health Care System, 151 Knollcroft Road, Lyons, NJ 07939; Miklos F. Losonczy, M.D., Ph.D., Department of Mental Health and Behavioral Sciences, Veterans Affairs of New Jersey Health Care System, 151 Knollcroft Road, Lyons, NJ 07939; Douglas M. Ziedonis, M.D.; John Williams, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the presentation, clinicians and administrators should better understand the issues involved in the assessment and treatment of cocaine craving among individuals with schizophrenia.

### **SUMMARY:**

Background/Objective: Recent research suggests that individuals with schizophrenia and cocaine dependence have a great deal of persistent self-report craving and cue-elicited craving that plays a role in the high substance abuse relapses common in this population (Carol et al, 2001; Smelson et al, 2002). These studies highlight the need to develop pharmacological and psychosocial anticraving interventions to assist in treatment. Openlabel studies suggest that atypical neuroleptics may be useful for treating schizophrenia and cocaine dependence (Smelson et al, 2002).

Methods: We conducted a six-week, double-blind trial comparing olanzapine and haloperidol for reducing craving and relapses in individuals diagnosed with schizophrenia and cocaine dependence. Subjects were administered a weekly cue-exposure procedure to prime patients with cocaine related cues in a laboratory and study the anticraving effects.

Results: Individuals treated with olanzapine (n=16) showed significantly less cue-elicited craving on the energy (.01) and sick (.05) dimensions of craving and 12.5% had a positive urine toxicology screening for an illicit substance compared to 40% of those in the haloperidol group (n=15). This difference in craving reduction was even greater for the study completers.

Conclusions: Olanzapine appears to be an effective adjunctive treatment for decreasing cocaine craving and preventing relapses among cocaine dependent schizophrenics.

### **REFERENCES:**

1. Carol G, Smelson DA, Losonczy MF, Ziedonis D: Alcohol & drug abuse: a preliminary investigation

- of cocaine craving among persons with and without schizophrenia. Psychiatr Serv 2001; 52(8):1029–1031.
- Smelson DA, Losonczy M, Kilker C, Starosta A, Kind J, Williams J, Ziedonis D: An analysis of cuereactivity among individuals with schizophrenia compared to cocaine addicts without schizophrenia. Psychiatr Serv 2002; 53(12):1612–1616.

Poster 246

Saturday, November 1 3:00 p.m.-4:30 p.m.

## MAXIMUM TOLERATED DOSE STUDY OF TIAGABINE IN GENERALIZED ANXIETY DISORDER

Cephalon, Inc.

Vicky E. Spratlin, M.D., Associate Medical Director, Carman Research, 4015 South Cobb Drive, Suite 245, Smyrna, GA 30080; John S. Carman, M.D., Medical Director, Carman Research, 4015 South Cobb Drive, Suite 245, Smyrna, GA 30080-6316

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should have an understanding of the maximum tolerated dose of tiagabine in patients with generalized anxiety disorder.

### **SUMMARY:**

Objective: GABA, the primary CNS inhibitory neurotransmitter, appears to play a key role in anxiety and sleep. Tiagabine, a selective GABA reuptake inhibitor (SGRI), increases synaptic GABA availability. The maximum tolerated dose (MTD) of tiagabine using different titration approaches, and preliminary safety and efficacy in generalized anxiety disorder (GAD) were evaluated.

Methods: Starting dose was 2 mg bid or placebo. Dose was increased by 2 mg (Group 1) or 4 mg (Group 2) of tiagabine or placebo every three days, until a nontolerated or maximum (28 mg/day) dose was obtained. Efficacy assessments included the Hamilton Anxiety Rating Scale (HAM-A) and Pittsburgh Sleep Quality Index (PSQI).

Results: Eighteen of 19 randomized patients (Group 1, n=8; Group 2, n=6; placebo, n=5) completed the study. Tiagabine MTD range was 4-28mg/day (Group 1) and 8-28mg/day (Group 2); 69% of MTD were ≤16mg/day. Most common AEs for tiagabine included dizziness (n=9), nausea (n=4), and asthenia (n=3). One patient in Group 1 withdrew because of SAE at 32 mg/day (syncope and abnormal thinking). Responders (≥50% decrease from baseline in HAM-A score) at MTD were 57% (Group 1), 33% (Group 2), and 0% (Placebo).

Improvements in sleep were also seen in tiagabine- versus placebo-treated patients.

Conclusions: Tiagabine MTD range was 4–28 mg/day, with 69% ≤16mg/day. These data support further development of tiagabine in anxiety.

This presentation was supported by Cephalon, Inc., West Chester, PA.

### **REFERENCES:**

- 1. Lydiard RB: The role of GABA in anxiety disorders. J Clin Psychiatry 2003; 64(Suppl 3):21–27.
- 2. Mathias S, Wetter TC, Steiger A, et al. The GABA reuptake inhibitor tiagabine promotes slow wave sleep in normal elderly subjects. Neurobiol Aging 2001; 22:247–253.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 247

Saturday, November 1 3:00 p.m.-4:30 p.m.

### MEMANTINE/DONEPEZIL IS SUPERIOR TO PLACEBO/DONEPEZIL FOR MODERATE TO SEVERE ALZHEIMER'S DISEASE

Forest Laboratories, Inc.

Pierre N. Tariot, M.D., Departments of Psychiatry, Medicine, and Neurology, and Center for Aging and Developmental Biology, University of Rochester Medical Center, 435 East Henrietta Road, Rochester, NY 14620-4629; Martin Farlow, M.D., Professor, Department of Neurology, Indiana University School of Medicine, 541 Clinical Drive, Suite 583, Indianapolis, IN 46202; George T. Grossberg, M.D.; Ivan Gergel, M.D.; Stephen M. Graham, Ph.D.; Jin James, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to evaluate the safety and efficacy of memantine in combination with donepezil for the treatment of moderate-to-severe Alzheimer's disease.

### **SUMMARY:**

Objective: Memantine, a moderate-affinity uncompetitive NMDA-receptor antagonist, represents a novel Alzheimer's disease (AD) therapy in the U.S. and is approved in Europe. We conducted a 24-week, randomized, double-blind, parallel-arm, placebo-controlled trial in 37 U.S. centers to study memantine's safety and efficacy in moderate-to-severe AD patients treated with the cholinesterase inhibitor donepezil.

*Methods:* Inclusion criteria: diagnosis of probable AD by NINCDS-ADRDA, MMSE 5-14, MRI/CT consistent

with probable AD, six-month daily donepezil therapy. Primary assessments: SIB and ADCS-ADL (cognition and function measures, respectively). CIBIC-Plus global assessment also was performed. Analyses were performed on the ITT population using LOCF.

Results: Of 403 patients randomized and treated with memantine 10mg bid (n=202) or placebo (n=201), 85% of memantine-treated patients and 75% of placebo patients completed the trial. At week 24, memantine/donepezil patients improved significantly (p<0.001) in cognition (SIB) compared with placebo/donepezil patients, and declined significantly less (p=0.028) in function (ADCS-ADL). A significant difference favoring memantine/donepezil was seen on CIBIC-Plus (p=0.027).

Conclusions: These results further support memantine's safety and efficacy for moderate-to-severe AD and demonstrate memantine/donepezil is superior to donepezil alone. Treatment with memantine/donepezil improved cognition relative to baseline whereas donepezil alone was associated with continued cognitive decline.

Funding Source: Forest Laboratories, Inc.

### **REFERENCES:**

- Parsons CG, Danysz W, Quack G: Memantine is a clinically well tolerated N-methyl-D-aspartate (NMDA) receptor antagonist—a review of preclinical data. Neuropharmacology 1999; 38:735–767.
- 2. Jain KK: Evaluation of memantine for neuroprotection in dementia. Expert Opin Investig Drugs 2000; 9(6):1397–1406.

### **TARGET AUDIENCE:**

**Psychiatrists** 

Poster 248

Saturday, November 1 3:00 p.m.-4:30 p.m.

### A DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL OF QUETIAPINE AUGMENTATION IN PATIENTS WITH OCD RESISTANT TO SEROTONIN REUPTAKE INHIBITORS

Damiaan Denys, M.D., Department of Psychiatry, University Medical Center, P.O. Box 85500, Utrecht, Netherlands 3508 GA; Harold van Megen, M.D.; Herman Wessenberg, M.D.; Jeff Goldfein

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to treat therapy refractory patients with OCD.

### **SUMMARY:**

Background: Although serotonin reuptake inhibitors (SRIs) are the most effective pharmacological treatment currently available for patients with obsessive-compulsive disorder (OCD), 40% to 60% of patients do not respond to this treatment.

*Objective*: To evaluate the efficacy and tolerability of quetiapine in addition to an SRI for treatment-refractory patients with OCD.

Methods: Forty patients with primary OCD according to DSM-IV criteria were randomly assigned in an eightweek, double-blind, placebo-controlled trial to receive dosages titrated upward to 300 mg/day of quetiapine (n=20) or placebo (n=20) in addition to their SRI treatment. At entry, all patients were unresponsive to courses of treatment with at least two different SRIs at maximum dose for eight weeks. During the study, primary efficacy was assessed by change from baseline on the Yale-Brown obsessive-compulsive scale (Y-BOCS). A responder was defined by a final clinical global impression (CGI) rating of "very much improved" or "much improved," and a decrease of ≥35% on the Y-BOCS.

Results: An intent-to-treat, last-observation-carried-forward analysis demonstrated a mean decrease on the Y-BOCS of  $9.0 \pm 7.0$  (31%) in the quetiapine group, and of  $1.8 \pm 3.4$  (6%) in the placebo group. Eight of 20 (40%) patients were responders in the quetiapine group, and two of 20 (10%) patients in the placebo group. The most common side effects in the quetiapine group were somnolence, dry mouth, weight gain, and dizziness.

Conclusion: The results of this study show that quetiapine in addition to an SRI is beneficial for patients with OCD who did not respond to SRI treatment alone.

### **REFERENCES:**

- McDougle CJ, Epperson CN, Pelton GH, Wasylink S, Price LH: A double-blind, placebo-controlled study of risperidone addition in serotonin reuptake inhibitor-refractory obsessive-compulsive disorder. Arch.Gen.Psychiatry 2000; 57:794–801
- 2. Denys D, van Megen H, Westenberg H: Quetiapine addition to serotonin reuptake inhibitor treatment in patients with treatment-refractory obsessive-compulsive disorder: an open-label study. J Clin Psychiatry 2002; 63:700–703.

Poster 249

Saturday, November 1 3:00 p.m.-4:30 p.m.

### BRAND NAME TO GENERIC CLOZAPINE SWITCH: PHARMACOKINETIC AND CLINICAL EFFECTS

Ruben A. Miozzo, M.D., Community *HealthLink*, 72 Jacques Avenue, Worcester, MA 01610; Jeffrey G. Sto-

vall, M.D., Assistant Professor of Psychiatry, University of Massachusetts Medical School, and Medical Director, Outpatient Services, Community Healthlink, 72 Jacques Avenue, Worcester, MA 01610; Mayra Tisminetzky, M.D.; Jayendra K. Patel, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize effects of different formulations on the pharmacokinetics of clozanine.

### **SUMMARY:**

Introduction: Clozapine is the drug of choice for treatment-resistant schizophrenia. Following patent expiration, cheaper generic clozapine has become available. Thus, in Massachusetts, the Department of Medical Assistance decided to switch patients from Clozaril to generic clozapine. This switch to generic clozapine has generated controversy about the potential loss of efficacy due to pharmacokinetic differences.

Methods: During the switch to the generic clozapine, to alleviate the concerns of the clinicians and patients, a decision was made to measure the before and after levels of clozapine/norclozapine along with changes in clinical status of the patient. The clozapine dose remained the same following the switch and psychiatrists could adjust the dose as needed based on clinical symptoms.

Results: At our center, 71 patients (M:F 1.73:1) (ages  $43.15 \pm 8.86$ ) underwent this switch. The mean percent change in clozapine and clozapine plus norclozapine levels following the switch was not statistically significant (p>0.5).

Conclusion: Our data, though from a small sample, suggest that the switch from brand-name clozapine to generic can be done without significant changes in plasma clozapine levels. Moreover, this switch did not appear to exacerbate clinical sympstoms. These and other data about potential cost saving will be presented.

### **REFERENCES:**

- 1. Perry PJ, Miller DD, Arndt S, et al: Clozapine and norclozapine plasma concentrations and clinical response of treatment-refractory schizophrenic patients. Am J Psychiatry 1991; 148:231–235.
- 2. Lam YM, Ereshefsky L, et al: Branded versus generic clozapine: bioavailability comparison and interchangeability issues, J Clin Psychiatry 2001; 62 (suppl 5) 18–22.

Poster 250

Saturday, November 1 3:00 p.m.-4:30 p.m.

## MAJOR DEPRESSIVE DISORDER AND EXECUTIVE DYSFUNCTION: A NEED FOR INTERVENTIONS?

Adrienne Lee Withall, B.S.C., Research Psychologist, Health Sciences Department, Sydney University, 36

Plinsoll Street, Sans Souci, Australia NSW 2219; Lynne Harris, Ph.D., M.A.; Steve Cumming, Ph.D., M.A.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the importance of a complete neuropsychiatry assessment (in particular of executive function) toward evaluating the response and outcome of patients with major depressive disorder.

### **SUMMARY:**

*Objective:* To delineate the executive functions affected by major depressive disorder.

Background: Depressed patients often report poor concentration, decision making, and organization. These symptoms are frustrating and disheartening, can persist after discharge, and cause functional impairment. Executive function is strongly related to long-term "real-life" outcome, since it involves skills necessary to adapt to a changing environment.

Methodology: Psychiatric (HRSD-21, DASS, FrSBe, SOFAS) and neuropsychological assessments (NART, Reaction Time, Digit Span, CVLT, COWAT, WCST, Stroop, WISC-III Mazes, Prospective Memory, Six Elements Test) were administered at admission and threemonth follow-up, to patients and age, sex and IQmatched controls. Forty patients (20–60 years and with a primary diagnosis of MDD) were recruited from the

Royal North Shore Hospital and Northside Clinic, Australia.

Results: At follow up, there were no significant differences between patients and controls on structured tests (Digits-forward, COWAT-semantic, Mazes, CVLT, Stroop). Significant deficits (p<0.01) were evident in the SET, Digits-backward, WCST-perseverations, prospective memory, and COWAT-phonemic. These tests require patients to organize, monitor, and review their performance.

Importance: A detailed neuropsychological assessment should be performed as part of an integrated mental health care approach for depression. Executive dysfunction may be a useful "ecological" predictor of outcome, and highlight those patients requiring support post-discharge.

### **REFERENCES:**

- Royall DR: Frontal systems impairment in major depression. Semin Clin Neuropsychiatry 1999; 4(1):13-23.
- Porter RJ, Gallagher P, Thompson JM, Young AH: Neurocognitive impairment in drug-free patients with major depressive disorder. Br J Psychiatry 2003; 182:214–220.

### **TARGET AUDIENCE:**

Mental health professionals determining the discharge, outcome & residual disability of patient.

Psychiatric Services Achievement Awards Session 1 Thursday, October 30 8:30 a.m.-11:30 a.m.

### CULTURE CHANGE IN INPATIENT CHILD PSYCHIATRY: THE OPEN ARMS PROGRAM AND THE COLLABORATIVE PROBLEM-SOLVING APPROACH

Psychiatric Services Gold Award

Bruce M. Hassuk, M.D., Child Assessment Unit, Cambridge Hospital, 17 Myrtle Avenue, Cambridge, MA 02138-3218; Kathleen Regan, R.N.; Ross W. Greene, Ph.D.; J. Stuart Aflon, Ph.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) understand the core elements of a new model of care in inpatient child psychiatry; (2) identify obstacles to implementing a new model of care and strategies to overcome them, and (3) recognize opportunities and settings for possible future application of a new model of care.

### **SUMMARY:**

Objective: To provide more humane inpatient psychiatric care to children by managing aggressive behavior without the use of restraint and seclusion and by helping children and families feel more welcome.

Methods: Restraint and locked-door seclusion, employed on inpatient units for managing aggressive behavior, are often aversive and traumatic to patients. A new Open Arms program replaces a punitive and consequence-based culture with new values providing nurturance, an atmosphere of teaching and learning, and choices, including child-centered care, positive physical contact and open visiting hours. Using a cognitive-behavioral model of conceptualization and intervention called the Collaborative Problem Solving (CPS) approach, staff and patients become proficient at collaborative problem solving as a means to resolve disagreements and defuse potentially conflictual situations to reduce the likelihood of aggressive outburst. Presenters will review culture changes and programmatic steps taken in implementing a new model of care, fundamentals of CPS and its application in an inpatient setting, and opportunities for application in other settings.

Conclusions: A new model of care using the Open Arms program and the Collaborative Problem Solving (CPS) approach has allowed for the elimination of the use of restraint and seclusion and provides a more compassionate model for the treatment of children, reducing harmful and coercive means of intervention, reducing staff injury and increasing staff job satisfaction.

### **REFERENCES:**

- American Academy of Child & Adolescent Psychiatry: Practice Parameter for the Prevention and Management of Aggressive Behavior in Child and Adolescent Psychiatric Institutions, With Special Reference to Seclusion and Restraint. Journal of the American Academy of Child & Adolescent Psychiatry 2002;41:4S-25S.
- 2. Greene RW, Ablon SA, Goring JC: A transactional model of oppositional behavior: underpinnings of the Collaborative Problem Solving approach. Journal of Psychosomatic Research 2002;1:1–9.

Psychiatric Services Achievement Awards Session 2 Thursday, October 30 8:30 a.m.-11:30 a.m.

# PROVIDING INNOVATIVE PROGRAMMING TO PARENTS WITH A MENTAL ILLNESS AND THEIR CHILDREN

Psychiatric Services Gold Award

Susan L. Totten, M.S.W., Clinical Social Worker, 507 East College Street, Iowa City, IA 52240; Kit Crane, M.S.W., L.I.C.S.W., Clinical Social Worker, 507 East College Street, Iowa City, IA 52240

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) understand the key components of an innovative community-based program that serves mentally ill parents and their children; (2) understand how this program model functions effectively in a community setting, and (3) understand the cost-effectiveness of this model program.

### **SUMMARY:**

Traditional services for families impacted by mental illness have historically been fragmented. Each family member may be receiving services from different providers and in relative isolation. Family-based services often are provided when families are at risk for out-of-home placement of children and/or when mental health is considered a risk factor for parental loss of custody. Different systems prioritize problems differently and do not routinely engage in joint planning, which often leads to duplication of services and can be counterproductive. Due to their mental illness, a parent's capacity for parenting is often viewed in a negative light with unrealistic expectations for both the parents and the families.

FSS/PACE offers a multi-service approach that decreases fragmentation, thus increasing family stability. Staff provide mental health interventions in the home and in the community for the entire family at regular

predictable meeting times not driven by crisis. The unique service delivery approach helps families acknowledge their strengths and see themselves outside a pathology paradigm. In addition, staff coordinate services with multiple agencies, provide counseling skill building, and direct ongoing linkages to psychiatrists and other mental health professionals.

A unique component of our model is it's mental health focus. Clinical case managers educate parents and family members about mental illness and how it affects the individual as well as the family as a whole. Collaborations between family members, their psychiatrist, and other mental health workers are formed in order to maintain productive relationships and to maximize community resources.

This workshop will describe the components of this innovative program, it's history and development, ongoing challenges, and the integral part it plays in the lives of the families it serves.

### **REFERENCES:**

- 1. Nicholson J, Henry A, Clayfield JC, Phillips SM: Parenting Well When You're Depressed. Oakland, CA, New Harbinger Publications, Inc., 2001.
- 2. Nicholson J, Biebel K, Hinden B, Henry A, Stier L: Critical Issues for Parents with Mental Illness and Their Families. Rockville, MD, Substance Abuse and Mental Health Services Administration, 2001.

Psychiatric Services Achievement Awards Session 3

Thursday, October 30 8:30 a.m.-11:30 a.m.

### SOUTHEAST MENTAL HEALTH SERVICES' SELF-RESPONSIBILITY AND SELF-HELP MODEL

Psychiatric Services Silver Award

Robert E. Whaley, M.B.A., Executive Director, Southeast Mental Health Services, 711 Barnes, La Junta, CO 81050; Edward L. Knight, Ph.D., Donald A. Johnston, M.D.

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) discuss the philosophical basis of the consumer empowerment movement and the Boston University Psychosocial Rehabilitation model; (2) explore the use of atypical antipsychotics and the limited use of court-ordered treatment; (3) identify implementation barriers such as staff attitudes, management style, and program restraints; (4) identify therapeutic, financial, and community benefits of implementing recovery.

### **SUMMARY:**

Southeast Mental Health Services, a national leader in rural behavioral health care in southeast Colorado, has implemented a complete change in culture and service delivery resulting in consumer and staff empowerment, better access to services, and a high level of community collaboration and integration. This presentation explains how SEMHS embraced the principles of the Recovery model, utilized the Boston University Psychosocial Rehabilitation model, and took an agency-wide look at efficiency, productivity, and management in an effort to make a holistic shift in operations. This program has captured the attention of varied groups across the country, and has had audiences over the past three years with the Colorado Behavioral Healthcare Conference, the Alternatives 2000 Conference, the federal Office of the Inspector General's Division of Health and Human Services, the CEO of Value-Options behavioral health care-managed care organization, the National Association of Rural Mental Health, and the International Association of Psychosocial Rehabilitation Services. It has been awarded the prestigious 2002 Lilly Reintegration Award in Clinical Medicine.

### **REFERENCES:**

- Carpinello SE, Knight E, Maarkowitz F: The development of Mental Health Confidence Scale: a measure of self-efficacy in individuals diagnosed with mental disorders, Psychiatric Rehabilitation Journal 2000;23(3).
- 2. Drucker PF: Management in a Time of Great Change. Truman Talley Books/Dutton, 1995.

Psychiatric Services
Achievement Awards
Session 4

Thursday, October 30
8:30 a.m.-11:30 a.m.

## A PROACTIVE AND INNOVATIVE TREATMENT MODEL FOR CHILDREN WITH DUAL DIAGNOSIS

Psychiatric Services Silver Award

Katherine Johnson-Patagoc, M.S., Program Director, CARITAS Peace Center, 2020 Newburg Road, Louisville, KY 40205; Daniel M. Tucker, M.D.; Beth A. Duncan

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this course, the participant will (1) be familiar with the CARITAS Peace Center's proactive and innovative treatment model for children and adolescents with dual diagnosis of mental health disorder and mental retardation/brain injury; (2) be able to describe the unique aspects of the treatment components such as composition of the trans-disciplinary team, indi-

vidualized behavioral plans, and highly developed data collection system.

### **SUMMARY:**

This presentation for clinicians, researchers, and administrators will outline the Innovations and Neurobehavioral Center programs that were established at CARI-TAS Peace Center. The programs were developed in response to statewide concern that children and adolescents with co-existing mental health disorders and developmental disabilities/brain injury were being placed in institutions out of Kentucky-far from family and community support systems. In addition to difficulties in generalizing positive changes to a home community from distant placements, services were more costly to the service system and families striving to maintain contact with their child. The Innovations and Neurobehavioral Center offers far more than traditional psychiatric treatment. The programs include state-of-the-art transdisciplinary treatment both in the hospital and the community. Treatment approaches are data driven with primary interventions of psychiatry and applied behavior analysis. Other disciplines essential to this treatment approach include speech pathology and occupational therapy. Due to continued success well documented through individual and group data, the Innovations and Neurobehavioral Center has grown from a single, 22bed unit to three units serving up to 67 children and adolescents.

### **REFERENCES:**

- 1. Baer DM, Wolf MM, Risley TR: Some still-current dimensions of applied behavior analysis. Journal of Applied Behavior Analysis 1987; 20:313–327.
- 2. Martin A, Scahill L, Charney DS, Leckman JF (Eds): Pediatric Psychopharmacology: Principles and Practice. Oxford, Oxford University Press, 2003.

Psychiatric Services Achievement Awards Session 5 Thursday, October 30 8:30 a.m.-11:30 a.m.

### SERVICE ENHANCEMENT TO A DUAL DIAGNOSIS POPULATION

Psychiatric Services Bronze Award

Randy A. Hayes, Director of Quality Assurance, Sinnissippi Centers, Inc., 125 South Fourth Street, Oregon, IL 61061

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize the process changes involved in providing a full range of MISA (MICA) specific services, recognize the need for such changes, and understand the potential for increased functional levels for the MISA consumer using this approach.

### **SUMMARY:**

This workshop details the process used to identify, eliminate, and/or modify barriers to accessing services for MISA consumers in order to improve their level of functioning. Barriers to consumers receiving full range of services were identified by a multi-disciplinary team. Specific system changes, modifications, and clinician helps were implemented to ensure increased service access. Comparison measures showed a lowered dropout rate for the MISA-specific group as well as improved functioning over the comparison group. Process measures showed a lowered use of emergency services, reduced number of emergency psychiatric hospitalizations increase in sobriety, and increased length of service. Functional measures showed a 199% increase in the 11 functional areas when averaged. The workshop concludes that improved access to MISA-specific services significantly increases these consumers' quality of life.

### **REFERENCES:**

- Am Assoc of Community Psychiatrists: AACP Position Statement on Program Competencies in a Comprehensive Integrated System of Care for Individuals With Co-occurring Psychiatric and Substance Abuse Disorders.
- 2. Hayes R, et al: Service enhancement to a dual-diagnosis population: mental illness/substance abuse. Q Management Health Care 2003; 12–3:133–150.

Psychiatric Services Achievement Awards Session 6 Thursday, October 30 8:30 a.m.-11:30 a.m.

### SUMMIT COUNTY'S SYSTEMATIC APPROACH TO THE DE-CRIMINALIZATION OF THE MENTALLY ILL

Psychiatric Services Bronze Award

Mark R. Munetz, M.D., Chief Clinical Officer, Summit County Alcohol, Drug Addiction and Mental Health Services Board, and Professor of Psychiatry and Director, Coordinating Centers of Excellence Project for Mental Health and Criminal Justice, 100 West Cedar Street, #300, Akron, OH 44307

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should appreciate the rising numbers of individuals with serious mental illness in jails and prisons in the U.S., understand the "sequential intercept" model to approaching the problem of criminalization of the mentally

ill, and give examples of both pre-arrest and post-arrest diversion programs in Summit County.

### **SUMMARY:**

Summit County (Greater Akron) Ohio has been making a concerted effort to address the complex phenomenon known as the criminalization of the mentally ill. Following consultation with the National GAINS Center, in April 2000 Summit County started a Mental Health/Criminal Justice Forum, bringing key stakeholders from both systems together. The forum has helped in the ongoing development of a systematic approach to decriminalization of the mentally ill, using a simple conceptual approach called the Sequential Intercept Model. This model suggests a series of potential points at which an individual can be "intercepted" and kept from getting further into the criminal justice system. Intercept points include provision of evidence-based, best clinical practices; pre-arrest diversion; post-arrest

diversion; and treatment within corrections and linkage back to community services. In developing the model in Summit County, three new cross-system partnerships have been developed: an assertive community treatment team that provides integrated mental health and substance abuse treatment for people with serious mental disorders, the Akron Police and Summit County, Sheriff Crisis Intervention Teams, and the Akron Municipal Mental Health Court. Summit County is now attempting to promulgate the model throughout Ohio through the efforts of the Criminal Justice Coordinating Center of Excellence.

### **REFERENCES:**

- 1. Council of State Governments: Criminal Justice/ Mental Health Consensus Project, New York, 2002.
- Munetz MR, Grande TP, Chambers MR: The incarceration of individuals with severe mental disorders. Community Mental Health Journal 2001; 37:361–372.

### No. 1A USING A CONSUMER PROGRESS NOTE TO EVALUATE CHILDREN'S SERVICES

### DO OUR PROGRAMS WORK?

Neil Pessin, Ph.D., Director, Community Mental Health Services, Visiting Nurse Service of New York, 1250 Broadway, Third Floor, New York, NY 10001; David C. Lindy, M.D., Clinical Director and Chief Psychiatrist, Community Mental Health Services, Visiting Nurse Service of New York, and Associate Clinical Professor of Psychiatry, Columbia University, 1250 Broadway, Third Floor, New York, NY 10001

### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, participants should be able to appreciate issues involved in evaluating community mental health programs.

### **SUMMARY:**

Program evaluation is increasingly important for community mental health service programs. Consumers and payers are appropriately concerned that clients receive efficacious, cost-effective services. Providers and researchers must continuously assess program design and outcomes. Even though outcome studies can be expensive and difficult to perform, a program's survival may depend upon its ability to demonstrate utility. Clearly, we must develop effective, feasible methods for assessing program outcomes.

The Visiting Nurse Service of New York's Community Mental Health Services (VNS) operates approximately 30 programs throughout New York City, with a staff of almost 300 workers who see 10,000 clients annually. Most of our programs were designed to more effectively deliver services to underserved and/or resistant clients who have traditionally been too difficult to serve. We utilize an assertive, outreach-oriented approach to achieve this goal, employing case management as a fundamental tool. However, the question remains: do these programs achieve their goals?

This symposium will present program evaluation studies employed by four VNS programs. Clinical Case Management examines the effectiveness of motivational interviewing techniques in helping substance abusing clients on public assistance remain in mandated treatment. Assertive Community Treatment presents results of clinical outcomes of seriously and persistently mentally ill clients treated with the ACT model. Mobile Crisis examines client and system characteristics that predict more successful outcomes. Home-based Crisis Intervention discusses outcomes of clients managed with a collaborative client-staff progress note. We will conclude with a discussion of issues in performing program evaluation in the community, including what parameters best evaluate programs and how to utilize data collected for other purposes as outcome data.

Katherine G. Levine, M.S.W., Program Director, Community Mental Health Services, Visiting Nurse Service of New York, 450 East 149th Street, Third Floor, Bronx, NY 10455; Lori Rodriguez, M.S.W.; Foluso Otuyelu, C.S.W.; Neil Pessin, Ph.D.; David C. Lindy, M.D.

### **SUMMARY:**

The Visiting Nurse Service of New York operates the Home-Based Crisis Intervention Service (HBCI) to prevent psychiatric hospitalization of at-risk youth. Two programs serve the Bronx and two serve Brooklyn. We developed the Consumer Progress Note to provide consumers and clinicians with a practical tool for empowering families, measuring progress on goals and consumer satisfaction, and to help track quality assurance. The note is completed in collaboration with the client and/or primary caretaker at every face-to-face interview. Each note includes measurements on the following three rating scales: goal attainment, consumer satisfaction, and risk.

We will present a study comparing teams using the Consumer Progress Note and those using their traditional note. One team in each site was trained in the use of the note while the other team continued to function as usual. The study follows ten cases from each team over six months. Outcomes will be examined for measures of engagement, family empowerment, consumer satisfaction, safety, and symptom reduction.

### No. 1B MOBILE CRISIS SERVICES: UTILIZATION AND OUTCOMES

Linda Sacco, A.C.S.W., Program Director, Community Mental Health Services, Visiting Nurse Service of New York, 1250 Broadway, New York, NY 10001; Neil Pessin, Ph.D.; David C. Lindy, M.D.

### **SUMMARY:**

Mobile crisis services are now a widely accepted approach to the delivery of emergency mental health care. They are described as benefiting patients and families, staff and community providers, as well as the mental health system, through improved access to patients, earlier intervention, and decreased hospitalizations. However, claims of efficacy and cost-effectiveness are based on little empirical evidence. Although studies do exist about this method of service delivery, they are usually descriptions of single programs that have added little to the empirical data about program effectiveness.

In a 1995 national study conducted to assess the prevalence of mobile crisis services, Geller et al concluded that while most states had some form of mobile emergency services, minimal data had been collected to support the claims that these services decrease hospital utilization and reduce costs. It was suggested that future research focus on comprehensive program descriptions including target populations, service utilization, clinical team format, cost comparisons, nature of interventions, and follow-up outcomes. Perhaps more importantly, this information should be collected uniformly across many programs in an effort to develop a comprehensive evaluation plan. Since that time, there has been evidence of increasing attempts to demonstrate the effectiveness of this form of service delivery. The Visiting Nurse Service of New York has administered three mobile crisis programs in New York City since 1986. Following the Geller study, the VNS Mobile Crisis Service conducts ongoing program evaluation results by measuring rates of utilization of services, crisis stabilization, hospital diversion, client satisfaction, and dispositions. We will present results of recent data. In addition, plans for improving on future evaluations will be discussed.

#### No. 1C EFFECTS OF MOTIVATION INTERVIEWING ON OUTCOMES IN A CASE MANAGEMENT PROGRAM FOR SUBSTANCE ABUSERS

Kenneth Corbin, C.S.W., Program Director, Community Mental Health Services, Visiting Nurse Service of New York, 1259 Broadway, New York, NY 10001; David C. Lindy, M.D.; Neil Pessin, Ph.D.

#### **SUMMARY:**

Motivational interviewing (MI) is a client-centered technique that has been shown to be effective in the treatment of substance abuse. MI focuses on the client's ambivalence about change while specifically orienting interventions to his/her level of readiness for change. The technique requires specialized training and, arguably, psychological sophistication. The Visiting Nurse Service of New York's Clinical Case Management Program (CCM) provides case management services to persons with substance abuse applying to the city's human resources administration (HRA) for public assistance. Clients must also have specified additional problems, e.g., psychiatric illness, homelessness, criminal justice history. HRA mandates treatment for these clients, and the CCM program is designed to help clients comply with treatment and ultimately become employed. CCM case managers, typically B.A. level workers, received MI training, and clinical outcomes, defined as rates of treatment compliance, were compared with workers who did not receive MI training. We will present results of this naturalistic, outcome study.

#### No. 1D MEASURING CLINICAL OUTCOMES IN ASSERTIVE COMMUNITY TREATMENT CLIENTS

Christina Fragola, C.S.W., Program Coordinator, Community Mental Health Services, Visiting Nurse Service of New York, 1250 Broadway, New York, NY 10001; Jonathan Margolies, C.S.W.; Aleksandar Perovic, M.D.; David C. Lindy, M.D.; Neil Pessin, Ph.D.

#### **SUMMARY:**

Assertive Community Treatment (ACT), one of the best studied models within community mental health, has repeatedly been shown to reduce hospitalization rates and improve quality of life in patients with serious and persistent mental illness. Although the model is effective, other studies have shown that particular ACT programs do not necessarily achieve comparable efficiacy. The Visiting Nurse Service of New York operates two ACT teams that provide services to 55 clients each in separate sites in New York City. We have been interested in measuring their effectiveness, and will present data from current clients, as well as clients from the past five years, comparing pre- and post-ACT rates of hospitalization and substance abuse. We will also compare levels of symptomatology, engagement, and medication compliance upon admission with yearly intervals of time in ACT. Finally, we will discuss methodological implications of our findings, and advantages and disadvantages of performing non-controlled outcome studies.

#### REFERENCES:

- Madsen, WC: Collaborative Therapy With Multi-Stressed Families. New York, NY, Guilford Press, 1999.
- Geller J, Fisher W, McDermeit M: A National Survey of Mobile Crisis Services and Their Evaluation. Psychiatric Services 1996; 46(9):896–897.
- Dunn C, Deroo L, Frederick PR: The use of brief interventions adapted from motivational interviewing across behavioral domains: a systematic review. Addiction 2001; 96:1725–1742.
- Allness DJ, Knoedler WH: The PACT Model of Community-Based Treatment for Persons with Severe and Persistent Mental Illnesses: A Manual for PACT Start-Up. NAMI Anti-Stigma Foundation, Arlington, VA, 1998.

Symposium 2

Wednesday, October 29 2:00 p.m.-5:00 p.m.

#### THE MASSACHUSETTS DIVISION OF MEDICAL ASSISTANCE AND DEPARTMENT OF MENTAL HEALTH INITIATIVE TO IMPROVE PRESCRIBING PRACTICES

James M. Ellison, M.D., Consultant, APA Institute Scientific Program Committee, President, Massachusetts Psychiatric Society, and Clinical Director, Geriatric Psychiatry Service, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize ways to increase pharmacotherapy effectiveness.

#### **SUMMARY:**

Around the United States, psychiatric treatment's accessibility for Medicaid-insured individuals has been threatened by rising pharmaceutical costs, especially when prescribed in expensive combinations that may also be of questionable clinical effectiveness. Responding to both clinical and fiscal needs, the Massachusetts Division of Medical Assistance and Department of Mental Health sought to identify prescribing practices that are both costly and lacking in evidence-based support. An advisory task force representing DMA, DMH, academia, the Massachusetts Psychiatric Society, managed care, and consumer advocacy was convened. Through examination of Medicaid patients' medication regimens, five potentially irrational practices were identified: (1) excessive polypharmacy, (2) co-prescribing of two or more atypical antipsychotic medications, (3) co-prescribing of two or more SSRIs, (4) off-label use of gabapentin, and (5) add-on use of hypnotic agents. This symposium will review the basis for this intervention, the administrative and educational approaches employed, and the implications for practice and costcontrol.

#### No. 2A CLINICALLY SOUND APPROACH TO MEDICAID COST CONTAINMENT

Annette Hanson, M.D., Medical Director, Massachusetts State Division of Medical Assistance, 600 Washington Street, Boston, MA 02111

#### **SUMMARY:**

Pharmacy expenses are the fastest growing component of Medicaid budgets across the nation. As state revenues

drop and health care expenses continue to rise, policy makers have been forced into action to put off a feared meltdown of state Medicaid programs. States have used a variety of methods to manage pharmacy costs. We in Massachusetts have attempted to meld prudent fiscal stewardship of taxpayers' money with good clinical and evidence-based medical practice to develop our pharmacy management plan. I will describe the state of the Medicaid pharmacy budget, including examples of why there is such high growth; give examples of how other states manager pharmacy costs; and review the pharmacy management plan for MassHealth (MA Medicaid) including the use of clinical advisory committees, educational letters, monitoring of outlier prescribers.

# No. 2B THE MASSACHUSETTS DEPARTMENT OF MENTAL HEALTH PERSPECTIVE ON POLYPHARMACY

Kenneth S. Duckworth, M.D., Consultant, APA Institute Scientific Program Committee, and Division of Clinical Services, Massachusetts State Department of Mental Health, 25 Staniford Street, Boston, MA 02114

#### **SUMMARY:**

DMH has pursued an interest in polypharmacy, primarily as it relates to clinical practice. Specifically, DMH has been interested in the use of multiple atypical antipsychotics, multiple SSRIs and many (over five) medications given to our patients. DMH serves 24,000 persons with severe and persistent mental illness in the state, so our patients are likely to receive more intensive treatments, as some of our population continues to have active symptoms when conventional strategies are attempted. We observe that clinical practice is ahead of the evidence—and as policy makers we have to attempt to discern what is best practice for these interventions and for what patients.

On another front, DMH has been tracking the causes of death for our population and note extensive overrepresentation of early cardiovascular death in our population. We do not know the relative contribution of medications or polypharmacy to these findings, but are attempting to do so in conjunction with Medicaid-based on claims data.

DMH has worked with Medicaid to bring some of the best minds in the state together to attempt to answer the important questions where policy, practice, and polypharmacy meet—these include leaders from Mass Psychiatric, advocacy, consumer, and academic communities.

#### No. 2C HIGHLIGHTS OF A SYMPOSIUM ON POLYPHARMACY

David N. Osser, M.D., Associate Professor of Psychiatry, Harvard Medical School, 150 Winding River Road, Needham, MA 02492

#### **SUMMARY:**

A recent five-hour symposium organized by the Massachusetts Psychiatric Society probed the question of whether the widespread use of polypharmacy represents an undesirable deviation from evidence-based medicine or an indication that clinical practice is ahead of the evidence in a desirable way. This presentation is a summary of the key points made by speakers and discussants in this meeting. The keynote address focused on the power of the nonspecific aspects of the treatment situation, i.e., placebo effect, and how investigator bias can lead a clinician to falsely attribute an observed benefit to the specific treatment chosen rather than to these nonspecific effects. The next section examined the literature on augmentation strategies and combinations of antidepressants in treatment-resistant depression. Another speaker discussed the same issues in the pharmacotherapy of schizophrenia. Their conclusions about appropriate and inappropriate indications for polypharmacy will be summarized. The use of add-on hypnotics was also examined in detail. In clinical practice, insomnia is often approached with the routine addition of another medication for sleep. However, very often the management of insomnia in patients with psychiatric disorders is facilitated by focusing on the specific cause of the symptom, such as the primary psychiatric illness, addictions (e.g., nicotine, caffeine), or side effects of medications.

#### No. 2D HOW MANAGED CARE CAN IMPROVE PRESCRIBING PRACTICES

R. James Thatcher, M.D., Medical Director, Massachusetts Behavioral Health Partnership, 150 Federal Street, Boston, MA 02110

#### **SUMMARY:**

This presentation will discuss how a typical managed care organization, one that does not specifically control pharmacy services, can nonetheless create opportunities for network providers to improve their prescribing practices through use of targeted interventions in the following core areas of responsibility:

- Specification of covered, contracted services
- Development of medical necessity criteria and fee schedules for each covered service

- Authorization of payment for covered services based on medical necessity criteria
- Design and implementation of quality improvement initiatives
- Coordination of multiple providers and/or systems in treatment planning and provision of care
- Promotion of best practices education of providers and consumers
- Use of practice profiling in identifying needs and planning interventions

Examples will be used to illustrate these principles.

#### No. 2E LEARNING TO PRESCRIBE COST-EFFECTIVELY: A RESIDENT'S PERSPECTIVE

Aafaque Akhter, M.D., Department of Psychiatry, Taunton State Hospital, 11-S Robin Circle, Norton, MA 02766

#### **SUMMARY:**

Cost-effective prescribing is of the utmost necessity with skyrocketing drug prices. It is even more important in psychopharmacology, considering the large placebo effect problem with psychiatric patients. Cost-effectiveness comes with getting the best outcomes, which is associated with evidence-based practice.

The difficulties faced by a resident in learning costeffective practice are numerous. First and foremost is
the variable adherence to evidence-based thinking found
among mentors and supervisors, some of whom actively
oppose these principles, despite the fact that ACGME
encourages residents to learn evidence-based medicine
(EBM) and how to interpret the published literature. The
role of nurses in the training of residents in the inpatient
setting should be recognized in this regard. Nurses often
overvalue their "experience" and are not well-trained
in EBM. Practices that produce polypharmacy, overmedication, more side effects, and less treatment adherence over the long term are often encouraged by nurses.

Another difficulty confronting residents is that they are extensively exposed to detailing by pharmaceutical firms via luncheons, dinners, gifts, and other interactions. Most training programs offer no supervision on how to handle the messages and influence wielded by the drug representatives.

Psychiatric training in the British Isles differs substantially from the training in American residencies regarding cost-effective prescribing. British training programs place a strong emphasis on EBM and economical prescribing, as is required by the National Health Service and a more socialistic society in general. In the U.S., the culture is different and the advocates for rigorous emphasis on cost-effectiveness are in the minority.

#### **REFERENCES:**

- 1. Chassin MR, Galvin RW: The urgent need to improve health care quality: Institute of medicine national roundtable on health care quality [consensus statement]. JAMA 1998; 280:1000-5.
- 2. Duckworth K, Hanson A: Using a clinical and evidence-based strategy to preserve access to psychiatric medications. Psychiatr Serv 2002; 53(10):1231–2.
- 3. McClure RK: The judicious use of polypharmacy in the treatment of schizophrenia is justifiable. Journal of Psychotic Disorders: Reviews and Commentaries 2002; 6(3):3, 14–15.
- 4. Osser DN: Polypharmacy should not be routine in patients with schizophrenia. Journal of Psychotic Disorders: Reviews and Commentaries 2002; 6(3):3, 14–16.
- Barreira P, Duckworth K, Goff D, et al: Clinical practice guidelines: the Massachusetts experience in psychiatry. Harvard Rev Psychiatry 1999; 7:230-2.
- 6. Editorial Drug Company influence on Medical education in USA. The Lancet: 2000:356:9232.
- Wazana A: Physicians and the pharmaceutical industry: is a gift ever just a gift? JAMA 2000; 273–380.
- Kingsbury SJ, Yi D, Simpson GM: Rational and irrational polypharmacy. Psychiatric Services 2001; 52:1033-4.

Symposium 3 Wednesday, October 29 2:00 p.m.-5:00 p.m.

### INNOVATIVE AND CROSS-CULTURAL APPROACHES IN CHILD AND ADOLESCENT PSYCHIATRY

Joseph Gold, M.D., Clinical Director, Child Psychiatry, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be better able to select an international tool for screening of adolescent alcohol abuse; create services for Latino families; diagnose childhood psychosis; reduce inpatient and residential restraint usage; use applied behavioral analysis in developmentally disordered youth with severe comorbid psychiatric disorders.

#### **SUMMARY:**

The U.S. Surgeon General has described the high prevalence of child and adolescent psychiatric disorders severe enough to impair functioning and that few affected youth receive treatment. This symposium describes innovative clinical and cross-cultural approaches to screening, early recognition, accurate diagnosis, and timely, effective, and humane treatment tailored to particular disorders and populations. Dr. Parekh will de-

scribe international aspects of adolescent alcohol abuse and the selection of simple and valid screening tools. Dr. Aguirre will discuss challenges to the development of enduring services for Latino youth and families, across levels of care. Dr. Frazier will present an update on childhood psychosis: diagnosis, treatment, and potential prevention. Dr. Buonapane will describe the successful use of a strength-based, skill-building method to reduce the use of physical and mechanical restraints. Dr. Cameron will outline the use of applied behavior analysis in mentally retarded and autistic spectrum youth who have severe comorbid psychiatric disorders. The target audience is psychiatrists, other mental health professionals, parents, educators, primary care physicians, hospital administrators, and health policy makers—all of those whose efforts must be coordinated for us to incrementally move toward a comprehensive system of child and adolescent mental health care.

#### No. 3A EARLY IDENTIFICATION OF PSYCHOSIS IN YOUTHS

Jean A. Frazier, M.D., Director, Pediatric Psychotic Disorders Program, McLean Hospital, 30 Ricker Road, Newton, MA 02458

#### **SUMMARY:**

Objective: To present information on the prodrome and symptoms of psychosis in youths. Early identification and interventional strategies used during the prodromal period and active illness will be provided.

Methods: A PubMed review of the literature yielded data on the early hallmarks and treatment of psychosis in youths. Data regarding early presentations of psychosis in 100 children and adolescents enrolled in our neuroimaging projects were analyzed.

Results: High rates of inattention, speech and language difficulties, and neuromotor difficulties are seen prior to illness onset in youths. Young symptomatic patients have high rates of hallucinations, as well as thought disorder and ill-formed delusions, impacted by developmental stage. Few prospective longitudinal studies on treatment of early-onset psychosis with atypical agents exist; however, data indicate these agents hold promise for psychotic youths. One report documents the use of atypical agents in "ultra-high-risk" youths may prevent illness onset. Data analysis of early hallmarks of psychosis from our neuroimaging studies will be presented.

Conclusion: Early-onset psychosis is severely impairing. Promising data are emerging on early warning signs of illness and the use of atypical agents in youths. Further longitudinal research is warranted to define illness evolution prior to and after symptom onset.

#### No. 3B GLOBAL ADOLESCENT ALCOHOL USE AND EARLY SCREENING

Ranna I. Parekh, M.D., Department of Child and Adolescent Psychiatry, McLean Hospital, 81 Highland Avenue, Salem, MA 01970

#### **SUMMARY:**

The World Health Organizations' 1999 Global Status Report on Alcohol holds alcohol responsible for significant loss of years due to death and disability. The Global Burden of Disease found alcohol's effect on morbidity, measured in years of life disability, outweighed malnutrition and poor sanitation. It is the traumatic associated outcomes of alcohol use, often seen in younger persons, which are most responsible for alcohol's disability. Since the mid-1980s, overall consumption of alcohol by developed countries has decreased while it has steadily increased in developing countries. The latter's rise poses concerns for subsequent increase in alcohol-related morbidity among adolescents. This presentation reviews the limited international studies examining the effects of alcohol use. It focuses on studies in developed countries where alcohol remains a public health concern. In the United States, the leading cause of death for adolescents is known to be motor vehicle accidents, followed by homicide and suicide. Alcohol's involvement in these three causes has fueled the need for early intervention screens. Over the years, many screening tools have been devised, each with significant limitations. The CAGE questionnaire, which is widely used in primary care settings around the globe, is easy to administer and is sensitive in diagnosing abuse and dependence. Its short comings include its inability to detect risky levels of drinking and its lack of developmental appropriateness for adolescents and children. Most recently, a Boston pediatrician developed the CRAFFT screen for adolescent medical patients. Its first use in a study involving 538 adolescents proved it to be both sensitive and specific in identifying risky use as well as other diagnostic classifications. The CRAFFT is being currently used in other studies in the United States and may become the gold standard around the world for the early identification of problem drinking in adolescents.

#### No. 3C BEHAVIOR ANALYTIC TREATMENT FOR COMORBID PSYCHIATRIC AND DEVELOPMENTAL DISORDERS

Michael Cameron, Ph.D., Behavior Analyst, Franciscan Children's Hospital, 30 Warren Street, Brighton, MA 02135

#### **SUMMARY:**

Advances in the understanding of comorbid presentations among individuals with developmental disabilities have evolved over the last decade. For example, Sovener reviewed evidence concerning the prevalence of bipolar disorder in his examination of psychiatric disturbances among people with developmental disabilities. Moreover, Myers provided a comprehensive review of common clinical presentations of bipolar disorder.

Descriptions of the symptoms of specific psychiatric disturbances, like that offered by Myers are helpful because they allow families and clinicians to regard a diagnosis that may not have been considered, or possibly masked by a primary diagnosis of mental retardation, autism, or Asperger syndrome. Also helpful are descriptions of new psychopharmacological treatment approaches for the management of psychiatric disturbances, such as those provided by Goodwin and Ghaemi.

To date, the treatment of individuals with developmental disabilities and psychiatric disturbances has been systematic. Specifically, people with dual diagnoses have been identified, their symptomatology described, thus permitting the efficacy of various psychopharmacological agents to be assessed. While psychopharmacological agents are an important treatment component, it is unarguable that medication should be used within the context of a comprehensive treatment framework. Consequently, the purpose of this presentation is twofold: (1) to provide a behavior analytic conceptualization of people with dual diagnosis, and (2) to review the essential components of a framework for the treatment of individuals with a co-morbid presentation. Behaviorally based systems and specific behavioral intervention strategies used with individuals with dual diagnoses will be discussed.

#### No. 3D CULTURAL CONSIDERATIONS IN THE DELIVERY OF MENTAL HEALTH SERVICES TO LATINO CHILDREN AND ADOLESCENTS

Blaise A. Aguirre, M.D., Department of Psychiatry, McLean Hospital, One Arborview Road, Jamaica Plain, MA 02130-3410

#### **SUMMARY:**

In census 2000, of 281.4 million residents counted in the U.S., 35.3 million, or 12.5% was Hispanic. In Massachusetts, the census reports that 6.8% of the 6,379,304 population is Hispanic. These numbers are substantial and the demographic data show that Latinos will continue to grow in absolute numbers and as a total percentage of the population. Further, the Surgeon General in a recent report stated that compared with

whites, minorities, including Latinos had less access to, and availability of, mental health services; were less likely to receive needed mental health services; often receive a poorer quality of mental health care; and are underrepresented in mental health research. The need for comprehensive and culturally competent—that being both linguistic and cultural competence—is clear. States such as California and Florida, with large Latino minorities have met the challenge of the provision of such care through the allocation of resources. This may in part be due to the political voice and consequent political makeup of legislatures; however, there are other important factors such as the emphasis on cultural sensitivity in the medical schools and allied educational services. Health care organizations in these states use a wide spectrum of strategies for overcoming linguistic and cultural barriers to care. These strategies include the use of bilingual providers, bilingual/bicultural community health workers, interpreters (onsite and telephone), and translated written materials. In Massachusetts, however, the provision of culturally competent care to the Latin population is challenged by various factors including the allocation of resources, finding culturally competent health care providers, and the lack of awareness of currently available provider data, resources, and potential solutions.

#### No. 3E A STRENGTH-BASED APPROACH TO CHILD INPATIENT PSYCHIATRIC CARE

Ralph J. Buonopane, Ph.D., Program Director, McLean-Franciscan Child and Adolescent Inpatient Psychiatric Program, 30 Warren Street, Brighton, MA 02135

#### **SUMMARY:**

The inpatient psychiatric care of children and adolescents presents several distinctive treatment challenges. Inpatient programs must be designed to meet the treatment needs of patient populations with diverse developmental and diagnostic profiles, who present in times of severe psychiatric crisis. In response, there is an emerging focus on practices that effectively reduce violence, both self and other directed, while simultaneously reducing or eliminating the use of restrictive interventions such as seclusion or restraint. Emerging research and treatment approaches incorporate an increased emphasis on mobilizing child and family resources and strengths to promote successful outcomes. This presentation draws on our experience implementing and sustaining a strength-based, skill-building approach in the inpatient psychiatric care of children and adolescents. Inpatient program policies, staffing patterns, clinical training, staff supervision, milieu culture, and therapeutic programming we're redefined to create a treatment context that promoted the expression of child and family strength and created hope and expectancy for change. Successbased, noncoercive interventions were adapted to meet a wide developmental and diagnostic range, while restrictive interventions were dramatically decreased.

#### **REFERENCES:**

- McGorry PD, Yung AR, Phillips LJ, Yuen HP, Francey S, Cosgrave EM, Germano D, Bravin J, MacDonald T, Blair A, Adlard S, Jackson H: Randomized controlled trial of interventions designed to reduce the risk of progression to first-episode psychosis in a clinical sample with subthreshold symptoms. Archives General Psychiatry 2002; 59:921–928.
- Kumra S, Frazier JA, Jacobsen LK, McKenna K, Gordon CT, Hamburger S, Smith AK, Albus KE, Alaghband-Rad J, Lenane M, Rapoport JL: Childhood-onset schizophrenia: a double blind clozapine trial. Archives of General Psychiatry 1996; 53:1090– 1097.
- Validity of the CRAFFT Substance Abuse Screening Test Among Adolescent Clinic Patients, Archives of Pediatric Adolescent Medicine 2002; 156:607–613.
- Global Status Report on Alcohol, World Health Organization, Geneva, Switzerland, 1999, pp. 1–60, 162–167.
- Luiselli JK, Cameron MJ (Eds): Antecedent Control: Innovative Approaches to Behavioral Support. Baltimore, Paul H. Brookes Publishing, 1998.
- 6. Singh NN, Wahler RG, Sabaawi M, Goza AB, Singh SD, Molina EJ. The Mindfulness Research Group. Mentoring treatment teams to integrate behavioral and psychopharmacological treatments in developmental disabilities. Research in Developmental Disabilities 2002; 23(6):379–389.
- 7. U.S. Census 2000.
- 8. Mental Health: Culture, Race, and Ethnicity. A Supplement to Mental Health: A Report of the Surgeon General, commissioned February 2000.
- Aspinwall LG, Staudinger UM (Eds): A Psychology of Human Strengths. Washington, D.C., Am Psychol Assoc 2002.
- Hubble MA, Duncan BL, Miller SD (Eds): The Heart & Soul of Change. Wash, D.C., Am Psychol Assoc 1999.

Symposium 4

Thursday, October 30 8:30 a.m.-11:30 a.m.

#### BEYOND BALANCE: POSITIVE PERSONAL AND PROFESSIONAL CHOICES AT EACH LIFE STAGE

Leah J. Dickstein, M.D., M.A., Professor Emeritus, Department of Psychiatry and Behavioral Science, Univer-

sity of Louisville, 3006 Dunraven Drive, Louisville, KY 40222; Carolyn B. Robinowitz, M.D., Dean, Georgetown University School of Medicine, 5225 Connecticut Avenue, N.W., #514, Washington, DC 20015; Carol C. Nadelson, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should recognize the importance and validity of unique personal and professional issues, responsibilities, opportunities, and choices or lack thereof, for women and men at different life stages.

#### **SUMMARY:**

As more women and more nontraditional women and men enter the professions, particularly medicine, too often they do not give sufficient thought and planning to their unique personal and professional needs, responsibilities, and goals at different life stages. Thus, while they are likely to achieve professional goals at different life stages, too often it is at the immeasurable cost to their personal lives. Symposium speakers will offer their national and international as well as personal perspectives to assist attendees in their planning.

Carolyn Robinowitz has held numerous national leadership roles in organized psychiatry following serving as APA senior deputy medical director, then as Georgetown University dean. Marshall Forstein will share his insights into choices or lack thereof and responsibilities in the lives of respected and acclaimed colleague-leaders. Tana Grady-Wehky will discuss unique resident and midcareer issues facing women and men in the 21<sup>st</sup> century. Leah Dickstein will offer insights facing all women and men medical students and professionals from an historical, therapist role and with current knowledge from a national perspective in assisting women and men in their professional negotiations.

#### No. 4A BALANCING ACTS: HOW TO SAVOR THE SEESAW WITHOUT GETTING DIZZY AND MASTER THE TIGHTROPE WITHOUT FALLING OFF

Carolyn B. Robinowitz, M.D., Dean, Georgetown University School of Medicine, 5225 Connecticut Avenue, N.W., #514, Washington, DC 20015

#### **SUMMARY:**

The end of the 20<sup>th</sup> century saw increasing numbers of women in the professions, at the same time that their male counterparts voiced greater expectations of combining their personal and family life with the demands of their work. "Having it all" became the buzz phrase, initially of women, but increasingly of men as both

groups recognized the importance of love and work. Yet, striking a satisfying balance has been elusive for professional women and men, especially those in the health and mental health professions. This presentation will address the issues that impact on achieving satisfaction and success in both roles, and in particular those factors affecting health and mental professionals. Topics will include fluctuating needs and timing at various family and career stages, institutional and organizational structures and function, avoidance of pitfalls, and examples of successful approaches. Participants will become cognizant of the factors that support as well as impede career and family satisfaction.

#### No. 4B PROMOTING BALANCE AND WELL-BEING FOR PSYCHIATRY RESIDENTS

Tana A. Grady-Weliky, M.D., Senior Associate Dean for Medical Education, and Associate Professor of Psychiatry and Obstetrics/Gynecology, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, P.O. Box 601, Rochester, NY 14642

#### **SUMMARY:**

The Accreditation Council on Graduate Medical Education (ACGME) has adopted several guidelines to enhance the residency training experience across specialties. In addition to the six core competencies (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice), in July 2003 all residency-training programs will be expected to adhere to an 80-hour/week work ("duty") rule. Efforts to limit residents' work hours have been implemented not only to enhance patient care and safety, but also to facilitate resident well-being and learning. Resident physicians must have time for learning in clinical and didactic settings. Moreover, residents need to develop skills in self-reflection, which fosters self awareness and contributes to professional development. It has also been suggested that the capacity for self-reflection enhances the experience of physicians in practice as well as clinical outcomes. This presentation will address the importance of providing time and specific training in these areas. Additionally, it will identify ways in which psychiatric educators can create learning environments that will facilitate the training of residents in a balanced and healthy fashion.

#### No. 4C COMING OUT OF THE CLOSET PROFESSIONALLY: DEVELOPING A SELF AMIDST A NEW PANDEMIC

Marshall Forstein, M.D., Director of Psychiatric Residency Training, The Cambridge Hospital, Harvard University, 24 Olmstead Street, Jamaica Plain, MA 02130

#### **SUMMARY:**

The decision to come out as a gay professional begins a process that forever changes one's life course. Although attitudes and opportunities have changed considerably in some arenas, declaring one's same-sex orientation is often assumed to have potentially negative consequences. In many cases, there is a lack of mentoring or support for making this decision. Sometimes coming out is not an active decision but rather the result of coincidence or accident. Sometimes in defiance of the norm one finds the passion in one's life. And timing, as they say, is everything. So in the beginning of my residency, at the beginning of the AIDS epidemic, I was thrust by chance into making choices that have expanded my world beyond expectation.

This presentation will present a particular journey of coming out within the field of medicine and psychiatry. I will trace my experience coming out as a gay man from the beginning of my medical school career, through residency and into practice as an academic and community psychiatrist. Observations about the internal process and the response of others will be presented with attention to the developmental aspects of the formation of a "gay professional identity." Particularly, I will focus on the positive and negative experiences that led me to forge what I consider to be a most appropriate and rewarding career in psychiatry.

#### No. 4D HISTORIC AND CURRENT INSIGHTS INTO LIFE RESPONSIBILITIES AND CHOICES

Leah J. Dickstein, M.D., M.A., Professor Emeritus, Department of Psychiatry and Behavioral Science, University of Louisville, 3006 Dunraven Drive, Louisville, KY 40222

#### **SUMMARY:**

Although the second women's movement for equality occurred in the early 1960s following women's active leadership in the civil rights movement and the first men's movement occurred in the 1970s, for too many stereotypes and restrictions for both sexes remain strong. Restrictive cultural sex-role stereotypes continue to pervade children's, adolescents, young adults, and more

senior adults' lives. Most of us are exposed daily to 3,000 gender stereotypes in every part of our lives. This presentation will include factors such as sex-role socialization, education, work and career, body image, communication styles, personal goals and choices, or lack thereof, secondary to sex-role stereotypes.

The major impact of these issues too often affects the perceived choices or restrictions women and men face at each stage of their personal and professional lives. Attendees will learn about effective ways to risk modifying and changing goals, plans and ways of functioning without guilt and fear. Many specific examples of successful risks taken will be offered.

#### **REFERENCES:**

- 1. Epstein LC: Sex differences in career progression and satisfaction in an academic medical center. JAMWA, 2002; 57:195.
- Stautberg, Worthing: Balancing Acts: Juggling Love, Work, Family and Recreation. New York, MasterMedia, 1992.
- 3. ACGME website-http://www.acgme.org.
- 4. Epstein R: "Handful Practice" JAMA.
- 5. McNaught B: Now That I Am Out What Do I Do?, St. Martin Press, 1998.
- Dickstein LJ: Dr. Alexandra Symonds' Legacy of Advancing women psychiatrists & promoting women's mental health: The American Journal of Psychoanalysis 2000; 60(3):215–228.

Symposium 5

Thursday, October 30 8:30 a.m.-11:30 a.m.

### OUT OF THE OFFICE: TREATMENT IN SHELTERS

Laurence P. Karper, M.D., Vice Chair, Department of Psychiatry, Lehigh Valley Hospital at Muhlenberg, 2545 Schoenersville Road, Fifth Floor, Bethlehem, PA 18107; Alan D. Felix, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe and understand various approaches to treating psychiatric patients in settings outside of traditional clinic or office settings.

#### **SUMMARY:**

Homeless shelters, often affiliated with faith-based or charitable organizations, provide care to many individuals with psychiatric or substance-use disorders. All too often, these organizations have become providers of last resort for homeless dual-diagnosis patients. The homeless have substantial unmet needs and often present to shelters in crisis. Psychiatric treatment settings, while effective at diagnosing and treating behavioral health

disorders, face numerous obstacles in providing comprehensive multidimensional care to the homeless. These obstacles include balancing the complex needs of the homeless patient with ensuring access to inpatient services in an environment of chronic scarcity of resources and maintaining economic viability. Shelters focus on housing, nutrition, and maintaining safety and in addition may provide financial, vocational, psychiatric, and living skills assistance. These organizations may lack the expertise in understanding psychiatric disabilities and substance use disorders which complicates the difficult task of 'treating' homelessness. Providing treatment in the shelter setting may provide a cost-effective solution to the current financial problems faced by public sector mental health providers. Patients who are currently living in a shelter frequently are unable to participate in conventional inpatient or outpatient treatment and can be seen as non-compliant. The presenters of this symposium have developed local solutions to the problems of the homeless patient and from these experiences have fostered new collaborative relationships.

#### No. 5A DEVELOPING A COMPREHENSIVE PSYCHIATRIC SHELTER

Laurence P. Karper, M.D., Vice Chair, Department of Psychiatry, Lehigh Valley Hospital at Muhlenberg, 2545 Schoenersville Road, Fifth Floor, Bethlehem, PA 18107; Gary Millspaugh, M.P.H.; Vivian Davis-Martinez, L.S.W., C.A.C.; Evette Vega, B.A.

#### **SUMMARY:**

Providing comprehensive integrated care to homeless individuals can test the limits of a mental health system's resources and resourcefulness. The challenges of providing care to this population include coordinating outpatient mental health treatment, ensuring rapid referral to nonpsychiatric medical care, and inpatient triage and diversion (crisis intervention). Meeting the multidimensional needs of the homeless has put significant further stress on public health systems and community hospitals that already struggle to provide for patients in more conventional treatment settings. This presentation reviews the progress of a funded collaboration between a faith-based shelter and licensed drug and alcohol treatment facility and a community hospital department of psychiatry. The project began as a multi-year research study and has grown into a collaboration leading to the development of a multidisciplinary, comprehensive psychiatric evaluation unit for homeless mentally ill men. The study has successfully tested the hypothesis that shelter-based care coordination is more effective that routine care for dual-diagnosis clients. Data will be presented on the 72 subjects that have completed intake and have been followed for up to one year. Rating instruments include measures of alcohol and drug consumption, psychiatric symptoms, homelessness, and general health outcomes. This collaboration is funded through a two-year grant supported by the Dorothy Rider Pool Health Care Trust. The future development includes planning to introduce comprehensive evaluations on-site to shelter clients by the development of a physician assistant fellowship.

#### No. 5B CREATING ALTERNATIVE TREATMENTS IN A SHELTER

Charles Barber, M.F.A., Research Associate, Yale Program on Poverty, Disability and Urban Health, Yale University School of Medicine, 205 Whitney Avenue, Suite 304, New Haven, CT 06511

#### **SUMMARY:**

The Fort Washington Men's Shelter in upper Manhattan provides residential, case management, and medical and psychiatric services for 200 men. Fort Washington is the largest mental health shelter in the world. The great challenge at the facility is getting clients to engage in psychiatric treatment. The shelter staff strongly believe in the importance of psychotropic medications and physical health care but have found a nontraditional, nonconfrontational approach the most effective. Even though two leading departments of psychiatry, Columbia Presbyterian Medical Center and New York State Psychiatric Institute, are located within a block of the shelter, no services are provided there. Rather there are three informal, "home-like" clinics within the shelter, each with its own culture, expertise, and philosophies. Staff make an effort to dissolve the hierarchy and distinctions that typically exist between psychiatrist and other staff. Great attention is paid to how the engagement and even the treatment process can be practiced in unusual and unanticipated ways. Close attention is paid to the importance of ritual and routine and staff often engage in a greater degree of personal disclosure than would be appropriate in most settings, and employ peers who have become actively engaged in treatment to discuss its benefits with other patients. The effectiveness of such strategies has been shown by the shelter's record in housing placements; about 60% of shelter residents are placed in supportive or independent housing in the community annually.

#### No. 5C CHARACTERISTICS OF TREATMENT IN A RESCUE MISSION

Gary Milspaugh, M.P.H., Allentown Rescue Mission, 355 West Hamilton Street, Allentown, PA 18105; Vivian

Davis-Martinez, L.S.W., C.A.C.; Laurence P. Karper, M.D.

#### **SUMMARY:**

The gospel rescue mission movement is a Christianbased, loosely organized provider of shelter to the homeless. Gospel rescue missions are typically very independent and earnestly avoid secular and government influences, sometimes including generally accepted medical and psychiatric practices. Many of the homeless persons helped by missions are suffering from mental illness and alcohol and drug problems. In addition, they have substantial social, vocational, and financial needs. Many missions, in addition to spiritual support, provide guidance to their clients on living skills and job training. We evaluated the current practices of rescue missions in the United States via a world-wide, web-based questionnaire. The missions are quite diverse and serve a population of predominantly homeless men. On average they serve approximately 100,000 meals per year to 25,000 individuals. The average yearly shelter census is over 21,000 bed nights. Most rescue missions provide various kinds of treatment or collaborate with community providers. Responses confirmed our belief that rescue missions often serve clients with clinically significant psychopathology. However, there are substantial variations in services offered and the characteristics of those services.

# No. 5D INTEGRATING A COGNITIVE BEHAVIORAL TREATMENT GROUP IN A LONG-TERM, FAITH-BASED SHELTER PROGRAM

Evette Vega, B.A., Allentown Rescue Mission, 355 West Hamilton Street, Allentown, PA 18105; Vivian Davis-Martinez, L.S.W., C.A.C.; Gary Milspaugh, M.P.H.; Laurence P. Karper, M.D.

#### **SUMMARY:**

Cognitive-behavioral treatment (CBT) has been shown to be effective in reducing symptoms and reducing substance use in a broad array of psychiatric syndromes including mood, personality, and substance abuse disorders. In addition, our works has focused on reducing aggressive thoughts, feelings, and behaviors in male clients in various social situations and with a wide variety of clinical situations. This paper will address our experience with the implementation of a CBT-based group to reduce symptoms and improve functioning of homeless men in a faith-based long-term shelter. Our efforts to overcome the obstacles in providing this treatment outside of conventional psychiatric settings will be detailed in our presentation. Obstacles reviewed in-

clude the resistance present in staff, clients, and their non-psychiatric institutions. Our outcome data include measures of psychiatric symptoms, use of alcohol and illicit drugs, and measures of anger and impulsivity.

#### No. 5E INAPPROPRIATE PLACEMENT: PATIENT DUMPING AT A HOMELESS SHELTER

Vivian Davis-Martinez, L.S.W., C.A.C., Allentown Rescue Mission, P.O. Box 748, Allentown, PA 18104; Gary Milspaugh, M.P.H.; Laurence P. Karper, M.D.

#### **SUMMARY:**

Caring for homeless individuals with mental health needs in a faith-based shelter presents many challenges, including the need to maintain safety and to rapidly assess and triage clients with multiple needs. In addition to the complexities present in providing services to those who "walk in out of the cold," we also face the increasing phenomenon of inappropriate placement or what is commonly called patient dumping. Unfortunately, it is now an all too common occurrence that human service professionals discharge clients to our shelter in need of medication, extensive psychiatric services, detoxification, and clothes. Some of the inappropriately placed individuals were not even able to walk at the time of their discharge. It is understood that homeless shelters are often the treators of last resort for many clients; however, for those who are not psychiatrically or medically stabilized, a homeless shelter is an inappropriate disposition. Hospitals and other service providers dump clients without insurance or consideration of their psychiatric needs. This dumping is done without proper phone contact or referral information. When contact is made, hospital case workers may refer their clients regardless of the recommendation and even refusal to take them. Regrettably, these men find themselves at our doorstep unexpected, resulting in additional feelings of stress and powerlessness over a system that fails to meet their needs. We present data demonstrating the significant psychiatric symptomatology of clients discharged from inpatient medical and psychiatric settings and the impact this has on the receiving shelter. Strategies to deal with the consequences of and to prevent dumping are reviewed.

#### **REFERENCES:**

- 1. Drake RE, et al: Follow-up of substance abuse in severely mentally ill patients. J Nerv Men Dis 1993; 181:606–611.
- Caton DLM, et al: Follow-up of chronically homeless mentally ill men. Am J Psychiatry 1993; 150:1639– 1642.

- 3. Burger DT: Women Who Changed the Heart of the City: The Untold Story of the City Rescue Mission Movement. Kregel Publications, 1997.
- 4. Clark WL: Gardens of the Streets: Poetry and Pictures of Urban Rescue Mission and the People they Serve. Mayhaven Publishing, 1995.
- 5. Schlesinger M; et al: The determinants of dumping: a national study of economically motivated transfers involving mental health care. Health Serv Res 1997; 32(5):561-90.

#### Symposium 6

Thursday, October 30 2:00 p.m.-5:00 p.m.

#### INNOVATIONS IN LEVEL OF CARE ASSESSMENT FOR PSYCHIATRIC AND SUBSTANCE DISORDERS

American Association of Community Psychiatrists

Kenneth M. Minkoff, M.D., Associate Clinical Professor, Department of Psychiatry, Harvard Medical School, 100 Powdermill Road, Box 319, Acton, MA 01720

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: (1) describe the concept of independent de-linked dimensions of service intensity, and identify four such dimensions, (2) discuss the concept of multidimensional service intensity assessment, and identify six assessment dimensions for addiction patients and for psychiatric patients, and (3) describe the current availability, utility, validity, and reliability of the ASAM PPC2R, the LOCUS, the CHOICE, and the CHOICE-Dual.

#### **SUMMARY:**

Despite the fact that there has been extensive controversy regarding managed care and concern that managed care reviewers may inappropriately deny access to intensive services, there has been surprisingly little available objective data on the process of utilization management and level of care determination. Fortunately, in recent years, this has begun to change, as there has been increasing development and investigation of more sophisticated instruments for assessment of level of care or service intensity requirements.

This symposium attempts to bring together in a single forum a presentation of the most up-to-date level of care assessment tools available in the public domain. The symposium begins with a presentation of general principles of utilization management, including the description of independent dimensions of service intensity and the concept of multidimensional service intensity assessment, and illustrates the application of these concepts to the development of utilization management manuals

(CHOICE - the Choate Outline for Intensity of Care Evaluations) in the managed care oriented service continuum. The symposium continues with a description of the latest version of the American Society of Addiction Medicine Placement Criteria (2R), which incorporates increased sophistication regarding assessment of comorbid psychiatric disorders in the addiction placement process. This presentation is followed by a presentation on the NIDA-funded ASAM Criteria Validity Study, which is attempting to demonstrate objective support for the ASAM PPC2.

The next section of the symposium focuses on the latest version of a level of care assessment tool that originated on the psychiatric side, (though also incorporating addressing comorbidity): LOCUS 2.001, developed by the American Association of Community Psychiatrists (AACP). The instrument will be described, along with current research supporting validity and reliability.

The final section of the symposium will emphasize audience participation in the level of care assessment process. Sample cases (one addiction focussed, one psychiatric focused) will be distributed, and the audience will be invited to use ASAM 2R, LOCUS, and CHOICE-Dual to help determine appropriate level of care. The strengths and limitations of each instrument will then be discussed.

In total, the symposium will present the listener with an accurate portrayal of the current field of level of care assessment, and the directions of future research. This material will be invaluable for anyone involved, or planning to be involved in the development of, or delivery of service in, managed care systems.

## No. 6A PRINCIPLES OF UTILIZATION MANAGEMENT AND LEVEL OF CARE ASSESSMENT

Kenneth M. Minkoff, M.D., Associate Clinical Professor, Department of Psychiatry, Harvard Medical School, 100 Powdermill Road, Box 319, Acton, MA 01720

#### **SUMMARY:**

The presentation begins with an outline of basic principles of utilization management. This will include the concept of independent dimensions of service intensity, including biomedical, residential, treatment, and case management intensity, which lead in turn to the reconceptualization of levels of care as matrices of service intensity. In this model, the independent dimensions are de-linked so that program models can vary flexibly across dimensional categories.

The second key concept is that of multidimensional service intensity assessment. Level of care instruments

are based on identifying these dimensions, and connecting ratings on each dimension, separately and together, to the identification of patient service intensity requirements. Later talks in the symposium will illustrate how this is currently being done for individuals who present with substance disorders, psychiatric disorders (for adults), and child and adolescent psychiatric disorders.

The final component of this presentation will be the application of the above concepts to the creation of a behaviorally descriptive utilization management manual (CHOICE, CHOICE-DUAL) that has been utilized in a public-sector, managed care, case rate program in a vertically integrated continuum of care with a wide range of available service intensities.

#### No. 6B UNDERSTANDING AND USING THE PATIENT PLACEMENT CRITERIA OF THE AMERICAN SOCIETY OF ADDICTION MEDICINE

David Mee-Lee, M.D., Assistant Clinical Professor of Psychiatry, University of Hawaii, and Chair, American Society of Addiction Medicine, 4228 Boxelder Place, Davis, CA 95616

#### **SUMMARY:**

Clinicians involved in planning and managing care often lack a common language and systematic assessment and treatment approach that allows for effective individualized treatment plans and level of care placement. The Patient Placement Criteria for the Treatment of Substance-Related Disorders of the American Society of Addiction Medicine (ASAM) first published in 1991, provided common language to help the field develop a broader continuum of care. The Revised Second Edition (ASAM PPC2R) published in April 2001, added criteria for co-occurring mental and substance-related disorders, which made the ASAM PPC-2R even more applicable to behavioral health systems.

# No. 6C THE AMERICAN SOCIETY OF ADDICTION MEDICINE'S PATIENT PLACEMENT CRITERIA: CONTEXT, CONCEPTS, AND CONTINUING DEVELOPMENT

David R. Gastfriend, M.D., Associate Professor of Psychiatry, Harvard Medical School, and Director, Addiction Research Program, Massachusetts General Hospital, 388 Commonwealth Avenue, Lower Level, Boston, MA 02215

#### **SUMMARY:**

A decade after publication, the Patient Placement Criteria (PPC) published by the American Society of Addiction Medicine (ASAM) has become a national model for addiction care, bringing order to a field in turmoil. Technology has given the PPC adequate reliability, feasibility, and resolution. An independent Center for Substance Abuse Treatment panel found sufficient face validity to recommend that states proceed with implementation and evaluation. Two controlled studies described in the volume find evidence for validity using a comprehensive computerized implementation of the PPC in over 1,000 uninsured, Medicaid, privately insured, and Veterans Administration patients. Both naturalistic and randomized trials indicate that PPC matching was associated with less morbidity, better function, or less service utilization than mis-matching to lower level of care. Challenges remain, including low resolution of decision rules and poor reliability in site characterization. The new millennium with improved software that should empower community programs to join this respect.

# No. 6D THE LEVEL OF CARE UTILIZATION SYSTEM: A SIMPLE METHOD FOR LEVEL OF CARE DECISIONS

Wesley E. Sowers, M.D., Medical Director, Allegheny County Office of Behavioral Health, 206 Burry Road, Bradford Woods, PA 15015

#### **SUMMARY:**

The Level of Care Utilization System for Psychiatric and Addiction Services (LOCUS) was developed by the American Association of Community Psychiatrists in 1995. The instrument attempts to assist in making level of care determinations, while balancing the interests of maintaining quality with the demands for providing care in the most cost-effective manner possible. It is designed to be easily understood and used by clinicians. A number of other principles were identified to guide the development of LOCUS: (1) integration of mental health and addiction variables; (2) dimensional and quantifiable assessment parameters; (3) levels of care defined flexibly in terms of resource intensity rather than rigidly defined program requirements; and (4) adaptable to the variety of circumstances encountered in behavioral health environments. LOCUS has been field tested over the past five years and has been revised to accommodate suggestions obtained from that process. Preliminary testing has shown it to be reliable and consistent with expert determinations for placement decisions. This workshop will discuss the practical applications of LOCUS and will use a case example to demonstrate its utility.

#### **REFERENCES:**

- 1. Mincoff, Regner: The Choate Dual Ox Case Rate Program Innovations in Dual Dx Treatment. Med Care J Psychoactive, 1999 1–11.
- Mee-Lee D, Shulman GD, Fishman M, Gastfriend DR, and Griffith JH (eds): ASAM Patient Placement Criteria for the Treatment of Substance-Related Disorders. Second Edition-Revised (ASAM PPC-2R). Cheny Chase, Md, American Society of Addiction Medicine, Inc, 2001.
- 3. Mee-Lee D: Treatment planning for dual disordered psychiatric rehabilitation skills 2001; 5(1):52–79.
- 4. Gastfriend DR. Mee-Lee D. The ASAM Patient Placement Criteria Guidelines: challenges and continuing development. Journal of Addictive Diseases, in press.
- 5. Sowers W: Level-of-care determinations in psychiatry. Harvard Rev Psychiatry 1998; 5:286–90.
- 6. Sowers W, George C, Thompson K: Level of care utilization system for psychiatric and addiction services (LOCUS): a preliminary assessment of reliability and validity. CMHJ 1999; 35(6):545–563.

Symposium 7

Thursday, October 30 2:00 p.m.-5:00 p.m.

#### INTEGRATING MENTAL HEALTH TREATMENT THROUGH PSYCHOEDUCATION

Therapeutic Education Association

Karen A. Landwehr, M.C., Clinician/Educator, Tacoma Comprehensive Mental Health, 514 South 13th Street, Tacoma, WA 98402; Larry S. Baker, M.Div., Director of Training, Comprehensive Mental Health Community Education Partnership, 514 South 13th Street, Tacoma, WA 98402; Frederick J. Frese III, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, the participant should be able to recognize the potential of psychoeducation as an opportunity to offer integrated mental health services and will be able to assess the prevalence of psychoeducational approaches and the effectiveness of some current psychoeducation programs in promoting a seamless treatment experience for patients.

#### **SUMMARY:**

The mental health system has failed to develop a seamless approach to treatment. Hospitalized individuals often find themselves with a completely different treatment team from the one with whom they work while in the community. The two teams often fail to communicate in a significant way with each other, making treatment continuity largely an unfulfilled ideal. Incarcera-

tion and inpatient substance abuse treatment may well add additional treatment complications, making access to and effective use of services confusing to patients, family members, and treatment providers.

Since the one constant in this process is the patient, psychoeducation offers a unique opportunity to provide a focused, coordinated approach to psychiatric treatment. By providing knowledge about their mental illness, its symptoms, and the treatment and social services available to assist in recovery, psychoeducation offers patients improved treatment outcome and a more hopeful prognosis for major mental disorders.

This symposium will provide information concerning the prevalence of psychoeducation. Two model programs used to bridge the gap between hospital and community treatment will be presented. A cutting edge approach to computer assisted learning will be demonstrated. The responsibility to provide psychoeducation outside of the mental health system will be discussed.

### No. 7A PREVALENCE OF PSYCHOEDUCATION IN SERIOUS MENTAL ILLNESS

Cynthia C. Bisbee, Ph.D., Clinical Director, Montgomery Area Mental Health Authority, Alabama, 101 Coliseum Boulevard, Box 3223, Montgomery, AL 36109

#### **SUMMARY:**

The literature has amply demonstrated the benefits of psychoeducation with families of persons with serious mental illnesses such as schizophrenia, bipolar disorder, and severe depression. These benefits have been demonstrated also, to a lesser degree, with consumers learning illness self management. These interventions, however, have been embraced only to a limited extent in this country, despite their benefits to consumers, families, and the service deliver system. Treatment and management of serious mental illness requires a multi-faceted approach that encompasses biological, psychological, and social interventions, and psychoeducation is a vital part of the overall service plan. These efforts are fraught with barriers that block the widespread use of these techniques. This presentation will shed some light on the prevalence of psychoeducation, and enumerate some of the barriers that exist to providing psychoeducation. The session will describe the results of a survey of mental health providers regarding the extent to which they provide consumer and family psychoeducation, and the barriers that they experience. Examples of barriers encountered are attitudes about families as contributors to the development of the illnesses; cultural values of self-reliance and independence; level of knowledge and ability of providers to conduct psychoeducational activi-

ties; and system issues related to resources and processes, such as confidentiality of information and funding of family interventions. The presentation will then suggest some solutions to the barriers.

#### No. 7B IF PSYCHOEDUCATION WORKS, WHY IS NO ONE OFFERING IT?

Garry M. Vickar, M.D., Chair, Department of Psychiatry, Christian Hospital, 11125 Dunn Road, Suite 213, St. Louis, MO 63136

#### **SUMMARY:**

Since 1985 there has been a program, STEPS<sup>SM</sup>, dedicated to treating patients with schizophrenia in a general hospital setting. Since 1990, this program has been presented at various Institute meetings and yet is still, to our knowledge, the only such dedicated psychoeducational program in a general hospital setting. There are programs similar in academia or in V.A. or in state hospitals, but a large population of patients being served and treated in the private sector seems to not have this available to them. Why? Those questions will be addressed from the standpoint of understanding fully the concept of psychoeducation and the benefits available and the realities of the economic challenges that hospitals face when trying to provide programs and services and yet, at the same time, simply remain open.

The STEPS program is in a hospital affiliated with BJC, wherein resides Washington University. A BJC grant was made available so that Carol North, M.D., professor of psychiatry at Washington University, can undertake a study of the value of psychosocial education. The preliminary results from that study should be available at the meeting and will perhaps add an extra impetus to those who have had doubts as to the value of offering these services in their communities.

# No. 7C PEBBLES IN THE POND: BREAKING DOWN THE BOUNDARIES BETWEEN INPATIENT AND COMMUNITY MENTAL HEALTH TREATMENT

Karen A. Landwehr, M.C., Clinician/Educator, Tacoma Comprehensive Mental Health, 514 South 13th Street, Tacoma, WA 98402; Larry S. Baker, M.Div.

#### **SUMMARY:**

Pebbles in the Pond: Living With Chronic Neurobiological Disorders is a 12-week psychoeducation program for psychiatric patients, their family members, mental health care providers, and interested members of the

general public. It is currently being offered at Western State Hospital, in the three community mental health centers in Pierce County, Washington, as well as at community mental health centers in four other counties in Washington State. Referrals to the program are received from local hospitals, jails, and substance abuse programs.

Pebbles in the Pond provides participants with current information about major mental disorders, their diagnosis, and treatment options. This presentation will look at the role Pebbles in the Pond plays in transitioning individuals from inpatient care to treatment in the community. Data concerning referral follow-through and changes in attitude toward medication will be discussed.

#### No. 7D COMPUTER-ASSISTED LEARNING IN PSYCHOEDUCATION

Patricia L. Scheifler, M.S.W., Director, Partnership for Recovery, 249 Lakewood Circle, Sylacauga, AL 35150

#### **SUMMARY:**

We are now at the threshold of an opportunity to harness the synergy of a number of forces: (1) the explosion in computer technology, (2) the development of tailored and effective educational techniques and materials, (3) the potential for improved cognitive functioning due to new generation antipsychotic medications, and (4) and an increased emphasis on measurable treatment outcomes. Preliminary data indicate that computer-based education can be beneficial for people who have longterm schizophrenia spectrum disorders. In addition, a few initial psychotherapeutic computerized learning modules have recently appeared on the commercial market. Also, increasing numbers of state hospitals and community treatment programs are dedicating computers specifically for patient education purposes. These converging forces indicate that the timing is right for development of interactive, computer based, psychiatric patient education modules.

This presentation will demonstrate two new computerassisted learning programs. Participants will be encouraged to discuss the pros and cons of computer-assisted learning and the potential for using this technology in various treatment settings.

#### No. 7E COMMUNITY EDUCATION: WHOSE TASK IS IT?

Larry S. Baker, M.Div., Director of Training, Comprehensive Mental Health Community Education Partner-

ship, 514 South 13th Street, Tacoma, WA 98402; Karen A. Landwehr, M.C.

#### **SUMMARY:**

Schools, police departments, libraries, public transportation conveyances, and retail outlets are among the numerous venues where individuals may exhibit psychiatric symptoms. Persons in jails, prisons, or alcohol and substance abuse programs encounter similar information lacunae. Often, the staffs of these organizations have little, if any, information on the etiology and manifestations of severe and persistent disorders. Some of their information may be outdated, resulting in stigmatizing and ineffective responses. In-service training in such organizations may not cover essential topics.

Some APA members may recall the early NIMH staffing grants, which supported consultation and education as a service modality. Pre-paid health care programs do not have comparable provisions. Some treatment methods within the ambulatory care approach may prove useful.

Psychoeducation programs in our communities can help bridge this gap and contribute to the "seamlessness" addressed in the symposium. This paper will describe a community education program in a large urban community mental health center. Examples of successful community outreach will be described. The role of community psychiatry will be explored as a strategy, a volunteer effort, and/or a responsibility. Discussion of the options and models will occur in the question and answer portion of the presentation.

#### REFERENCES:

- 1. Bisbee C: Educating patients and families about serious mental illness. Pike Road, AL: CPS Bisbee, 1995.
- Lefley H: Family caregiving in mental illness. Thousand Oaks, CA, SAGE Publications, Inc., 1996.
- American Psychiatric Association: Practice Guidelines for the Treatment of Patients with Schizophrenia. American Psychiatric Press, Washington, D.C., 1986
- 4. Bisbee C: Educating Patients and Families About Mental Illness: A Practical Guide. Gaithersburg, Md, Aspen Publishers, 1991.
- 5. Pebbles in the Pond: Living With Chronic Neurobiological Disorders. Directions in Education, Training & Consultation, Gig Harbor, WA, 2003.
- 6. Medalia A, Revheim N, Casey M: Schizophrenia Bulletin 2001, 27:2, 2001, 259–267.
- Johnson M, Shaw BW, Winzelberg A: Help-Stress, 2001.
- 8. Hollingsworth E (Ed.): Dissemination of Model Programs in Community Treatment. San Francisco, Jossey-Bass, 1997.

9. Harris HS, Maloney DC: Human Services: Contemporary Issues and Trends. Needham Heights, MA, Allyn & Bacon, 1999.

Symposium 8

Friday, October 31 8:30 a.m.-11:30 a.m.

#### COGNITIVELY-IMPAIRED ADULTS: EMERGING CLINICAL PHENOMENA AND CHALLENGES

Albert C. Gaw, M.D., Past-Speaker, APA Assembly, Medical Director, San Francisco Mental Health Rehabilitation Facility, and Medical Director for Long-Term Care, Community Mental Health Services, San Francisco Department of Public Health, 887 Potrero Avenue, San Francisco, CA 94110

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should recognize the emerging cohort of cognitively impaired adults, gain understanding of the neurobehavioral substrate for their behavior, develop individualized treatment strategies, and engage new specialists in the interdisciplinary treatment planning.

#### **SUMMARY:**

This symposium highlights the clinical phenomenon and diagnostic and therapeutic issues of persons with cognitive impairment. Clinicians working in school settings and in rehabilitation facilities indicate the presence of an emerging cohort of individuals who may have short attention span with impairment of cognitive processing. As a result, instructions about therapeutic interventions are often not heard. Such patients may also show low frustration tolerance and/or agitated behaviors. Neuropsychological testing often reveals frontal lobe and other cognitive deficits. The etiologies can range from early exposure to substances (alcohol and drugs) in utero, chronic substance use, psychotic states, delirium, dementia, and other Axis I disorders. Individualized innovative therapeutic strategies may need to be developed. This symposium will cover the clinical challenges and phenomenon of cognitive processing impairment, review of neuropsychological findings, discussion of therapeutic interventions in psychiatric rehabilitative and community settings, and present an update on fetal alcohol syndrome. A new paradigm shift in the interdisciplinary approaches in the biopsychosocial rehabilitation of such a cohort of individuals is urged.

## No. 8A TREATMENT OF COGNITIVELYIMPAIRED ADULTS: THE NEED TO THINK OUTSIDE OF THE BOX

Mozettia Henley, D.N.S., Associate Hospital Administrator, San Francisco Mental Health Rehabilitation Facility, 887 Potrero Avenue, San Francisco, CA 94110

#### **SUMMARY:**

The emerging cohort of mentally ill adults underscores promulgation of a shift in our treatment paradigm requiring that no interdisciplinary treatment team can afford to be without ready access to a special education specialist, occupational therapist, neuropsychologist, and behavioral specialist.

Consistent with NIMH's designation of the 2000s as "The Decade of Behavior," we have found that many of our consumers present with behaviors that require specialized intervention. Many were part of the educational "special needs" population and diagnosed with learning disabilities and information processing difficulties; others function impulsively. Case histories reveal multigenerational influences on mental functioning, i.e., being second- or third-generation psychiatric service consumers in the family; socioeconomics, education stresses, and substance use all influence CNS development.

Consideration of interventions with consumers who have idiosyncratic needs related to social interaction, auditory/visual processing problems, problem-solving skills deficits, and impairment in judgment and thinking indicate that psychiatric service providers expand the membership of their treatment teams and "think outside the box" as they plan their interventions. This paper presents creative approaches toward working with this new generation of mentally ill adults using recent research findings and biopsychosocial rehabilitation interventions.

#### No. 8B NEUROPSYCHOLOGICAL PERSPECTIVE OF BEHAVIORAL PROBLEMS

Lori Wensley, Ph.D., 88 King Street, Unit 618, San Francisco, CA 94107

#### **SUMMARY:**

The treatment and care of individuals with significant cognitive impairment is frequently complicated by the presence of behavioral problems related to these deficits. Problems of this type frequently occur among individuals with disorders such as head injury, HIV dementia, fetal alcohol syndrome, and others. This presentation is designed to increase the awareness of practitioners

regarding the etiology of cognitive deficits among this population and their most common behavioral problems. Participants will also receive information to aid in the assessment of cognitive impairment and the development of appropriate responses to ensure the safety of the patient, educate caregivers, and maximize the quality of life of these patients.

#### No. 8C CHALLENGES OF BEHAVIORAL INTERVENTION IN PSYCHIATRIC REHABILITATION FACILITIES

Terry Ellis, M.S.W., Department of Psychiatry, San Francisco Mental Health Rehabilitation Facility, 887 Potrero Avenue, San Francisco, CA 94110

#### **SUMMARY:**

Historically, clinical interventions in psychiatric settings have successfully focused on the treatment of symptoms such as hallucinations and delusions. However, new generations of the mentally ill are now presenting in these settings whose illness is characterized by impairment and deficits in the area of judgment, thinking and language processing, perception, problem solving, memory, and social interaction. Many of these consumers present relatively free of hallucinations and delusions, but with highly idiosyncratic reality testing. Behavioral presentations are marked by profound lack of flexibility and adaptive skills. Transitions are difficult. Relationships are utilitarian and transitory. Interaction with the environment is reactive and primary coping strategies include extreme behavioral presentations that include violence toward ones self and others. This type of complex presentation raises major issues related to risk in long-term care settings. We are finding that their behavioral presentations have become the focus of intervention.

This paper will examine the relationship between the new generation of mental health clients and the challenges faced by long-term care psychiatric rehabilitation programs. A case study is used to illustrate this complexity. An interdisciplinary team approach is outlined through the presentation of a comprehensive plan of care that includes behavioral intervention strategies.

#### No. 8D DIAGNOSING AND MANAGING FETAL ALCOHOL SPECTRUM DISORDER IN ADOLESCENTS AND YOUNG ADULTS

Charles W. Huffine, Jr., M.D., Member, APA Institute Scientific Program Committee, and Associate Clinical

Professor of Psychiatry, University of Washington, 3123 Fairview Avenue, East, Seattle, WA 98102

#### **SUMMARY:**

In this section Dr. Huffine will discuss the hidden nature of brain damage from fetal alcohol exposure. He will cite some of the findings from research done at the University of Washington on prevalence and will share his clinical experience in diagnosing subsyndromal FAS with a diagnosis of personality change secondary to fetal alcohol exposure (DSM-IV 310.1). Characteristics of this diagnosis will be described. Given variable limitations in brain function with this diagnosis, Dr. Huffine will describe approaches to management of impulse control difficulties and lower than expected judgment for age. Learning disabilities with this diagnosis will be described as well as implications for remediation. Differential diagnosis will be discussed along with a critique of the concept of dual diagnosis (especially with ADD/ ADHD). Implications for pharmacologic treatment will be discussed.

#### **REFERENCES:**

- Siegel DJ: The Developing Mind: Toward a Neurobiology of Interpersonal Experience. New York, Guilford, 1999.
- Penelope Z, Leary M, Boccellari A: AIDS and the Impact of Cognitive Impairment. UCSF AIDS Health Project. Monograph Series #1. University of San Francisco. 1995.
- 3. Schore AN: Affect Regulation and the Origin of the Self: The Neurobiology of Emotional Development. Hillsdale, NJ, Erlbaum, 1994.
- 4. Steissguth A: Fetal alcohol syndrome in adolescents and adults. JAMA 1991; 17.
- 4. Carmichael-Olson H, Morse B, Huffine C: Developmental and Psychopathology: Fetal Alcohol Syndrome and Related Conditions. Seminars in Clinical Neuro Psychiatry, 1998.

Symposium 9

Friday, October 31 8:30 a.m.-11:30 a.m.

### ETHICS IN COMMUNITY MENTAL HEALTH CARE: COMMONPLACE CONCERNS

American Association of Community Psychiatrists

David L. Cutler, M.D., Member, APA Institute Scientific Program Committee, and Director, Public Psychiatry Training Program, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3011; Patricia Backlar, Professor, Department of Philosophy, Portland State University, P.O. Box 751, Portland, OR 97201

#### **EDUCATIONAL OBJECTIVES:**

At the end of this session, the participant should be able to recognize and respond to the range of ethical concerns and dilemmas that arise in community mental health care practice with persons who suffer from severe persistent mental disorders that may impede their ability to protect their own interests.

#### **SUMMARY:**

Socrates' question "how best to live?" is not an insignificant or anoteric query. Indeed, ethics is not a hifalutin subject. Many of us reflect on and ask a similar question. It is a question appropriate for all of us, whatever out abilities and disabilities.

Our purpose in presenting this symposium is to prompt—perhaps provoke—the audience to recognize, to reflect upon, to analyze, and to respond to the range of everyday commonplace ethical concerns and dilemmas that arise in community mental health care practice with persons who suffer from severe and persistent mental disorders that may impede their ability to protect their own interests.

The concerns that we have chosen to explore both encompass and interweave personal, social, and policy matters. The topics addressed include: ethical issues relevant to mental health services in culturally diverse communities; boundary conflicts in community settings; violence and mental disorders—at home and in the workplace; psychiatric anticipatory planning; ethics in neurobiological research; and, conflicting interests-pharmaceutical industry support of psychiatric research and education.

Problems and conflicts in any kind of system or policy emanate from personal positions. No solution is appropriate if it does not deal with the issues at the source. For community mental health providers the issue at the source is the consumer. The wellbeing is the raison d'etre for community mental health programs.

#### No. 9A ETHICS IN NEUROBIOLOGICAL RESEARCH

Frederick J. Frese III, Ph.D., Coordinator, Summit County Recovery Project, Summit County Alcohol, Drug Addiction, and Mental Health Services Board, 283 Hartford Drive, Hudson, OH 44236

#### **SUMMARY:**

Dr. Frese discusses the issue of ethical concerns about human neurobiological research from the perspective of a person who is both been diagnosed and treated for serious mental illness (shizophrenia) and who has been a psychologist responsible for treatment of persons with mental illnesses.

He focuses attention on the recommendations of the National Bioethics Advisory Commission (NBAC) as embodied in its report, Research Involving Persons with Mental Disorders That May Affect Decision Making Capacity. In this regard, he overviews newspaper reports on this topic as well as published views of senior psychiatric researchers and research administrators. Views of consumers, family members, and other advocates are also examined.

From this overview, the presenter draws conclusions and makes four specific recommendations as to how conditions can be improved with regard to the conduct of neurobiological research. His views stress the importance of input of recovering persons and more openness on the part of researchers and other professionals.

#### No. 9B BOUNDARY ISSUES IN COMMUNITY-BASED SETTINGS

David A. Pollack, M.D., Associate Professor of Psychiatry, and Associate Director, Public Psychiatry Training Program, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201

#### **SUMMARY:**

Boundary issues in community-based mental health programs are more complex than those in individual psychotherapy settings, especially with respect to the increased diversity of circumstances, relationships, and locations, and the transformation of care delivery systems. Providers are often overwhelmed with service demands and obligations to meet shifting regulatory requirements and have not consistently attended to some of the ethical dilemmas that have developed. This is a mistake that we hope to avoid.

This presentation will focus on how an urban mental health agency responded to a wide range of ethical dilemmas. In addition to the usual boundary dilemmas, such as confidentiality concerns and the relationship limits between clinician and patient that are seen in private practice settings, additional factors contributed to new ethical concerns.

Some were related to the expansion of the workforce to include staff and volunteers who are not trained in the mental health professions and who have no formal exposure to professional codes of ethics. The growing and positive movement to include consumers and families as active participants in their own and other clients' care has also created boundary dilemmas that must be addressed. The diversity of locations in which treatment services are provided, especially residential and milieubased treatment programs, not to mention the in vivo treatment experiences that are provided will be addressed.

No. 9C

#### PSYCHIATRIC ANTICIPATORY PLANNING: IS IT AN EMERGING FORM OF PSYCHOSOCIAL INTERVENTION?

Patricia Backlar, Professor, Department of Philosophy, Portland State University, P.O. Box 751, Portland, OR 97201; Bentson McFarland, Ph.D.; Joseph Mahler, M.S.; Jeffrey Swanson, Ph.D.

#### **SUMMARY:**

Psychiatric advance directives (PADs) are modeled upon advance directives (ADs) for end-of-life care. Yet they differ in substance and there are critical distinctions between them. PADs are intended for persons who have experienced the sort of crisis that they anticipate will recur. Patients are able to use such experience to plan for similar situations in the future, or perhaps prevent them.

Pilot research shows that patients and informal and formal caregivers found PADs to be acceptable. Yet, as currently implemented into the system, PADs are generally ignored by clinicians in outpatient and inpatient facilities. The study results substantiate that a piece of paper by itself may not change patients' attitudes, remedy a lack of resources, or improve clinical outcomes.

In a fragmented treatment system complicated by disperate treatment locations, PADs' most tangible significance may be as a mechanism in which patients (playing the central role as self-advocate) in collaboration with their service providers, prepare a document, which when needed, is easily retrieved. The processes involved in the collaborative development of PADs—assessment of past crises, recognition of prodromal symptoms, surrogate appointment—may be a psychosocial intervention that that encourages staksholder communication and enhances patients' recovery.

#### No. 9D

#### PHARMACEUTICAL INDUSTRY SUPPORT OF RESEARCH AND EDUCATION: ETHICAL ISSUES AND PROPOSED REMEDIES

Charles R. Goldman, M.D., Professor of Psychiatry, University of South Carolina School of Medicine, 15 Medical Park, Columbia, SC 29203

#### **SUMMARY:**

Ethical problems associated with conflicts of interest between the needs of the public and the profit motives of industry are having a greater and greater impact on the lives and safety of patients. This is true both in the case of the managed care industry and also the pharma-

ceutical industry, particularly with respect to its influence on research and education of physicians. Since the enactment of the Baye-Dole legislation in 1980, which supported the transfer of research technology from universities to commercial sources, academic-industry partnership has grown at a rate of 8.1% annually. This dramatic increase in academic-industry partnership has produced an impressive array of scientific breakthroughs and new medical treatments. It has also resulted in a disturbing degree of interdependence between academic centers and the pharmaceutical industry. At the end of the 20th century, pharmaceutical companies were spending more than \$3 billion per year in the United States on clinical drug trials and over \$6 billion worldwide. Seventy percent of money for clinical trials in the U.S. comes from this industry (not NIH). At the same time, at least \$11 billion is spent each year by pharmaceutical companies in promotion and marketing, which amount to \$8000-\$13,0000 per year spent on each physician. We discuss the ethical problems and implications of these trends.

#### **REFERENCES:**

- 1. Weiss R: Research ethics panel urges new regulations to protect mentally ill. Washington Post, 1998; 11(18).
- 2. Witaker R, Kong D: Doing harm: Research on the Mentally Ill. Boston Globe 1998; (11)15–18.
- Reiser SJ, Bursztajn HJ, Appelbaum PS, Gutheil TG: Divided Selves: A Case Approach to Mental Health Ethics. Cambridge, MA: Cambridge University Press, 1987.
- 4. Christansen RC: Ethical issues in community mental health: cases and conflicts. Community Mental Health Journal 1997;33:5-11.
- Backlar P, McFarland BH, Swanson JW, Mahler J: Consumer, provider, and informal caregiver opinions on psychiatric advance directives. Administration and Policy in Mental Health 28(6):427–441.
- 6. Bodenheimer T: Uneasy alliance—clinical investigators and the pharmaceutical industry. N Engl J Med 2000; 18:342(20):1539–44.
- 7. Wazana A: Physicians and the pharmaceutical industry: is a gift ever just a gift? JAMA 2000; 19; 283(3):373-80.

Symposium 10

Friday, October 31 8:30 a.m.-11:30 a.m.

THE PRESIDENT'S COMMISSION ON MENTAL HEALTH: THE CHALLENGE OF PROVIDING EVIDENCE-BASED TREATMENT FOR THE SEVERELY MENTALLY ILL

Marcia K. Goin, M.D., Ph.D., President, American Psychiatric Association, and Clinical Professor of Psychia-

try, University of Southern California, Keck School of Medicine, 1127 Wilshire Boulevard, Suite 1115, Los Angeles, CA 90068; Darrel A. Regier, M.D., M.P.H., Director, Office of Research, and Executive Director, American Psychiatric Institute of Research and Education, American Psychiatric Association, 5101 Edgemoor Lane, Bethesda, MD 20814-2305; John S. McIntyre, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the goals of the President's Commission on Mental Health and how it is seeking to improve access to evidence-based treatments; increase knowledge and understanding of evidence-based treatment recommendations for the severely mentally ill and barriers to best practices.

#### **SUMMARY:**

This symposium provides an overview of the President's New Freedom Commission on Mental Health and the challenges it faces in providing access to the full range of evidence-based treatment for patients with severe mental illness. The first presentation provides an overview of the President's Commission, its mission and goals, and the challenges in identifying policies and services delivery models to promote evidence-based best practices in treating severe mental illness. The second presentation will summarize the latest evidence-based treatment recommendations from the new Schizophrenia Patient Outcomes Research Team (PORT) and the APA schizophrenia practice guidelines now being revised. The major barriers to implementing these recommendations will also be highlighted. The third presentation will describe the scope of the problem of mental illness among incarcerated individuals in the U.S. and strategies and evidence-based treatments being utilized to re-integrate these individuals into the community. The final presentation will feature national data from the APIRE Practice Research Network (PRN) characterizing the extent to which patients with bipolar disorder and schizophrenia in the U.S. experience difficulty obtaining recommended treatments, and receive evidence-based treatment consistent with current APA practice guideline recommendations.

No. 10A
AN OVERVIEW OF CHALLENGES
FACING THE PRESIDENT'S COMMISSION
ON MENTAL HEALTH IN PROVIDING
ACCESS TO EVIDENCE-BASED
TREATMENTS FOR THE SEVERELY
MENTALLY ILL

Anil G. Godbole, M.D., Chair, Department of Psychiatry, Illinois Masonic Medical Center, 836 West Wellington, Suite 7318, Chicago, IL 60657

#### **SUMMARY:**

This presentation will provide an overview of the President's New Freedom commission on Mental Health, established in April 2002. The Commission's mission and goals will be discussed. These include the mission of conducting a comprehensive study of the mental health service delivery system in the United States, including both the private and public sector, and advising the President on methods that will improve the system. The goals of the commission, including identifying innovative mental health services, treatments, and technologies that can be replicated in a variety of settings, and then formulating policy options that integrate the use of effective treatments and services for adults with serious mental illnesses and children with severe emotional disturbances, and could be implemented in all levels of the mental health system, will be discussed. Also, this presentation will discuss some of the challenges the commission has faced in ensuring access to evidence-based treatments for individuals with severe mental illness. Additionally, this presentation will provide an overview of some of the innovative policies and service delivery approaches the commission is currently considering recommending to the President that addresses the challenge of ensuring access to evidencebased treatment for the seriously mentally ill.

No. 10B
AN OVERVIEW OF CURRENT EVIDENCE-BASED TREATMENT
RECOMMENDATIONS FOR
SCHIZOPHRENIA AND CHALLENGES
FACING THE NATION'S SERVICES
DELIVERY SYSTEMS

Anthony F. Lehman, M.D., Chair, Department of Psychiatry, University of Maryland School of Medicine, 701 West Pratt Street, Suite 388, Baltimore, MD 21203

#### **SUMMARY:**

This presentation will provide an overview of the new key clinical treatment recommendations from the Schizophrenia Patient Outcomes Research Team (PORT). The new PORT recommendations will be compared and contrasted with other major national practice guidelines and treatment protocols for schizophrenia, including the American Psychiatric Association (APA) Practice Guideline for the Treatment of Patients with Schizophrenia (1997); the Expert Consensus Guideline for the Treatment of Schizophrenia (1999); and the schizophrenia treatment protocol from the Texas Medication Algorithm Project (TMAP) (1999). Recommendations pertaining to psychiatric management, psychopharmacologic treatments psychosocial interventions, and electroconvulsive therapy will be reviewed as well

as clinical and environmental features influencing treatment. Although the primary focus of the presentation will be to review current best practices in the form of key evidence and expert consensus treatment recommendations, the session will also highlight some of the major barriers and challenges faced in providing evidencebased treatments for this population.

# No. 10C THE PRESIDENT'S COMMISSION ON MENTAL HEALTH: THE CHALLENGES OF PROVIDING EVIDENCE-BASED TREATMENT FOR THE SEVERELY MENTALLY ILL IN THE CRIMINAL JUSTICE SYSTEM

Fred C. Osher, M.D., Director, Center for Behavioral Health, Justice and Public Law, Associate Professor of Psychiatry, University of Maryland School of Medicine, and Former APA/Bristol-Myers Squibb Fellow, 3700 Koppers Street, Suite 402, Baltimore, MD 21227

#### **SUMMARY:**

On any given day, there are over 2,000,000 adults in U.S. jails and prisons and over 4,500,000 under correctional supervision in the community. There are an unprecedented number of individuals arrested, jailed, and in contact with criminal justice programs who suffer from serious mental illnesses (SMI). The rate of mental illness among offenders is at least three to four times higher than that found in the general population and the majority of these individuals will have a co-occuring substance use disorder. The movement of persons with SMI, from living in communities with appropriate treatment to arrest and incarceration, has troubling implications. There is a wide range of programmatic activity aimed at diverting these individuals from criminal justice settings and re-integrating them into community through the application of evidence-based treatments. This paper will describe the challenges of providing these services, the data available to guide future interventions, and the gaps in our knowledge base.

#### No. 10D TREATMENT ACCESS AND QUALITY FOR PATIENTS WITH SCHIZOPHRENIA AND BIPOLAR DISORDER

Joyce C. West, Ph.D., M.P.P., Director, American Psychiatric Practice Research Network, American Psychiatric Association, 1400 K Street, N.W., Washington, DC 20005; Joshua E. Wilk, Ph.D.; Farifteh F. Duffy, Ph.D., M.H.S.; William E. Narrow, M.D., M.P.H.; Darrel A. Regier, M.D., M.P.H.

#### **SUMMARY:**

Objectives: Assess the extent to which patients with schizophrenia and bipolar disorder have difficulty accessing psychiatrist-recommended treatments due to financial considerations, and receive treatment consistent with evidence-based practice guidelines.

Methods: Nationally representative data from the 1999 APIRE Practice Research Network Study of Psychiatric Patients and Treatments examined treatment for systematically selected patients with schizophrenia (N=284) and bipolar disorder (N=192).

Results: 29% of schizophrenia patients and 25% of bipolar disorder patients had their psychiatrist report financial considerations resulted in providing a less optimal treatment. Guideline conformance rates were generally higher for psychopharmacologic than psychosocial recommendations; however, rates varied considerably. For schizophrenia, 94% of patients received antipsychotics; 95% of depressed patients received an antidepressant; only 20% of patients with treatment compliance problems received a depot antipsychotic. Forty-eight percent of patients received psychotherapy; 63% received some psychosocial treatment. For bipolar disorder, 74% of patients received mood stabilizers, 54% antidepressants, 40% antipsychotics, and 67.0% psychotherapy.

Conclusions: Treatment access and provision of evidence-based psychosocial treatment in particular is a significant problem for this population. Longitudinal clinical effectiveness studies are needed to assess the effects of limited treatment access and whether there is an empirically based clinical rationale for deviating from established treatment guidelines.

#### **REFERENCES:**

- Goldman HH, Ganju V, et al: Policy implications for implementing evidence-based practices. Psych Services 2001; (52):12.
- 2. Torrey WC, Drake RE, et al: Implementing Evidence-Based Practices for Persons with Severe Mental Illnesses. Psych Services, 2001; (52):1.
- Lehman AF, Steinwachs DS, and PORT investigators: Translating research into practice: the Schizophrenia PORT Treatment Recommendations. Schizophrenia Bulletin 1998; 24:1–10.
- Practice Guideline for the Treatment of Patients With Schizophrenia. Washington, DC, American Psychiatric Association, 1997.
- 5. Osher FC, Han YL: Jails as housing for persons with serious mental illness. American Jails 2002; 16(1):36-40.
- Steadman HJ, Deane MW, Borum R, Morrissey JP: Comparing outcomes of major models of police responses to mental health emergencies. Psychiatric Services 2000; 51(5):645–649.

7. Practice Guideline for the Treatment of Patients with Schizophrenia. Washington, DC, American Psychiatric Association, 1997.

Symposium 11

Friday, October 31 2:00 p.m.-5:00 p.m.

### PSYCHIATRIC LEADERSHIP IN COMMUNITY-BASED CARE: CANADA, FRANCE, AND THE U.S.

Jules M. Ranz, M.D., Director, Public Psychiatry Fellowship, and Clinical Professor of Psychiatry, Columbia University, New York State Psychiatric Institute, 1051 Riverside Drive, P.O. Box 111, New York, NY 10032; Stephen D. Rosenheck, M.S.W., Assistant Clinical Professor of Social Work, Columbia University, New York State Psychiatric Institute, 1051 Riverside Drive, P.O. Box 111, New York, NY 10032

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to explain specifically how and why psychiatric leadership at the service delivery level is structured differently in France, the U.S., and Ontario, Canada.

#### **SUMMARY:**

Cross-national comparison of public mental health systems has not yet focused on the role of the psychiatrist in community-based care. This role is structured differently in France, the United States, and Ontario, Canada.

In France, national legislation requires that a psychiatrist be the director of each secteur, the administrative unit of service delivery. In the U.S., no such law governs the community-based system in any state, but in community mental health organizations throughout the country the position of medical director has evolved and become widespread.

In Ontario, Canada, in contrast to both France and the United States, psychiatrists in community-based mental health services are generally not paid by salary, but rather by billing the Ontario Health Insurance Plan for clinical encounters, exactly as in office practice. As a result, psychiatric administrative activity is not easily remunerated and a formal leadership position for psychiatrists has been slow to develop.

This symposium will explore the history behind this three-way pattern of difference and the consequences of the pattern for current service delivery. In addition, the symposium will compare the influence on government policy in these three nations of both academic experts in psychiatry and professional psychiatric organizations.

#### No. 11A AN INTRODUCTION TO PSYCHIATRIC LEADERSHIP IN COMMUNITY-BASED CARE: CANADA, FRANCE, AND THE U.S.

Stephen D. Rosenheck, M.S.W., Assistant Clinical Professor of Social Work, Columbia University, New York State Psychiatric Institute, 1051 Riverside Drive, P.O. Box 111, New York, NY 10032

#### **SUMMARY:**

This presentation will introduce the symposium as a whole. To begin with, it will explain how the idea for the symposium evolved from a confluence in the activities of Columbia University's Fellowship in Public Psychiatry. Further, it will describe how during the past year the fellowship has organized a dialogue among the symposium presenters via e-mail to deepen and refine the comparison of psychiatric leadership in community-based care in these three nations. Finally, the presentation will highlight the themes and conclusions that emerged from this dialogue and that will be elaborated in the presentations that follow.

#### No. 11B THE POLITICAL HISTORY OF COMMUNITY CARE IN FRANCE

Patrick Mordelet, Ph.D., Director, Maison Blanche, France, 6-10 Rue Pierre Bagle, Paris, France 75020

#### **SUMMARY:**

The structure of the community-based mental health system in France is governed by national legislation that developed over a period of 20 years and was completed in the late 1980s. This legislation created a system organized according to the principle of unified services, in which the fundamental administrative unit is the geographically defined sector. The legislation places inpatient and outpatient services in each sector under the authority of a single "chef de secteur" and requires that the position be filled by a psychiatrist.

This paper will describe the political history of community mental health legislation in France, giving particular attention to the important role played in it by agreements between the French government and professional psychiatry organizations.

#### No. 11C THE ROLE OF CHEF DE SECTEUR

Marie-Jose Cottereau, M.D., Chef De Secteur, Secteur Montmartre, 40 Rue Ordener, Paris, France 75018

#### **SUMMARY:**

The public mental health system in France is structured by national legislation. The fundamental unit of clinical administration is the geographically defined sector in which inpatient and outpatient services are integrated under the authority of a "chef de secteur," a psychiatrist. The fundamental unit of fiscal administration is the centre hospitalier, consisting of approximately ten geographically contiguous sectors, with a director, who is generally not an M.D. This paper has two objectives. First, it will describe the responsibilities, problems, and daily functioning of a chef de secteur in Paris. Second, it will discuss the relationship between the chef de secteur and the director in the French system, with particular attention to their capacity to achieve organizational change when strongly allied.

#### No. 11D PSYCHIATRY AND COMMUNITY-BASED CARE IN ONTARIO

Donald A. Wasylenki, M.D., Professor of Psychiatry, University of Toronto, 250 College Street, #835, Toronto, ON, Canada M5T 1R8

#### **SUMMARY:**

National health insurance in Canada is de-centralized and administered at the provincial level. This paper will describe the history and structure of physician remuneration in Ontario in order to explain why psychiatrists working in community mental health services in this province generally receive payment by billing the Ontario Health Insurance Plan for clinical encounters, exactly as they do in office practice. The paper will analyze the consequences of this payment mechanism for how community mental health services function and how psychiatrists working within them define their role. It will also explain that even though the Ontario system gives psychiatrists limited power at the level of service delivery, it has allowed for considerable influence by academic experts in psychiatry on government policy.

#### No. 11E THE ROLE OF MEDICAL DIRECTOR IN U.S. COMMUNITY CARE

Jules M. Ranz, M.D., Director, Public Psychiatry Fellowship, and Clinical Professor of Psychiatry, Columbia University, New York State Psychiatric Institute, 1051 Riverside Drive, P.O. Box 111, New York, NY 10032

#### **SUMMARY:**

This paper will discuss the following two topics: (1) the history of the position of medical director in commu-

nity mental health organizations in the United States, and (2) the current, varied meaning of this position, demonstrated in survey research conducted by the presenter during the past five years.

**REFERENCES:** 

- 1. Ranz J, Rosenheck S, Deakins J: Columbia University, fellowship in public psychiatry. Psychiatric Services 1996; 47:512–16.
- 2. Mordelet P: La Sante Mentale: organisation at gestion. Paris, Berger Leurault, 1987.
- 3. Provost D. Bauer A: Trends and Development in public psychiatry in France since 1975. Acta Psychiatrica Scandanavica 2001; 410:63–68.
- 4. Goering P, et al: Canada's Mental Health System International Journal of Canadian Psychiatry 2000; 23:345–359.
- Renz, J., Eilenberg, J., Rosenheck, S., The Psychiatrists role as medical director: Task distributions and job satisfaction. Psychiatric Services 1997; 48:915–920.

Symposium 12

Friday, October 31 2:00 p.m.-5:00 p.m.

# THE MASSACHUSETTS MENTAL HEALTH SERVICES PROGRAM FOR YOUTH: A CLINICAL MODEL FOR INTEGRATED SYSTEMS OF CARE

Katherine E. Grimes, M.D., Medical Director, Neighborhood Health Programs, Massachusetts Mental Health Services Program for Youth, 253 Summer Street, Boston, MA 02210; Mary Jane England, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, the participant will learn interagency policy and funding mechanisms to support integrated systems of care, unique clinical quality challenges and opportunities involved in integrated care delivery for children and families, and strategies for increasing effectiveness of community action in diverse populations.

#### **SUMMARY:**

The Massachusetts—Mental Health Services Program for Youth (MA-MHSPY) is an integrated system of care for children between the ages of three and 18, who are insured via Medicaid and have major functional impairment with significant risk of out-of-home placement. In a unique collaboration involving the separate Massachusetts Departments of Social Services, Youth Services (juvenile justice), Mental Health, and Education, the Division of Medical Assistance, as well as family advocates and clinical experts, categorical funds

have been blended to purchase an individualized combination of the following:

- primary and specialty medical care
- traditional and non-traditional mental health and substance abuse services
- wraparound family, educational and community supports
- mentoring, care coordination and clinical care management

Through intensive coordination of community-based clinical and non-clinical services, children receive care across a variety of life domains. Family members define the missions, goals, and desired outcomes behind all care decisions. The "continuity of intent" involved in intensive clinically driven, integrated care management leads to enhanced effectiveness. Results show an improvement in functioning, satisfaction, and a reduction in costs and utilization. In particular, youth show reduction in risk to self and others, decreased substance use, and reduced days in out-of-home placement, and costs appear to decrease over time.

#### No. 12A SHARED GOVERNANCE: POLICY, PRACTICE, AND FUNDING

Katherine E. Grimes, M.D., Medical Director, Neighborhood Health Programs, Massachusetts Mental Health Services Program for Youth, 253 Summer Street, Boston, MA 02210

#### **SUMMARY:**

The Massachusetts-Mental Health Services Program for Youth (MA-MHSPY) is designed to serve youth who have severe functional impairment. The goal is to appropriately support both child and family via the delivery of integrated primary care, mental health, substance abuse, education, juvenile justice, and social services, in the hope that the child may be maintained in the community. By means of blended funding from multiple public agencies, traditional and non-traditional services are provided within a private, not-for-profit, medical managed care system. This model is the result of a seven-year collaboration between Harvard Pilgrim Health Care/Neighborhood Health Plan, Medicaid and the Massachusetts Departments of Social Services, Youth Services (juvenile justice), Mental Health and Education. The program was launched via a one-year MHSPY-Replication planning grant from the Robert Wood Johnson Foundation and Washington Business Group on Health. The diverse stakeholders, including the categorically distinct child-serving state agencies. family members, and clinical and policy experts, joined together to become the MA-MHSPY Steering Committee. The steering committee developed a methodology

to blend categorical funds to purchase a highly individualized, clinically informed, care package. In 2002, MA-MHSPY achieved "five-year survival," expanded to five communities, and is currently supported entirely by existing state dollars.

#### No. 12B ENHANCED CLINICAL EFFECTIVENESS VIA INTEGRATED CARE

Chip Wilder, L.C.S.W., Clinical Supervisor, Harvard Pilgrim Health Care, Massachusetts Mental Health Services Program for Youth, 1611 Cambridge Street, Cambridge, MA 02139; Jacquelyn Subberra, L.C.S.W.

#### **SUMMARY:**

Each MA-MHSPY child and family is assigned an individual care manager, a licensed clinician, upon entry into the program. The MHSPY Care Manager gets to know the family and completes a needs and strengths assessment. This initial assessment helps shape the membership of the community-based, combined professional and non-professional Care Planning Team (CPT), which brings together family, friends, agency, and school personnel, among others, to support the child's "mission." MA-MHSPY Care Managers work continuously with enrolled families to define goals, build on strengths, and identify resources to help parents achieve the mission for the child. Together, with the family at the center, the CPT identifies measurable goals via the Individual Care Plan and clear ownership of strength-based interventions to help meet the goals. The MA-MHSPY program provides intensive clinical supervision and active teamwork, using a deliberate continuity of intent across a spectrum of medical care, mental health and substance abuse treatment, social services, education, public safety, and wraparound-based interventions. Care managers work to facilitate access to appropriate formal and informal supports based on the family's individualized needs, rather than providing a predetermined benefit package. Care managers, themselves, offer direct care, care coordination, and case administration within the model.

#### No. 12C BUILDING FAMILY AND COMMUNITY CONNECTIONS IN DIVERSE POPULATIONS

Laurie Medeiros, Parent Coordinator, Neighborhood Health Programs, Massachusetts Mental Health Services Program for Youth, 6 Pleasant Street, Malden, MA 02148; Jeannette Adames, M.S.W.

#### **SUMMARY:**

MA-MHSPY is a family-centered program, which respects individual parental roles and responsibilities, as well as diverse attitudes, regarding the care of MHSPY enrolled children. Collaboration with family representatives in the leadership and administration of the program to best meet individual family cultures, is built into the model. The family "voice" is structured into every level of MHSPY operations, from the steering committee to the care planning team. Parent coordinators, themselves parents of children with special health care needs, participate without professionals present in the pre-enrollment orientation and preliminary contracting phase of MHSPY family involvement. Parent coordinators also consult regarding strategic planning, and facilitation of culturally sensitive approaches to group events, such as sharing information about special education or "making it through the holidays." Parent partners offer individual support, such as accompanying a grandparent to a court hearing, or being there when a parent explains that the family's religious beliefs are at odds with a planned classroom activity. The fact that MHSPY family satisfaction is 93%, and that program retention of families is 98%, speaks to the value of individualizing the care planning process for each child and family consistent with that child's needs and the family's culture.

#### **REFERENCES:**

- 1. Bertram RM, Malysiak BB, Rudo ZH: What maintains fidelity in a wraparound approach? How can it be ensured? Tampa Conference Roundtable, 1999.
- Cole R: The Robert Wood Johnson Foundation's mental health services program for youth, in Children's Mental Health: Creating Systems of Care in a Changing Society. Edited by Stroul BA, Baltimore, Paul H. Brookes Publishing Co, 1996 pp 235–248.
- 3. Foster ME, Bickman L: Refining the costs analyses of the Fort Bragg evaluation: the impact of cost offset and cost shifting. Mental Health Services Research 2000; 2(1): 13–25.
- 4. Frank RF, McGuire TG, Normand, ST, Goldman HH: The value of mental health care at the system level: The case of treating depression. Health Affairs 1999; 18(5): 71–88.
- Isaacs MR, Benjamin MP: Programs which utilize culturally competent principles, in Toward a Culturally Competent System of Care, Volume II. Georgetown University Child Development Center, Washington DC, 1991.
- Miles P, Franz J: Access, voice, and ownership: examining service effectiveness from the family's perspective, 1994 http://www.paperboat.com/calliope.html.
- 7. National Center for Cultural Competence 2001. Georgetown University, Child Development Center.

- http://www.georgetown.edu/research/gucdc/nccc/index.html.
- 8. Olfson M, Sing M, Schlesinger HH: Mental health/medical care cost offsets: opportunities for managed care. Health Affairs 1999; 18(2): 79–90.
- Stroul BA, Friedman RM: A System of Care for Severely Emotionally Disturbed Children and Youth. Washington, DC, Georgetown University Child Development Center, National Technical Assistance Center for Children's Mental Health, 1986.
- VanDenBerg JE: Integration of individualized mental health services into the system of care for children and adolescents. Administration and Policy in Mental Health 1993; 20: 247–257.
- Worthington J, Hernandez, M, Friedman B, Uzzell D: Learning from families: identifying service strategies for success, in Systems of Care: Promising Practices in Children's Mental Health, 2001 Series, Volume II. Washington, D.C., Center for Effective Collaboration and Practice, American Institutes for Research.

Symposium 13

Saturday, November 1 8:30 a.m.-11:30 a.m.

### DISASTER MENTAL HEALTH: A UNIFORMED UNDERSTANDING

American Association of Community Psychiatrists

Anthony T. Ng, M.D., Medical Director, Disaster Psychiatry Outreach of New York, 141 Fifth Avenue, Third Floor, New York, NY 10010; Kenneth S. Thompson, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the symposium, the participants will (1) have a greater understanding of the culture of uniformed services including the fire services, the police, and the military; (2) identify challenges and knowledge that will assist them in implementing mental health care and stress management for the uniformed services in mental health planning and; (3) learn the application of that knowledge to disaster mental health care for the uniformed services.

#### **SUMMARY:**

The mental health risks of the uniformed services in both non-disaster and disaster settings have been described in the literature. These risks include anxiety, major depression, posttraumatic stress disorder, and substance abuse. Traditionally, the mental health community has not been able to meet the needs of these communities, which include the fire services, the police, and the military. This challenge has been highlighted in the aftermath of the Oklahoma City bombing, and more

recently, the devastating attack on the World Trade Center in September 2001. Part of the difficulty in meeting this need has been the cultures of the three uniformed services and how members of those services perceive mental health care. The presentation will identify issues and challenges that are specific to each of those cultures, including burnouts in the fire services, and the organizational structures of law enforcement and the military. The presentation will focus the view of mental health from the uniformed service perspectives. The presenters will identify how mental health professionals can partner with the uniformed services in the planning and delivery of mental health care to the uniformed services. At the end of the presentation, the role of mental health and the care of the uniformed services in the aftermath of disaster will be discussed.

#### No. 13A CHALLENGES AND STRATEGIES FOR WORKING WITH LAW ENFORCEMENT ORGANIZATIONS

Robert P. Delprino, Ph.D., Associate Professor of Psychology, Buffalo State College, 1300 Elmwood Avenue, Buffalo, NY 14222

#### **SUMMARY:**

A perception exists among officers that interaction with a mental health professional can have consequences that will adversely affect the officer's career or status within their agency. The role of the mental health professional as a screener of applicants or as an evaluator for fitness of duty, has not placed mental health services in the highest regards by many line officers. However, the use of psychological services in law enforcement continues to increase. Assessment of recruits, special examination of problem officers, and counseling were the primary use of psychological services reported by more than 85% of the agencies surveyed. To supply such services effectively however, mental health professionals should be aware of the unique challenges they may face when working with law enforcement agencies, which include issues of the police organization, issues of the political, demographic, technological, and social forces that they work within; and providing services that are acceptable to the police administration, unions, and the rank and file.

The presenter will discuss these challenges as well lessons learned from involvement with a national law enforcement labor association, as a visiting fellow with the National Institute of Justice, director of several federally funded grants, and developer of an institute for crisis intervention and law enforcement family support. All of these actives have required interaction with many law enforcement agencies as well as addressing and

coordinating the needs of department administrators, police officers, their unions, and service providers. Insights and views presented will be supported with brief mention of relevant data.

#### No. 13B IDENTIFICATION AND PREVENTION OF BURNOUT IN THE FIRE SERVICES

Ronald Palmer, M.S.W., Battalion Chief, Salt Lake County Fire Department, 5864 West 9600, North, Highland, UT 84003; Wanda M. Spaid, L.S.W.

#### **SUMMARY:**

Introduction: Burnout in firefighter/paramedics (FF/PM) is widely believed to exist, but few empirical data support its existence, symptomatology, or intervention. Understanding the extent, nature, and causes of burnout is crucial to improving employee morale and performance.

Study Population: Three hundred and fifty firefighters employed by Salt Lake County Fire Department.

Hypothesis: Three specific hypotheses were tested: (1) FFs who score high on burnout will also score high on authoritarianism (2) FFs who score high on burnout will also score high on inner-directedness (3) FFs who score high on burnout will also score high on sensation seeking.

*Methods:* In this descriptive study, FFs completed four standardized instruments measuring authoritarianism, burnout inner-directedness versus other-directedness, and sensation seeking.

Results: FFs who scored high on burnout also scored high on authoritarianism and on the boredom subscale of the sensation seeking instrument.

Conclusion: A focus on control issues needs to be an integral part of programs for decreasing employee burnout among FFs. Specific components of such programs should include stress management training and counseling services. In addition, management personnel need to be taught to recognize and deal with their own control issues as they affect job performance.

#### No. 13C BASIC TRAINING: LEARNING TO WORK WITH MILITARY UNIFORMED SERVICE MEMBERS

Amy D. Criscitello, M.S.N., Clinical Nurse Specialist, Department of Behavioral Health, National Naval Medical Center, 8901 Wisconsin Avenue, PSC-60, Box 30044, Bethesda, MD 20889

#### **SUMMARY:**

When military uniformed service personnel are involved in situations requiring intervention or interactions with mental health professionals, there are several issues that should not be overlooked. The "uniqueness" of the military is not unlike other uniformed services, like the police, firefighters, or emergency response personnel in many aspects, but some differences do exist. Primarily, military members (MM) are subject to deployments that can exceed six months. MM are not necessarily returning directly to their homes and loved ones. Many service members are accustomed to lengthy deployments, but when a crisis situation arises, the reactions may be different than usual. MM speak their own service-specific language, and may view outsiders as people who seek to place blame. Unit cohesion and integrity are highly valued and an integral part of the services' core values. The mental health stigma is another challenge uniformed mental health providers face, and one the non-uniformed provider may face as well. Mental health treatment may result in the loss of a security clearance or ability to perform a specific job or task, which may affect the willingness of a MM to seek treatment. Due to the distinctiveness of the military uniform culture, several tips for communicating with uniformed military service personnel will be provided.

#### **REFERENCES:**

- Anderson W, Swenson D, Clay D: Stress Management for Law Enforcement Officers. Prentice Hall, Englewood Cliffs, NJ, 1995.
- 2. Palmer R, Spaid W: Burnout in firefighters and paramedics. Prehospital and Disaster Medicine 1996; (2):11-15.
- Reeves JJ: Perspectives on disaster mental health intervention from USNS COMFORT. Military Medicine 2002; 9.
- 4. Ursano RJ, Fullerton CS, Norwood AE: Psychiatric dimensions of disaster: Patient care, community consultation and preventive medicine. Harvard Review of Psychiatry, 1996; 11–12.

Symposium 14

Saturday, November 1 8:30 a.m.-11:30 a.m.

### INTEGRATING SERVICES FOR PATIENTS WITH BORDERLINE PERSONALITY DISORDER

John G. Gunderson, M.D., Professor of Psychiatry, Harvard Medical School, and Director, The Borderline Center, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should understand how and why integration of modalities (e.g., medication, partial-hospital, DBT, families, individual therapy) benefits borderline patients.

#### **SUMMARY:**

High levels of treatment utilization, suicidality, liabilities, and staff burnout are predictable outcomes when borderline patients are treated on clinical services where their specific needs aren't recognized or when they are treated by uninformed or unenthusiastic staff. Increasing knowledge about the efficacy of multiple modalities in treating those patients now offers a basis for establishing more effective treatment programs. This symposium will begin by Gunderson describing a model for integrating and sequencing of the various modalities that can help enhance program development and staff satisfaction. Each presenter will then summarize the literature relevant to their component of the overall treatment program, and then describe the goals and issues of implementing that component. Neuhaus will detail the role played by partial hospital services and describe an innovative sixweek program that combines cognitive-behavioral and psychodynamic elements. Smith will describe an intensive outpatient service and how this underutilized level of care plays a particularly valuable role in transitioning borderline patients back to community life. Murphy will describe adaptations of DBT that can be made to fit within both partial hospital and outpatient clinic settings in which patients are exposed to modalities with different theoretical bases (e.g., biological, psychodynamic). Berkowitz will describe psychoeducation services for patients and families suitable for all levels of care, with data indicating that conversion of families into members of the treatment team helps BPD patients and relieves burden.

#### No. 14A A MODEL FOR ORGANIZING TREATMENT SERVICES

John G. Gunderson, M.D., Professor of Psychiatry, Harvard Medical School, and Director, The Borderline Center, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **SUMMARY:**

Borderline personality disorder is comprised of problems involving the domains of subjective distress (e.g., depression and anger), maladaptive behaviors (e.g., selfinjurious, impulsive), unstable relationships (e.g., rejection or abandonment sensitive), and intrapsychic organization (e.g., distorted or diffuse identity). These domains provide the framework for a model for the sequencing

of treatment goals (i.e., first subjective distress and last intrapsychic organization) and for selecting treatment modalities. The borderline patients' states of distress are usually most quickly and safely diminished by reducing stress (e.g., situational change) and/or medications (subjective relief). The behavioral problems of borderline patients are best addressed by structured and explicit behavioral therapies per se (e.g., DBT), or by changing their social reinforcement (e.g., via family education or therapeutic communities). The interpersonal problems require the patients getting involved in corrective relationships, most often via individual or group therapies. While all of these modalities can effect intrapsychic organization, to develop more awareness and stabilization of the borderline patient's sense of self depends upon validation and insight, interventions that usually are most effectively offered within long-term psychodynamic psychotherapies. This model is associated with the principle that significant change in each of these domains requires progressively longer durations of treatment, within progressively lower levels of care. Moreover, change in each domain requires progressively greater responsibility for active participation by the borderline patients.

#### No. 14B DESIGNING PARTIAL HOSPITAL SERVICES SPECIFIC FOR PATIENTS WITH BORDERLINE PERSONALITY DISORDER

Edmund C. Neuhaus, Ph.D., Assistant Professor of Psychology, Department of Psychiatry, Harvard Medical School, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **SUMMARY:**

Within a psychosocial continuum of care, partial hospital programs address the needs of borderline patients in acute or sub-acute states. Patient-treatment matching is optimized with emphases on psychoeducation, skills training, and interpersonal connections. The approach draws heavily from empirically supported treatments of cognitive behavior (CBT), dialectical behavior (DBT), and psychodynamic therapies. A reasonable time frame is approximately six weeks. This allows changes to begin that will be sustained if patients then step down to intensive outpatient care. Treatment is framed in stages, whereby realistic objectives can be assessed on a week by week basis. Weekly objectives allow treatment to be conceptualized in time frames compatible with the constraints of managed care. In the initial stage, the program structure promotes containment and involvement while teaching patients how to utilize treatment and establish priorities. Psychoeducation offers information

and validation. Skills training begins at a fundamental level. Patients are taught how to do "chain analyses" of typical patterns resulting in maladaptive behaviors (e.g., circumstances surrounding self-injurious behaviors), and they learn straightforward, behaviorally oriented interventions (e.g., impulse control plan). In more advanced stages, patients practice and refine skills, begin to address problems regarding interpersonal connections, evaluate capacities for vocational functioning, and solidify treatment relationships.

#### No. 14C THE ROLE OF INTENSIVE OUTPATIENT PROGRAMS FOR PATIENTS WITH BORDERLINE PERSONALITY DISORDER

George W. Smith, LICSW, Director, Outpatient Group Services, and Co-Director, Outpatient Personality Disorders Service, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **SUMMARY:**

Due to their emotional volatility, impulsivity, and interpersonal neediness, borderline patients place extraordinary demands on treatment settings. These patients often fare poorly with inpatient treatment: locked doors, liability concerns, and institutional efforts to control the borderline patient frequently contribute to regressive behavior or unproductive splitting and control struggles with staff. Intensive Outpatient Programs (IOP) are a new level of care comprised of four to ten groups per week. They serve as a transition from either hospitalization or partial hospital services for patients returning to life in the community. Lasting two to three hours each day, preferably in the morning or late afternoon, they offer more intensive treatment than customary outpatient services while leaving time for patients to pursue vocational interests. Three important components of an IOP for borderline patients are: (1) daily groups offering structure and support to promote community stabilization and to help patients develop non-clinical activities; (2) skills training groups, preferably DBT based, to assist patients in developing new strategies for containing impulsive behaviors and for increasing tolerance for emotional distress; (3) interpersonal groups that are less structured and examine the neediness and conflicts that inevitably arise between group members. Through frequent contact with the clinicians and with other patients in the IOP, borderline patients can feel sufficiently held and understood to develop their functional capacities in the community.

No. 14D

## SYNTHESIS AS A TREATMENT TEAM GOAL: DIALECTICAL BEHAVIOR THERAPY AND OTHER ORIENTATIONS TOWARD TREATMENT

Elizabeth T. Murphy, Ph.D., Psychologist, Department of Psychiatry, Harvard Medical School, McLean Hospital, 115 Mill Street, Belmont, MA 02478

#### **SUMMARY:**

A growing body of research is demonstrating the value of dialectical behavior therapy in a variety of clinical settings. It is nonetheless rare to provide DBT, like other empirically validated treatments, in the manner conducted in randomly controlled trials. This presentation reflects the author's experience in providing DBT in a psychiatric hospital across different levels of care, in conjunction with many non-DBT-trained clinicians.

Communication is essential. This requires a willingness to exchange information about difficulties in the treatment, updates on patients' progress, and about institutional or systemic issues. To do this well means conferring frequently with all team members.

Also important is to recognize situations that won't work. Patient factors include lack of commitment to treatment or change. Therapist factors include lack of commitment to the patient, inattention to current maladaptive behaviors, and not integrating the skills into ongoing individual therapy.

Content, as well as pace of the skills group is modified to accommodate patients for whom dialectics, biosocial theory, validation, and applied behavioral theory are not explicit components of their individual treatment.

#### No. 14E MULTIFAMILY PSYCHOEDUCATIONAL TREATMENT OF BORDERLINE PERSONALITY DISORDER

Cynthia B. Berkowitz, M.D., Child Psychiatrist, Walker Home and School, 1968 Central Avenue, Needham, MA 02492; Maureen Smith, M.S.W.

#### **SUMMARY:**

Borderline personality disorder (BPD) is a chronic disorder marked by crises of self-destructive behavior and diminished functioning that are often triggered by criticism and hostility in the family environment. The goal of the current treatment is to decrease the frequency of crises and improve the functioning of the individual with BPD by helping families to create a more empathic and calm family environment. This goal is achieved with the use of two therapeutic tools: psychoeducation and multifamily groups. In the psychoeducational content,

families are given a rationale for changing, including a deficit model of BPD. The multifamily group reduces feelings of guilt and fear and thereby empowers relatives to set effective limits on the individual with BPD. During a two-year treatment, families are taught a problemsolving process in which they apply coping guidelines and communication skills. This presentation will review the assumptions and techniques of this treatment and explain why it is far more effective than traditional psychodynamic family treatments in forming an alliance with the families of individuals with BPD. We will discuss the results of a two-vear pilot study of this treatment led by Dr. John Gunderson, in which outcomes indicated major benefit in the areas of decreased burden to families, improved communication, and increased independence of the individuals with BPD.

#### **REFERENCES:**

- Gunderson JG: Borderline Personality Disorder: A Clincal Guide. APPI, Washington, DC, 2001.
- Ogrodniczuk JS, Piper WE: Day treatment for personality disorders: a review of research findings. Harvard Rev Psychiatry 2001; 9:105–117.
- 3. Gunderson JG: Borderline Personality Disorder: A Clincal Guide. APPI, Wash., DC, 2001.
- 4. Simpson EB, et al: Use of dialectical behavior therapy in a partial hospital program for women with borderline personality disorder. Psychiatric Services 1998; 49(5):669–673.
- Berkowitz CB, Gunderson JG: Multifamily Psychoeducational Treatment of Borderline Personality Disorder, in Multifamily Groups in the Treatment of Severe Psychiatric Disorders. Edited by McFarlane WR. New York, NY, The Guilford Press, 2002, pp 268–290.

Symposium 15

Saturday, November 1 2:00 p.m.-5:00 p.m.

#### SUCCESSFUL TRANSITIONS FROM ACUTE PSYCHIATRY TO OUTPATIENT SERVICES

American Association of Community Psychiatrists

Peter L. Forster, M.D., Associate Clinical Professor of Psychiatry, University of California at San Francisco, 211 Gough Street, Suite 211, San Francisco, CA 94102

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should understand the importance of transitions from acute psychiatry to outpatient treatment and will be able to identify at least three strategies for improving the effectiveness of these transitions.

#### **SUMMARY:**

The risks of rehospitalization and suicide following discharge will be reviewed. The most consistent predictor of rehospitalization is the severity of the initial presentation to the acute setting, but other predictors will be discussed. Suicide rates immediately after discharge from a hospital are much higher than at other times in a patient's life. This is particularly true in the month following discharge, and this fact highlights the importance of effective transition planning. The American Association of Community Psychiatrists' new Continuity of Care Guidelines will be presented. Data from an innovative Hawaiian quality management-based process designed to improve transitions from a state hospital to a community-based system of care will be reviewed. Results from an ongoing study of factors that are correlated with successful transitions from emergency psychiatric services to outpatient care will be summarized. This study emphasizes the importance of integrating of patient preferences for acute care delivery (both pharmacologic and non-pharmacologic) into care planning.

#### No. 15A AMERICAN ASSOCIATION OF COMMUNITY PSYCHIATRISTS' CONTINUITY OF CARE GUIDELINES

Wesley E. Sowers, M.D., Medical Director, Allegheny County Office of Behavioral Health, 206 Burry Road, Bradford Woods, PA 15015

#### **SUMMARY:**

Guidelines outlining principles for the management of transitions in mental health and addiction services will be presented. These include indicators of high-quality transition management in several defined domains.

#### No. 15B QUALITY MANAGEMENT-BASED OVERSIGHT OF TRANSITIONING

Thomas W. Hester, M.D., State Medical Director, Hawaii State Department of Mental Health, 1250 Punchbowl Street, Room 256, Honolulu, HI 96813

#### **SUMMARY:**

Data from an innovative Hawaiian quality management-based process designed to improve transitions from a state hospital to a community-based system of care will be reviewed. The Hawaii Department of Health, Adult Mental Health Division developed this process that includes monitoring of critical elements needed for a successful community transition. The program was implemented to improve continuity of services for pa-

tients discharged from Hawaii State Hospital. This session will discuss why this project was initiated and the process used to identify and monitor critical elements. A data analysis of results and trends will be presented.

#### No. 15C OUTPATIENT FOLLOW-UP AND REHOSPITALIZATION RATES

Neal H. Adams, M.D., Medical Director, California State Department of Mental Health, 4129 Cherryvale Avenue, Soquel, CA 95073

#### **SUMMARY:**

Recent quality improvement studies, data, and policy development related to outpatient follow up and rates of rehospitalization will be reviewed. This presentation will examine broad system issues and policy. It will also set forth practice implications.

#### No. 15D IMPACT OF INPATIENT CARE ON AFTERCARE COMPLIANCE

Glenn W. Currier, M.D., Director, Psychiatric Emergency, University of Rochester Medical Center, and President, American Association for Emergency Psychiatry, 300 Crittendon Boulevard, 1-9016-A, Rochester, NY 14642

#### **SUMMARY:**

Results from an ongoing study of factors that are correlated with successful transitions from emergency psychiatric services and inpatient care to outpatient care will be summarized. This study emphasizes the importance of integrating patient preferences for acute care delivery—both pharmacologic and non-pharmacologic—into care planning. Patients compliance with aftercare will be examined in relation to the impact of emergency and inpatient care upon them.

#### No. 15E STRATEGIES TO MAXIMIZE THE USE OF OUTPATIENT CARE MODALITIES AFTER DISCHARGE FROM SHORT LENGTH OF STAY SERVICE

Geetha Jayaram, M.D., Associate Professor, Department of Psychiatry, Johns Hopkins University, 600 North Wolfe Street, Meyer 101, Baltimore, MD 21287-7101

#### **SUMMARY:**

Current inpatient psychiatric treatment emphasizes rapid discharge to step-down systems. Although we have made significant advances in the development of psychotropic medications, we lag behind in providing effective care to the severely mentally ill, Recidivist patients with persistent symptoms of illness are noncompliant, suffer from comorbid conditions, and are likely to be functionally disabled. These patients may not be competent to consent to complex medical procedures as well.

We will present data describing the demographic, case complexity, and functional capacity of severely ill patients from a short-stay sample. We will discuss how competency and functional capacity can be evaluated in these patients. Also, methods to assess substance abuse. HIV risk, safety, and violence potential will be described and presented.

Examples of quality improvement studies, appropriate use of step down systems will be reviewed.

#### **REFERENCES:**

- 1. Goldacre M, Seagroatt V, Halon K: Suicide after discharge from psychiatric inpatient care. Lancet 1993; 342:283–6.
- 2. Guffel B, Held M, Goldman W: Predictive models and the effectiveness of strategies for improving outpatient follow-up under managed care. Psychiatric Services 2002; 53:1438–1443.
- 3. Lambert MT: Linking mental health and addiction services, a continuity-of-care team model. Health Serv Res 2002; 28:433–44.
- 4. Mezokari L, Knudsen H, Meyer E: The interlocking treatment system: a model for the delivery of state hospital-CMHC services. Hosp Community Psychiatry 1981; 32:273–8.
- 5. Bachrach L: Continuity of care for chronic mental patients: a conceptual analysis. Am J Psychiatry 1981; 138:1449–56.
- 6. Grella C, Gilmore J: Improving service delivery to the dually diagnosed in Los Angeles County. J Subst Abuse Treat 2002; 23:115–22.
- Arana J, Hastings B, Herron E: Continuous care teams in intensive outpatient treatment of chronic mentally ill patients. Hosp Community Psychiatry 1991; 42:503-7.
- Bauer MS, McBride L, Shea N, Gavin C, Holden F, Kendall S: Impact of an easy-access VA clinic-based program for patients with bipolar disorder. Psychiatric Services 1997; 48:491–6.
- 9. Jones B, Jayaram G, Inoraham G, Samuels J, Robinson H: Relating competency status to functional status at discharge in the chronically mentally ill. Journal of the American Academy of Psychiatry and Law 1998; 26:49–55.

10. Jayaram G, Tien A, Sullivan P, Gwon H: Elements of a successful short stay service. Psychiatric Services 1996; 47:407–12.

Medical School, and Medical Director, Women's Health Project, St. Luke's Roosevelt Hospital Center, 303 East 57th Street, Apt. 18-B, New York, NY 10022-2947

#### Symposium 16

Sunday, November 2 8:30 a.m.-11:30 a.m.

### WOMEN AT RISK: PSYCHODYNAMIC CONSIDERATIONS FOR TRAUMA AND RECOVERY

American Academy of Psychoanalysis and Dynamic Psychiatry

Matthew A, Tolchin, M.D., Assistant Clinical Professor of Psychiatry, Mount Sinai School of Medicine, and Past President, Academy of Psychoanalysis and Dynamic Psychiatry, 35 East 84th Street, New York, NY 10028-0871; Arthur M. Freeman III, M.D.; Clarice J. Kestenbaum, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, participants should have an enhanced appreciation of the benefits of psychodynamic understanding in the provision of psychiatric services generally, and greater ability to apply dynamic perspective in the treatment of three specific groups of psychiatric patients.

#### **SUMMARY:**

The symposium demonstrates the vital contribution of psychodynamic understanding in the provision of psychiatric services in areas where that perspective is often neglected. Presentations discuss the work done in a long-term comprehensive treatment group for women with serious psychiatric illness, a rape crisis center, and among trauma victims seen in a major psychiatric treatment and training hospital. The intended audience includes those who are experienced dynamic psychiatrists who would like to consider and discuss the three specific applications of the dynamic orientation that we present, as well as those who have less experience in the dynamic realm and would like to increase their familiarity with the general approach.

#### No. 16A BREAKING THROUGH THE DESPAIR: SPIRITUALLY-ORIENTED GROUP THERAPY AS A MEANS OF HEALING WOMEN WITH SEVERE MENTAL ILLNESS

Sharon L, Sageman, M.D., Department of Psychiatry, Columbia University College of Physicians and Surgeons, Department of Psychiatry, New York University

#### **SUMMARY:**

Studies have shown that 96% of Americans believe in God and over 90% pray, yet there is relatively little education available for clinicians on how to use spirituality as a tool for healing mental illness, particularly when treating very sick patients. This paper illustrates how spiritually oriented group therapy with severely ill women can help to improve mood, affect, motivation, interpersonal bonding, and sense of self, and can succeed in reaching patients and promoting recovery in ways that traditional therapy can not. Specific modalities including group prayer, yoga breathing, and spiritual readings are described.

Breaking Through the Despair offers both a psychodynamic and a neurophysiologic perspective for understanding how this type of treatment helps patients transcend their mental illness and be able to grasp abstract spiritual concepts, develop a sense of belonging to a caring community, and integrate a new sense of themselves as productive and valued individuals.

#### No. 16B

FACING SEXUAL VIOLENCE IN A RAPE EMERGENCY ROOM: IDENTIFICATION, PROJECTIVE IDENTIFICATION, AND THE MYTH OF NEMESIS

Alvise Orlandini, M.D., Private Practice, Via San Vito #26, Milano, Italy 20123

#### **SUMMARY:**

The presentation focuses on the relationship between identification and sexual abuse. Three subsequent levels are considered, namely the relationships between (1) the abuser and the victim, (2) the gynecologist or social worker of the rape emergency room and the victim, and (3) the gynecologist or social worker and the entire rape emergency room staff. In the relationship with a rape victim, the gynecologist and the social worker may perceive unexpected negative feelings such as fear, horror, impotence, despair, or even anger, which can interfere in the identification with the victim. Rage can be considered also as a concrete form of devaluation through concrete penetration of the victim. As an example, a myth of sexual abuse is presented: the rape of Nemesis by Zeus.

#### No. 16C PSYCHODYNAMIC ISSUES IN THE TREATMENT OF TRAUMA SURVIVORS

Eric M. Plakun, M.D., Director of Program Development and Admissions, Erikson Institute for Education and Research, Austin Riggs Center, and Instructor of Psychiatry, Harvard Medical School, 25 Main Street, P.O. Box 962, Stockbridge, MA 01262

#### **SUMMARY:**

A familiar aspect of trauma is an individual's repeated retraumatization in subsequent relationships. This paper explores mutual projective identification between therapist and patient, also called enactment, as one mechanism that contributes to the repetition of trauma in treatment and other relationships. Therapists are at risk for enactments when they "refuse" the transference offered by patients and lose their stance of technical neutrality. Frequently, the transferences that are refused arise from predictable trauma-related transference-countertransference paradigms involving the patient relating to the therapist as the perpetrator of abuse, the victim of the patient's abuse, or the witness or bystander to abuse. The therapist's own character vulnerabilities may make these transferences particularly ego dystonic and hard to endure. Case examples are offered to illustrate this thesis.

#### **REFERENCES:**

- 1. Plakun EM: Making the alliance and taking the transference in work with self-destructive borderline patients. Journal of Psychotherapy Practice and Research 2001; 10:269–276.
- 2. Shapiro ER, Carr AW: Lost in Familiar Places. New Haven, CT, Yale University Press, 1991.
- 3. Ravi-Shankar SS: Change and love. An Intimate Note to the Sincere Seeker. Art of Living Foundation, Santa Barbara, California 1999; 4: pp 113–114.
- 4. Newberg A, D'Aquili E, Rause V: Why God Won't Go Away. Random House, N.Y. 2001; pp. 2–8, 155.
- Groth NA, Birnbaum HJ: Men Who Rape: The Psychology of Sex Offenders, Plenum Press, New York, 1980.
- 6. Plakun EM: Enactment and the treatment of abuse survivors. Harvard Review of Psychiatry 1998; 5: 318–325.
- Brown RP, Gerbarg PL: Yogic breathing and meditation: when the thalamus quiets the cortex and rouses the limbic system. Proceedings of the Science of Breath International Symposium on Sudarshan Kriya. Pranayam, and Consciousness. New Delhi, India 2002.
- 8. Sullivan WP: It helps me to be a whole person: the role of spirituality among the mentally challenged. Psychosocial-Rehabilitation Journal 1993; 16(3): 125–134.

2. Levinson DV: A conception of adult development. American Psychologist 1986; 41:3–43.

### GROWING OLD: UTILIZING MUSIC TO UNDERSTAND THE AGING PROCESS

Robert W. Hierholzer, M.D., Chief, Mental Health Service, VA Central California Health Care System, and Associate Clinical Professor of Psychiatry, University of California at San Francisco, 2615 East Clinton Avenue, Fresno, CA 93703; Hani R. Khouzam, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) recognize the importance of role changes as people age and how these may be either successfully negotiated or lead to crises, (2) recognize how the elderly view and utilize their past, and how they anticipate the future (including their own mortality), (3) appreciate how music has long grappled with issues of aging, reflecting our fears as well as triumphs, and (4) appreciate how music can be a more compelling medium for exploring aging than customary lecture formats.

#### **SUMMARY:**

The American population is aging, and the aged do not necessarily view life in the same way as younger individuals. It is important that mental health professionals working with the elderly appreciate what it is like to grow old and be old. It is also important that mental health professionals understand their own feelings about aging and the elderly, and understand our society's attitudes toward aging. This presentation, which was originally designed to teach psychiatry residents about these issues and attitudes, utilizes music to highlight aspects of aging. This presentation invites participants to think about the aging process and to utilize music as a medium that more readily engages learners than mere lectures. After listening to musical selections dealing with the aging process—classical and popular—participants will be asked to discuss what each work says about aging, and what attitudes are reflected. Correlations with published literature on aging will be made, as well as how such a learning experience might fit into an overall geriatric curriculum. Finally, the audience will be asked to critique this method of teaching.

#### TARGET AUDIENCE(S):

All mental health professionals who work with the elderly, and those who teach about aging.

#### **REFERENCES:**

Eight Stages of Man, in Childhood and Society. Edited by Erikson EH. W. W. Norton & Co., N.Y., 1950, pp 247-274.

#### Workshop 2

Wednesday, October 29 10:00 a.m.-11:30 a.m.

### MAKING VIDEO PRESENTATIONS: NEW TECHNOLOGIES AND NEW OPPORTUNITIES

Laurence P. Karper, M.D., Vice Chair, Department of Psychiatry, Lehigh Valley Hospital at Muhlenberg, 2545 Schoenersville Road, Fifth Floor, Bethlehem, PA 18107; Charles Barber, M.F.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participants will be able to make use of the available technologies to plan and develop a video presentation.

#### **SUMMARY:**

The advent of digital video technology enables mental health professionals without significant experience in multimedia to create video presentations. Video can be used to augment conventional slide or oral presentations or can constitute a stand-alone educational or promotional experience. Video productions, prior to the digital video revolution, required professional expertise and equipment. The quality of these productions was quite high; however, their expense limits the application of these productions. This presentation demonstrates how widely available consumer personal computer and audiovisual equipment can be used to prepare a presentation suited for various audiences. A currently funded research project will be used as a case study to understand the organization and creation of a multimedia presentation utilizing digital video technology. The presentation will provide a step-by-step introduction to the software and hardware tools needed to complete a project for use in a presentation and opportunities will be available for discussion and feedback regarding projects of audience interest.

#### **TARGET AUDIENCE(S):**

Researchers, educators, and clinicians interested in utilizing video to present information.

#### **REFERENCES:**

- 1. Nadelson T: Audiovisual overview: journey of healing: an outpatient therapy group for war-related PTSD. Psychiatr Serv 1999; 50:627–628.
- 2. Reavis PA, Epstein BA: Selected list of video programs on mental illness and treatment for patients and their families. Psychiatr Serv 1995; 46:1238–1240.

Workshop 3

Wednesday, October 29 10:00 a.m.-11:30 a.m.

#### A PROGRAM TO REDUCE RESTRAINT AND SECLUSION ON A LOCKED DEPARTMENT OF MENTAL HEALTH REPLACEMENT UNIT

Alex N. Sabo, M.D., Chair, Department of Psychiatry, Berkshire Medical Center, 725 North Street, Pittsfield, MA 01201-4109; Sean Jennings, M.A.; Joel A. Vogt, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to: (1) describe a performance improvement program that successfully reduced restraint and seclusion, (2) identify therapeutic alliance as the single most important factor and ways to enhance alliance under difficult circumstances, and (3) describe three techniques for working with staff to improve their ability to decrease restraint and seclusion.

#### **SUMMARY:**

Restraint and seclusion are accepted methods for insuring the safety of patients and staff on locked psychiatric units. Yet, there are no controlled studies that demonstrate their value in those with serious mental illness. Their use can also be associated with increased injuries to staff and patients and to the deterioration of a therapeutic alliance between staff and patients. Over a three-year period, the number of hours of restraint and seclusion on a locked, DMH state-hospital replacement unit decreased from 390 hours per year to 20 hours per year. There was no increase in injuries to staff or patients. Staff themselves felt that there was an improvement in the therapeutic alliance between themselves and patients. This workshop will outline the theoretical assumptions behind the effort to reduce the use of restraint and seclusion and the specific steps taken in educating the inpatient staff and working with them on a day-to-day basis to achieve these results. Case illustrations with both patients and staff will be presented. Workshop participants will be encouraged to share their own experiences regarding successes and pitfalls in attempting to reduce restraint and seclusion on their locked units.

#### **TARGET AUDIENCE(S):**

Psychiatrists, psychologists, social workers, and nurses working on inpatient psychiatric units; department of mental health administrators.

#### **REFERENCES:**

1. Sabo AN, Havens L (Editors): The Real World Guide to Psychotherapy Practice. Harvard University Press, London and Cambridge, MA: 2000.

2. Sailas E, Fenton M: Seclusion and restraint for people with serious mental illnesses. Cochrane Database of Systematic Reviews 2000; (2):CD001163.

Workshop 4

Wednesday, October 29 10:00 a.m.-11:30 a.m.

### MULTIDISCIPLINE TEAM APPROACH TO THE TREATMENT OF THE LATINO IMMIGRANT

Guillermo Olivos, M.D., Staff Psychiatrist, Montgomery County Mental Health Administration, 8818 Georgia Avenue, Suite 200, Silver Spring, MD 20910; Lidia R. Carnota-Cohen, M.D.; Iris E. Ysern-Gonzáles, L.C.S.W.-C.; Viviana Azar, M.S.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, participants will be able to better understand and identify a variety of effective approaches to meet specific mental health needs of Latino immigrants.

#### **SUMMARY:**

The Latino immigrant arriving in the Metropolitan Washington, D.C. area, and treated at our multicultural program, usually brings a history of separation and exposure to violence and abuse. After an arduous and dangerous journey from their homes to the U.S., they have to confront a myriad of problems related to adaptation to a land where people speak a different language and have other customs. These difficulties are compounded later on when families are reunified.

We consider to be essential in the treatment of this population a multidisciplinary team approach by culturally competent therapists; an emphasis in community outreach; the utilization of individual, family, educational, and supportive group therapy; case management; and pharmacotherapy.

Vignettes will be presented to illustrate the management of some of our individual patients and families in treatment.

#### **REFERENCES:**

1. Krug, Dahlberg, Mercy, et al: World Report on Violence and Health. WHO 2002. Mental Health: Culture, Race, and Ethnicity. US DHHS, 2001.

Workshop 5

Wednesday, October 29 10:00 a.m.-11:30 a.m.

### PARTNERING WITH COMMUNITY HOSPITALS TO IMPROVE ACCESS TO CARE

Robert P. Roca, M.D., M.P.H., Vice President and Medical Director, Sheppard Pratt Health Systems, 6501

North Charles Street, Baltimore, MD 21285; Steven S. Sharfstein, M.D.; Marsden H. McGuire, M.D.; Marcia Ellis, M.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) describe how a psychiatric hospital can improve regional access to integrated mental health services by partnering with community hospitals, and (2) describe and compare several models of emergency room consultation in community hospitals.

#### **SUMMARY:**

In an effort to enhance regional access to an integrated system of mental health services, Sheppard Pratt has contracted with ten community hospitals throughout Maryland and northern Virginia to manage their inpatient, emergency, consultation-liaison, and hospitalbased outpatient psychiatric services. This experience has been a "living laboratory" in which different models of collaboration and service delivery have been developed in response to the needs, cultures, and financial constraints of the partner hospitals. The emergency room (ER) serves as a major gateway to the system but each ER has particular requirements and resources. We will describe and compare the various models of emergency services delivery that we have developed in response to these needs. Consultation-liaison (C-L) services (both in hospitals and local nursing homes) are important points of access to the system of care. We will describe our approach to the development of C-L services and the impact of these programs on other services in the continuum. Inpatient, partial hospital, and intensive outpatient programs exist in the majority of our partner hospitals. Local circumstances sometimes allow for the development of subspecialty services, e.g., ECT, adolescent day hospital; however, most communities cannot support these. We will describe how Sheppard Pratt, the regional freestanding psychiatric hospital, serves as a provider of subspecialty and other tertiary mental health services to its partner communities.

#### **TARGET AUDIENCE(S):**

Psychiatrists and administrators of mental health services.

#### **REFERENCES:**

- Schreter RK, Sharfstein SS, Schreter CA (eds): Managing care, not dollars: the continuum of mental health services. Washington DC, American Psychiatric Press, Inc, 1997.
- 2. Westwood B, Westwood G: Multi-presenter mental health patients in emergency departments—a review of models of care. Aust Health Rev 2001; 24:2002–13.

Workshop 6

Wednesday, October 29 1:30 p.m.-3:00 p.m.

#### PATTERNS OF LASTING RELATIONSHIPS: RESEARCH LESSONS FOR PSYCHOTHERAPISTS

Jacqueline Olds, M.D., Associate Clinical Professor of Psychiatry, Harvard University Medical School, 30 Hillside Avenue, Cambridge, MA 02140-3616; Richard S. Schwartz, M.D.; Robert J. Waldinger, M.D.; Janice Levine, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should better understand patterns of successful couples' relationships and apply that understanding to the treatment of both couples and individuals.

#### **SUMMARY:**

We will bring together presenters who have studied successful couples' relationships from several different research and observational perspectives. The goal is to create a dialogue among the presenters and with the workshop audience about the natural patterns of lasting relationships and how a better understanding of those patterns might usefully shape both couples therapy and individual therapy. Specific topics will include a model of natural shifts in the experience of closeness over the course of relationships, observational research on the measurement of empathic attunement in couples, and empirically based cognitive-behavioral approaches to couples' communication and conflict management.

#### TARGET AUDIENCE(S):

Couples' therapists, individual therapists

#### **REFERENCES:**

- Thomas G, Fletcher GJO: Empathic accuracy in close relationships, in Empathic Accuracy. Edited by Ickes W. NY, Guilford, 1997.
- 2. Schwartz R, Olds J: Marriage in Motion: The Natural Ebb and Flow of Lasting Relationships. NY, Perseus, 2000.

Workshop 7

Wednesday, October 29 1:30 p.m.-3:00 p.m.

### CONDUCTING RESEARCH ON INDIVIDUALS WITH IMPAIRED DECISION-MAKING ABILITIES

David Harper, Ph.D., Associate Director of Research, Harvard Medical School, and Department of Geriatrics, McLean Hospital, 115 Mill Street, Belmont, MA 02478;

Ruth A. Dukoff, M.D.; Janet M. Lawrence, M.D.; Yosef Workshop 8 Berlow, B.S.

Wednesday, October 29 1:30 p.m.-3:00 p.m.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to demonstrate a broad understanding of the ethical and legal concerns of involving individuals with impaired decision-making abilities in research as well as the strategies and recommendations for addressing these issues.

#### **SUMMARY:**

The ability to conduct research on individuals with impaired decision-making abilities is crucial to enhancing the diagnosis, treatment, and management of many diseases, including Alzheimer's disease and other dementias. However, conducting such research requires careful planning and implementation to meet the legal and ethical guidelines that serve to protect the rights and well-being of those participating. These guidelines include requiring the individual to provide informed consent before entering a research project to ensure that the participant possesses and understands all of the relevant information needed in order to make a voluntary decision. Individuals with decision-making impairment may not be capable of meeting this requirement and alternative strategies must be employed to allow such individuals to participate in research. These strategies must continue to uphold the basic ethical and legal standards, which are at the core of conducting human research. What follows is a discussion of the ethical and legal issues raised by including individuals with decision-making difficulty in research protocols, the importance of conducting this research to the growing field of geriatric psychiatry, and experiences of working with this population in both clinical and research settings.

#### **TARGET AUDIENCE(S):**

Researchers and clinicians working with individuals with impaired decision-making abilities

#### **REFERENCES:**

- 1. Grisso T, Appelbaum PS: Assessing Competence to Consent to Treatment: A Guide for Physicians and Other Health Professionals. New York, Oxford University Press, 1998.
- 2. Dukoff R, Sunderland T: Durable power of attorney and informed consent with Alzheimer's disease patients: a clinical study. Am J Psychiatry 1997; 154(8):1070-5.

#### PATIENT RESPONSIBILITY FOR ADDICTION TO PRESCRIBED **SUBSTANCES**

Harold J. Bursztajn, M.D., Associate Professor of Psychiatry, Harvard Medical School, 96 Larchwood Drive, Cambridge, MA 02138-4639; Robindra K. Paul, D.P.H.; Lance M. Dodes, M.D.; Brian Johnson, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to reliably evaluate patient responsibility for addiction to prescribed and nonprescribed substance addiction.

#### **SUMMARY:**

As a follow-up to our May 2003 APA workshop, the question of responsibility for addiction to prescribed substances will be explored across a variety of treatment settings, including primary care, traditional psychiatric, and managed health care-dominated treatment contexts. We will describe how addiction, versus simply overuse, centrally has to do with why only some of the people with upregulation continue to use drugs addictively. We will show that true addiction is a psychological phenomenon, not a physical one. We will also describe the results of our evidence-based review and analysis, which describes characteristic differences between those who become dependent upon prescribed medications versus those who become dependent upon nonprescribed substances. Workshop participants will be facilitated in conducting a review and analysis of their own clinical and forensic case experience as to approaches and methods for evaluating patient responsibility for addiction to prescribed and nonprescribed substances. The workshop is appropriate for all psychiatrists, particularly those with experience in the treatment or forensic evaluation of addictive behaviors.

#### **REFERENCES:**

- 1. Zinberg NE: Drug, Set, Setting: The Basis for Controlled Intoxicant Use. Yale University, Yale University Press, 1984.
- 2. Dodes LM: The Heart of Addiction. New York, Harper Collins, 2002.

#### Workshop 9

Wednesday, October 29 3:30 p.m.-5:00 p.m.

#### SITUATION THERAPY: ROADMAP TO RECOVERY FOR THE CHRONIC MENTALLY ILL

Norma C. Josef, M.D., Associate Professor of Psychiatry, Wayne State University School of Medicine, Walter Reuther Psychiatric Hospital, 30901 Palmer Road, Westland, MI 48186-9529; Tamara Ferguson, Ph.D.; Jack Ferguson, Ph.D.; June Whittler, M.S.W.; William Barnes, M.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should know how to use a structured method of group therapy to address basic social-cultural problems that have been identified by a computerized interview schedule. The method and exercises are contained in the manual Getting Control of Your Life.

#### **SUMMARY:**

The treatment of the mentally ill has recently tended to concentrate upon psychopharmacological methods. This workshop intends to address the neglected social and cultural components by examining treatment and outcomes with situation therapy. It focuses on chronically ill and forensic patients, who have been in treatment for a long time but with little continuity, and who are presently in a state hospital in the Midwest.

Situation therapy proposes that to develop a sense of attainment—or confidence in self and others—an individual must learn to balance expectations of self and others with corresponding performances in 16 life vectors such as health, housing, occupation, love, and sex. A person can respond to stress and imbalance with cognitive distortions, patterns of reaction, or can negotiate expectations and performances with self and others.

Patients are interviewed with a user-friendly, computerized interview schedule to assess each life vector. The manual Getting Control of Your Life provides them with group exercises. Basic social training consists of ten group therapy sessions in which participants learn to differentiate between expectations, feelings, and performances; understand their needs and those of others; and consider their present problems in terms of past traumatic experiences. Treatment outcomes are discussed.

#### **TARGET AUDIENCE(S):**

All mental health practitioners.

#### **REFERENCES:**

- 1. Erikson EH: Eight stages of men, in Childhood and Society. New York, W. W. Norton, 1950.
- Karasu TB: Toward a clinical model of psychotherapy for depression. I Systematic comparison of three psychotherapies. American Journal of Psychiatry 1990; 147:133–47.

Workshop 10

Wednesday, October 29 3:30 p.m.-5:00 p.m.

### THE PORTRAYAL OF PSYCHIATRY IN RECENT AMERICAN FILM

Steven E. Pflanz, M.D., Life Skills Flight Commander, F.E. Warren Air Force Base, U.S. Air Force, 6900 Alden Drive, Cheyenne, WY 82005

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to critically examine contemporary films with mental health content and understand how the images portrayed in these films influence the public perception of psychiatry and mental illness.

#### **SUMMARY:**

The American film industry has long had a fascination with psychiatry. The history of film is replete with vivid images of psychiatrists and their patients. Perhaps unlike any other force in America, major motion pictures have the power to enduringly influence the public perception of mental illness, its treatments, and the profession of psychiatry. In particular, the far-reaching appeal of films with success at the box office gives them a unique opportunity to shape the attitudes of everyday Americans. Oftentimes, mental health professionals pay more attention to films that achieve critical acclaim for their artistic merits. The value of these films is undeniable. However, to understand the forces shaping the public perception of our profession, it is necessary to examine the images of mental illness and the mentally ill in commercially successful films. In this workshop, the facilitator will discuss briefly the portrayal of psychiatry in contemporary films over the past five years, including such films as A Beautiful Mind, K-Pax, Don't Say a Word, The Sixth Sense, 28 Days, and Mumford. Each of these films achieved a certain degree of both critical acclaim and box-office success and was seen by millions of Americans. To generate discussion, short film clips from these movies will be viewed. The majority of the session will be devoted to audience discusion of these and other films and how we understand contemporary film to influence the image of psychiatry in America.

#### TARGET AUDIENCE(S):

General psychiatry, psychiatry, and the arts and humanities.

#### **REFERENCES:**

- Gabbard GO, Gabbard K: Psychiatry and the Cinema, 2nd Edition. Washington, DC, American Psychiatric Press, Inc. 1999.
- Hesley JW, Hesley JG: Rent Two Films and Let's Talk in the Morning: Using Popular Films in Psychotherapy. New York, John Wiley & Sons, Inc., 1998.

Wednesday, October 29 3:30 p.m.-5:00 p.m.

Workshop 12

Thursday, October 30 8:00 a.m.-9:30 a.m.

#### PSYCHIATRIC STAFF BURNOUT: IMPLICATION TO PSYCHOLOGICAL AND PHYSICAL WELL BEING

Nalini V. Juthani, M.D., Training Director, Department of Psychiatry, Albert Einstein College of Medicine, Bronx-Lebanon Health Center, 1276 Fulton Avenue, Bronx, NY 10456; Lita Lyakhovetskaya, M.D.; Alfeo V. Reminajes, M.D.; Virendra Juthani, M.D.; Ferdinand Banez, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the study will analyze the consequences of caregiver burnout and will determine any objective evidence of psychiatric, psychosomatic, physical symptoms, impact on their social lives, employment patterns, and impairment in psychological functioning. The study will also analyze the impact of available medical resources. Lastly, the study will then propose measures to prevent burnout among staff and measures to maintain their psychological and physical well being.

#### **SUMMARY:**

Psychiatric staffs, which include attending psychiatrists, resident psychiatrists, nurses, patient care technicians, social workers, and activity therapists will be surveyed using the Masloch Burnout Inventory (Modified), Goldberg's General Health Questionnaire (GHQ-28), and Zerit Caregiver Burden Scale. The Masloch Burnout Inventory (MBI) is used to determine occupational burnout. The Zerit Scale assesses caregiver burnout, and GHQ-28 is used to assess psychological distress. The study is purely voluntary and anonymous. Before the survey is conducted, demographic data, including sex, age, marital status, number of years in service, and average working hours per week will be collected. Subjects will be encouraged to answer questionnaires privately and candidly. Incomplete responses will be rejected.

#### **REFERENCES:**

- Briones AP, Silverstone F. Wolf-Klein G: Stress and Occupational Burnout Among Certified Nursing Assistants. Long-term Care Interface, 2002.
- 2. Carrasco M, Rodriguez BJ, et al: Alzheimer's caregiver burden and psychological distress. A neglected association in the assessment of dementia. Actas Esp Psiquiatr 2002; 30(4):201–6.

#### ALCOHOL USE DISORDERS IN OLDER ADULTS: RECOGNITION AND MANAGEMENT

Roland M. Atkinson, M.D., Department of Psychiatry, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201; Frederick C. Blow, Ph.D.; David W. Oslin, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) specify special risk factors for alcohol problems in older adults; (2) diagnose and describe appropriate interventions for major types of alcohol use disorders in older adults; (3) conduct brief interventions; and (4) treat co-occurring depressive disorders.

#### **SUMMARY:**

Alcohol use disorders are common in persons over age 60 and are found in particularly high proportions of patients in settings such as emergency departments, psychiatric services, and aging services high-risk caseloads. Mental health, addictions, geriatrics, and elder social service and nursing personnel all need to maintain high awareness of these disorders and acquire essential skills for screening and early intervention to assure timely recognition and treatment of these problems. The main goal of this workshop is to increase awareness and point the way to skill acquisition. Three nationally recognized contributors to the increasing evidence base for diagnosis and treatment of these disorders will guide discussion of the following subjects in an interactive format: (1) facts on alcohol and aging, (2) special risk factors for alcohol problems in elders, (3) types of alcohol use disorders and commonly co-occurring psychiatric disorders, (4) screening strategies, (5) techniques of brief intervention to modify alcohol consumption, (6) case management of more severe disorders, and (7) pharmacologic strategies in this population for managing alcohol withdrawal, alcohol use deterrence, and co-occurring disorders.

#### TARGET AUDIENCE(S):

All mental health, addictions, geriatrics, and aging services professionals; background in alcohol use disorders helpful but not required.

#### **REFERENCES:**

- Barry KL, Oslin DW, Blow FC: Alcohol Problems in Older Adults: Prevention and Management. New York, Springer, 2001.
- 2. Center for Substance Abuse Treatment: Substance Abuse Among Older Adults: Treatment Improvement

Protocol #26, DHHS Publ. No. (SMA) 98-3179, Rockville MD, USDHHS, Public Health Service, SAMHSA, 1998.

Workshop 13

Thursday, October 30 8:00 a.m.-9:30 a.m.

### RISK ASSESSMENT, TREATMENT, AND ETHICAL ISSUES RELATED TO SEX OFFENDERS

Fabian M. Saleh, M.D., Forensic Psychiatry Fellow, Department of Psychiatry, University of Massachusetts Medical School, 55 Lake Avenue, North, Worcester, MA 01655; Debra A. Pinals, M.D.; Paul S. Appelbaum, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the end of this presentation participants will be able to: (1) describe approaches to risk assessment of sex offenders, (2) describe pharmacologic treatments for sex offenders, and (3) discuss ethical considerations in treating and assessing risk related to sex offenders.

#### **SUMMARY:**

Individuals who engage in sexual offenses may be afflicted with a paraphilic disorder or sexual deviation syndrome. Paraphilias are psychiatric disorders characterized by deviant and culturally non-sanctioned sexual fantasies, thoughts, and/or behaviors. Though afflicted individuals usually become aware of the unconventionality of their sexual deviancies around the time of puberty, most do not seek treatment voluntarily and preemptively. A small propotion of these individuals may also suffer from symptoms of mental illness that can go unrecognized. Approaches to management involve assessing risk and offering pharmacological treatment if needed. Several pharmacologic agents have been tried to ameliorate symptoms, including testosterone-lowering and serotonergic medications. Various modalities have also been proposed and used to assess an individual's risk for engaging in problematic sexual behaviors. In assessing risk, ethical dilemmas often arise, especially related to the role of mental health professionals in assessing risk, judging the adequacy of consent, and distinguishing between correctional and treatment functions. The purpose of this workshop is to describes pharmacological treatments for juvenile and adult sex offenders and to review basic approaches to sex offender risk assessments. Finally, the presentation will include commentary related to ethical considerations in working with this population. Through case examples, discussions about particular issues faced by audience members will be encouraged.

#### **REFERENCES:**

- 1. Zonana H, et al.: Task Force Report on Sexually Dangerous Offenders. Washington, DC, American Psychiatric Association, 1999.
- Bradford JMW: The Neurobiology, neuropharmacology, and pharmacological treatment of the paraphilias and compulsive sexual behavior. Can J Psychiatry 2001; 46:26–34.

Workshop 14

Thursday, October 30 8:00 a.m.-9:30 a.m.

#### ALTERNATIVE MEDICINE, SPIRITUALITY, AND RECOVERY FROM SERIOUS MENTAL ILLNESS

Zlatka L. Russinova, Ph.D., Senior Research Associate, Center for Psychiatric Rehabilitation, Boston University, 940 Commonwealth Avenue, West, Boston, MA 02215; Nancy J. Wewiorski, Ph.D.; Dori S. Hutchinson, Sc.D.; Lisa Bellafato, M.Ed.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should (1) recognize the healing potential of alternative medicine for individuals with serious mental illness, (2) recognize the spiritual profiles of users of alternative therapies for the purposes of recovery from serious mental illness, and (3) demonstrate familiarity with some ways of using alternative medicine approaches in mental health and rehabilitative settings.

#### **SUMMARY:**

This workshop will focus on the role of various spiritual and holistic healing practices in the process of recovery from serious mental illness. Panel members will address both research and clinical practice perspectives. Findings from a national survey of 245 individuals with serious mental illness who report experiencing mental health benefits from use of such practices will be presented about (1) types of spiritual and holistic healing practices used most frequently; (2) patterns of use of such practices for the purposes of managing and recovering from a serious mental illness; (3) perceived benefits from using such practices; (4) spiritual profiles of users of such practices; and (5) associations between psychiatric diagnosis and the choice, use, and perceived benefits from alternative healing practices. In addition, panel members will report on the inclusion of various alternative healing approaches, such as Tai Chi, Yoga, meditation, and Reiki in the Services Division of the Center for Psychiatric Rehabilitation at Boston University, with special emphasis on accumulated clinical experience in delivering Yoga classes to individuals with serious mental illness. Panelists will engage workshop participants in a discussion about the integration of alternative therapies into the overall treatment planning for persons with serious mental illness.

#### **TARGET AUDIENCE(S):**

Mental health clinicians, researchers, and administrators

#### **REFERENCES:**

- 1. Russinova Z. Wewiorski NJ, Cash D: Use of alternative health care practices by persons with serious mental illness: perceived benefits. Am J Public Health 2002; 92, 1600–1603.
- Unutzer J, Klap R, Sturm R, Young AS, Marmon T, Shatkin J, Wells KB: Mental disorders and the use of alternative medicine: results from a national survey. Am J Psychiatry 2000; 157:1851–1857.

Workshop 15

Thursday, October 30 10:00 a.m.-11:30 a.m.

### PSYCHOTHERAPY IN PERILOUS TIMES: A LETTER BIT OF THERAPY

Roger F. Spencer, M.D., Professor, Department of Psychiatry, University of North Carolina at Chapel Hill School of Medicine, CB 7160, Chapel Hill, NC 27599-7160; Barbara H. Spencer, M.Ed., Retired, 206 Wild Turkey Trail, Chapel Hill, NC 27516

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should recognize some merits and pitfalls of therapy by mail, and understand the innovative use of words in teaching the art of psychotherapy.

#### **SUMMARY:**

"Psychotherapy in Perilous Times: A Letter Bit of Therapy" includes an introduction on the use of words as icons and links with emotions, thoughts, and experiences that we use in psychotherapy to try to understand and change ourselves. We present a brief play consisting of letters between a psychiatrist and a patient whom he had been treating for anxiety and depression before she was called up for military service.

Both characters are fictional but modeled after real events. Dr. Franklin tries to integrate cognitive, dynamic, interpersonal, and spiritual approaches, including poetry in supporting his patient through her war experience. There are some unexpected results for both.

The discussion then focuses on other extenuating circumstances that call for flexibility and resourcefulness, including recent terrorist attacks. There is no "one size fits all" formula. The "beneficial response" described by Ursano is considered. We end with a brief summary of our "stealth teaching" approach: demonstrating dy-

namic concepts such as transference and ambivalence through vicarious experience rather than just naming and describing them.

#### **TARGET AUDIENCE(S):**

Physicians and therapists as well as non-therapists who have an interest in responses to stress and creative approaches to teaching.

#### **REFERENCES:**

- 1. Ursano RJ: Psychiatric Dimensions of Disaster, Harvard Rev Psychiatry 1995; 3:196–201.
- 2. Moore M: A Woman At War: Charles Scribner and Sons, 1993.

Workshop 16

Thursday, October 30 10:00 a.m.-11:30 a.m.

#### IS THERE A DOCTOR IN THE COURT?

Ann-Marie Louison, M.S.W., Director, Nathaniel Project, CASES, 346 Broadway, Third Floor, New York, NY 10013; Nancy J. Needell, M.D.; Paul Pierre-Antoine, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the workshop, participants will have a better understanding of the intersection between mental illness and involvement in the criminal justice system, an increased awareness of programs designed to increase access to integrated mental health care for offenders, and how those programs impact the practice of psychiatry.

#### **SUMMARY:**

Typically, when we think of the role of psychiatrists in the criminal justice system we think of pre-trial competency hearings and the use of expert witnesses. Today, however, the role of psychiatrists is rapidly expanding as they are called upon to work with alternative to incarceration providers, diversion programs, and mental health courts. In these arenas, psychiatrists are called upon to educate judges, make assessments for program participation, and work alongside defense attorneys to advocate for offenders with mental illness. These new roles help to ensure that offenders have access to effective community-based treatment, yet raise complex ethical and practical questions about the emerging nature of psychiatric practice. This workshop will explore how psychiatrists must balance their roles as doctors, advocates, and educators in a context where the ramifications of court decisions are significant. This interactive workshop will lay out the issues facing psychiatrists in the court and identify the need for the creation of guidelines and principles. It will include psychiatrists who have taken on new roles in the system and program operators who work alongside those psychiatrists to increase access to psychiatric services for offenders with mental illness.

#### **TARGET AUDIENCE(S):**

Psychiatrists and mental health care professionals.

Workshop 17

Thursday, October 30 10:00 a.m.-11:30 a.m.

### IMPROVING THE MEDICAL CLEARANCE OF PSYCHIATRIC PATIENTS

Randy L. Thompson, M.D., Medical Director, Chicago Read Mental Health Center, 911 North Elm Street, Hinsdale, IL 60521; Leslie Zun, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) articulate specific problems in the medical clearance of psychiatric patients, and (2) develop a protocol for improving medical clearance, which is broadly applicable across service systems.

#### **SUMMARY:**

This workshop reports on the first prospective study of the medical clearance of patients with known psychiatric illness. The target audience of the workshop is all persons involved with or interested in the subject of medical clearance of psychiatric patients.

Medical clearance signifies an initial medical evaluation in the emergency department before transfer to a psychiatric facility, of patients whose symptoms may be psychiatric in origin. This medical clearance is commonly fraught with problems. In order to resolve these concerns, a team of emergency physicians and psychiatrists developed a consensus protocol for the medical clearance of patients with a history of psychiatric illness, in the emergency department, prior to transfer to a state psychiatric hospital. The protocol includes both a psychiatric assessment and clinically indicated physical assessment. The performance of any laboratory tests is based on the clinical indications and not by routine. The study goals were to determine if there is a set of psychiatric patients who do not need laboratory testing in the emergency department; to demonstrate the accuracy of a protocol for medically clearing patients with psychiatric complaints; and to improve the working relationship between emergency department physicians and psychiatrists in the state hospital.

#### **TARGET AUDIENCE(S):**

Any psychiatrist involved in intake of patients from emergency departments.

#### **REFERENCES:**

- 1. Riba M, Hale M: Medical clearance: fact or fiction in the hospital emergency room. Psychosomatics 1990; 31:400–404.
- 2. Tintinalli JE, Peacock FW, Wright MA: Emergency medical evaluation of psychiatric patients. Ann Emerg Med 1994; 23:859–862.

Workshop 18

Thursday, October 30 10:00 a.m.-11:30 a.m.

#### PSYCHIATRY CONSULTATION TO NURSING HOMES: CLINICAL AND FINANCIAL MODELS

Richard J. Goldberg, M.D., Psychiatrist-In-Chief, Department of Psychiatry, Rhode Island and Miriam Hospitals, 593 Eddy Street, Providence, RI 02903-4923; Robert J. Boland, M.D.; Debbie Mendelsohn, MSRNCS

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to organize and plan strategies for establishing nursing home consultation programs that are clinically relevant and financially viable.

#### **SUMMARY:**

Psychiatrists, especially those interested in geriatric psychiatry, have opportunities to become involved as consultants to nursing homes. The target audience would be psychiatrists, psychiatric nurse clinical specialists, and program managers who are involved with or considering the development of nursing home consultation programs. Aside from the clinical issues, there are a number of considerations pertinent to interdisciplinary models of care, role of the psychiatrist, as well as important financial considerations. The presenters will provide an overview of clinical epidemiology regarding psychiatric problems in nursing homes, as well as two models of care that demonstrate options for psychiatry-nursing interaction. The advantages and disadvantages of the models will be discussed in terms of clinical and financial issues. Some novel methods to facilitate the doctor/ nurse interaction and increase the efficiency of mutual duties, including the use of newer technologies, such as a palm computer-shared database system for data collecting, notetaking, and billing, will also be discussed.

#### **REFERENCES:**

- Bartels SJ, Colenda CC: Mental health services for Alzheimer's disease. Am J Geriatr Psychiatry 1998; 6:S85-S100.
- Bartels SJ, Moak GS, Dums AR: Models of mental health services in nursing homes: a review of the literature. Psychiatr Serv 2002; 53:1390–1396.

Workshop 19

Thursday, October 30 1:30 p.m.-3:00 p.m.

### THE BEGINNING STAGES OF COUPLES' THERAPY: VIDEO CASE STUDIES

Ian E. Alger, M.D., Clinical Professor of Psychiatry, New York Presbyterian Hospital-Weill Medical Center, 500 East 77th Street, #132, New York, NY 10162-0025

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to identify the critical issues in couples therapy, particularly as they engage in the initial assessment during early therapy sessions; have increased awareness of his or her style as a couples therapist.

#### **SUMMARY:**

Participants will have the opportunity to view videotaped couples' sessions, and to role-play clinical examples of couples' treatment with the leader. The focus of the workshop session will be to identify issues of engagement and problem identification, change facilitation, and closure with couples during the first and second therapeutic meetings. Workshop participants will have the opportunity to compare their own clinical experiences related to problems of working with couples, and in dealing with contemporary couples' problems such as separation and divorce; issues in second marriages; sexuality and intimacy; and conflicts that arise in a dualcareer situation.

#### **TARGET AUDIENCE(S):**

All mental health professionals

#### **REFERENCES:**

- 1. Alger I: Marital therapy with dual-career couples. Psychiatric Annals 1991; 21:8.
- 2. Gurman AS, Jacobson NS: Clinical Handbook of Couple Therapy. Guilford Press, 2002.

Workshop 20

Thursday, October 30 1:30 p.m.-3:00 p.m.

#### LESBIAN AND GAY PARENTING: PROFESSIONAL AND PERSONAL ISSUES

Association of Gay and Lesbian Psychiatrists

Margery Sved, M.D., Adjunct Associate Professor of Psychiatry, University of North Carolina, and Past President, Association of Gay and Lesbian Psychiatrists, P.O. Box 37247, Raleigh, NC 27627-7247; Phillip Hernández, M.D.; Marshall Forstein, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should understand many of the issues faced by gay men and lesbians who parent.

#### **SUMMARY:**

A panel of psychiatrists who are also parents will discuss a variety of issues relating to their families. This will include a summary of the research and literature available about gay and lesbian parented families and about the children raised in these families.

Panelists will discuss their decision-making process related to when and how to parent, and how this interfaced with career decisions. In addition, issues to address with young and older children, experiences of the children, legal concerns, issues with clients and patients, and other areas will be included.

#### TARGET AUDIENCE(S):

Psychiatrists and other mental health clinicians who treat gay men and lesbians.

#### **REFERENCES:**

- 1. Cabaj RP, Stein TS: Textbook of Homosexuality and Mental Health. American Psychiatric Press, Inc., Washington DC, 1996.
- 2. Martin A: The Lesbian and Gay Parenting Handbook. Harper Perennial, New York, 1993.

Workshop 21

Thursday, October 30 1:30 p.m.-3:00 p.m.

### SUCCESSFUL NAVIGATION THROUGH CHIEF RESIDENCIES

Susan J. Hatters-Friedman, M.D., Chief Resident, University Hospitals of Cleveland, 11100 Euclid Avenue, Hanna Pavilion, Cleveland, OH 49106; Robert J. Ronis, M.D., M.P.H.; Steven J. Zuchowski, M.D.; Brian A. Anderson, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, participants will be able to better define the role of the chief resident(s) and be familiar with strategies for dealing with inevitable conflicts of interest.

#### **SUMMARY:**

Successful navigation through the chief residency in psychiatry requires much planning and mentoring. The chief resident has an undoubtedly important, yet somewhat mystical role. Chief residency may be similar to lonely "middle management" and varied issues face programs with multiple chief residents, such as splitting. Defining various roles is critical in planning the year,

as is group therapy training. Because the chief resident is neither merely a resident nor faculty, it is a precarious endeavor, likened to a double agent, who lacks a peer group. The chief is expected to be an effective negotiator, which is somewhat dependent on previous relationships, while balancing fourth-year learning with chief duties.

A variety of successful models for chief residencies will be presented, including Looney's suggested models of ward chief, teacher, resident advocate, faculty advocate, and interface chief. Roles should be fluid, based on talents and needs of the program. We will discuss benefits, such as training in leadership skills and learning about academics, as well as liabilities of chief residency, and make suggestions based on the panel's own experiences. Workshop participants may discuss individual issues related to choosing chief residency and challenges that chief residents face.

#### **TARGET AUDIENCE(S):**

Current chief residents, residency training directors, and residents interested in chief residency positions.

#### **REFERENCES:**

- 1. Lowy FH, Thornton JF: To be or not to be a psychiatric chief resident. Can J Psych 1980; 25:121–127.
- Looney JG, Engelberg SJ, Gode RO, Knesper DJ: The psychiatric chief residency: a preliminary training experience in administrative process. Am J Psych 1975; 132:729-733.

Workshop 22

Thursday, October 30 1:30 p.m.-3:00 p.m.

## PEER REVIEW AND MORBIDITY AND MORTALITY IN THE COMMUNITY: A TEN-YEAR PERSPECTIVE

Jeffrey L. Geller, M.D., M.P.H., Professor of Psychiatry, University of Massachusetts Medical School, 55 Lake Avenue, North, Worcester, MA 01655-0002; Marie H. Hobart, M.D.; Jeffrey G. Stovall, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should (1) know how to organize and participate in a peer review process, and (2) recognize the major areas of morbidity and mortality for patients in a typical urban community mental health center.

#### **SUMMARY:**

Clinical practice in the community is fraught with risk, given the severity of illnesses, the complexity and array of psychopharmacological and psychosocial treatments, and medical morbidity. Many patients suffer with substance abuse, intellectual impairments, and other conditions. In addition, our patients often live in poor, unsafe areas. Having a forum to discuss provision of care in this setting is crucial. This workshop will focus on how a peer review process for physicians was designed and how the process facilitates frank discussion by reviewing difficult outcomes. Cases for review include deaths, suicide attempts violent episodes, severe medication reactions, severe medical morbidity related to the psychiatric care, and high-risk patients who are difficult to engage. Data from the past ten years will be shared regarding the types and frequencies of difficult outcome seen.

#### **TARGET AUDIENCE(S):**

Physicians, nurse practictioners, clinic and unit directors.

#### **REFERENCES:**

- Kinzie JD, et al: Improving quality assurance through psychiatric mortality and morbidity conferences in a University Hospital. Hospital and Community Psychiatry 1992; 43:470–474.
- 2. Dembling BP, et al: Life Expectancy and Causes of Death in a Population Treated for Serious Mental Illness. Psych Services 1990; 50:1036–1042.

Workshop 23

Thursday, October 30 1:30 p.m.-3:00 p.m.

### WHAT IS THE ROLE OF PUBLIC ADVOCACY IN MEDICAL PROFESSIONALISM?

American Association of Community Psychiatrists

Kenneth S. Thompson, M.D., Director, Institute for Public Health and Psychiatry, Western Psychiatric Institute and Clinic; Associate Professor of Psychiatry and Public Health, University of Pittsburgh Medical Center, and Former APA/Bristol-Myers Squibb Fellow, 4601 Baum Boulevard, Ross Building, Second Floor, Pittsburgh, PA 15213; Gene Bishop, M.D.; Michael Fine, M.D.; Meagan Sandel, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, participants will become aware of the SOROS Foundation Physician Advocacy Fellowship and the efforts of current Fellows to reinject public service advocacy into concepts of medical professionalism.

#### **SUMMARY:**

Initiated in the early 1990s to promote the development of open societies in the newly independent states of the former Soviet Union, the SOROS foundation Open Society Institute extended its reach to the U.S. later in the decade. It did this after observing how extensively market forces were impinging on the independence of social institutions; such as the medical profession. Under the umbrella of the Medicine as a Profession Program, the foundation established a number of projects, supporting physicians willing to work with consumer organizations, challenge the American way of death, or oppose the war on drugs. One of the projects, the Physician Advocacy Fellowship, has already funded over 25 physicians to work with health advocacy organizations and pursue advocacy campaigns to increase social justice in health and health care for vulnerable, socially excluded populations. Specific topics being addressed include human rights, access to care, and health status disparities. So far, only one psychiatrist has been a SOROS Physician Advocate Fellow. In this workshop, former and current SOROS fellows will describe their work and lead an active conversation about the issues involved in public service advocacy as a member of the medical profession.

#### **TARGET AUDIENCE(S):**

Public service psychiatrists, early career psychiatrists, psychiatric administrators

#### **REFERENCES:**

- 1. Soros G: Soros on Soros: Staying Ahead of the Curve.
- 2. Heifetz R, Linsky M: Leadership on the Line.

Workshop 24

Thursday, October 30 3:30 p.m.-5:00 p.m.

## RESOLVING UNFINISHED BUSINESS AT THE END OF LIFE: THE ART OF HAND CASTING

Leah J. Dickstein, M.D., M.A., Professor Emeritus, Department of Psychiatry and Behavioral Science, University of Louisville, 3006 Dunraven Drive, Louisville, KY 40222; Christiane Corbat, B.S.A., Artist in the Healing Arts, 32 Cole Street, Warren, RI 02885

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should understand the importance of the arts in mental and general health care and their use by psychiatrists and other health professionals to enable patients to deal with mind/body/spirit issues, including end of life. Included is a demonstration and attendees' participation in handcasting.

#### **SUMMARY:**

Dr. Dickstein has employed creative arts, broadly defined as part of psychiatric treatment for three decades with inpatients, outpatients, including in short medication checkups and in an elective course for medical

students. She will share general benefits and slides. Christiane Corbat is an internationally recognized, award-winning artist known for her work with physicians, other health care professionals, artists, and patients. With her goal to promote healing in all, Ms. Corbat cofounded a nonprofit organization Waking Dreams & Warrior Women, for women with breast cancer to work through feelings. This workshop will offer attendees the opportunity to understand the importance and usefulness of the arts in patient care from a theoretical, historical and hands-on experience as Ms. Corbat shares the philosophy, slides of her work with women and men patients with different disorders. She will then guide attendees in exploring some of their issues and help them make a hand casting themselves which they will take with them.

#### **TARGET AUDIENCE(S):**

All psychiatrists and other mental health professionals in the effective use of the arts together with conventional medical treatments.

#### REFERENCES:

- 1. Journal of the American Medical Association (JAMA) Feb. 4, 1998 Pulse Section: Cover & 2 discriptive articles about Christiane Corbat.
- Samuels M, Lane MR: Creative Healing. Harper Collins, 1998, pp 254–257.

Workshop 25

Thursday, October 30 3:30 p.m.-5:00 p.m.

#### DILEMMAS IN PSYCHIATRIC TREATMENT OF CHILDREN AND FAMILIES IN FOSTER CARE: IS IT AN INSURMOUNTABLE TASK?

APIRE/Janssen Early Career Psychiatrist Fellows

Margery Sved, M.D., Adjunct Associate Professor of Psychiatry, University of North Carolina, and Past President, Association of Gay and Lesbian Psychiatrists, P.O. Box 37247, Raleigh, NC 27627-7247; Linda Chokroverty, M.D.; Veronica M. Rojas, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the workshop, the participant should be able to recognize common traumatic themes inherent to children and families affected by foster care. The participant will be able to appreciate the challenges in treatment of such individuals. Finally, he/she will be able to generate productive dialogues between child welfare and mental health providers.

#### **SUMMARY:**

The field of child welfare has evolved significantly since its beginnings in the early 20th century. The scope of its work has included protective, preventative, and foster care/adoptive services. Yet, despite the multidimensional nature of its services and programs, and the inherent psychological trauma endured by children and families involved in the child welfare system, consultation with mental health providers and psychiatric treatment remain low priorities for those involved in child protection, especially foster care. Initiatives to include mental health services into community-based programs have been suggested, but are still at a nascent stage.

During the workshop, challenges faced in the mental health treatment of children and families in foster care will be explored. Specifically, the care of children attending outpatient and inpatient psychiatric settings who are also involved in foster care will be discussed. Finally, strategies will be developed for more effective consultation, psycho-education, and problem solving among psychiatrists and case managers who interface between child welfare agencies and the public mental health system.

#### **TARGET AUDIENCE(S):**

Adult and child psychiatrists, allied mental health professionals such as social workers, psychologists, nurses, caseworkers. Educators and child welfare workers will also benefit.

#### **REFERENCES:**

- Grigsby RK: Consultation with youth shelters, group homes, foster care homes, and Big Brothers/Big Sisters programs, in Child and Adolescent Psychiatry: A Comprehensive Textbook, 2<sup>nd</sup> Edition. Edited by Lewis M, William & Wilkins, 1996, pp. 908–912.
- Advisory Board of the Child Welfare Watch Project: Supporting Stronger Families and Neighborhoods: City Hall and New York's Family and Children's Services. December 2001 Report, pp. 1–18.

Workshop 26

Thursday, October 30 3:30 p.m.-5:00 p.m.

### STALKING: CLASSIFICATION, ASSESSMENT, AND MANAGEMENT

Debra A. Pinals, M.D., Assistant Professor of Psychiatry, University of Massachusetts Medical School, 55 Lake Avenue, North, Worcester, MA 01655; Denise Mumley, Ph.D.; William Warnken, Psy.D.; Chad Tillbrook, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able (1) to detail stalking classification

schemes, (2) to discuss risk assessment related to patients who stalk, and (3) to review legal and clinical considerations related to risk management and advice to victims.

#### **SUMMARY:**

The phenomenon of stalking has increasingly come to public attention over recent years. Efforts to address stalking have been made in legal and clinical arenas. Statutes that define and outline punishments for stalking have been enacted in all 50 states. There is also a growing body of psychiatric literature related to stalking. Several authors have attempted to classify typological constructs related to stalking. These typologies examine factors such as the relationship between the stalker and the victim as well as the motivation of the stalker. These constructs have facilitated the ability to learn more about violence risk factors and potential management strategies. In this workshop, we will present a review of various classification schemes noted in the literature. followed by a discussion of violence risk assessment related to stalking. Risk management and advice to victims will also be addressed. Throughout the workshop, the presenters will utilize case examples to help illustrate clinical points. The target audience for this presentation includes any mental health professional who has treated or encountered individuals who have a history of engaging in stalking behaviors. The presentation is aimed for clinicians with all ranges of experience with this population.

#### **REFERENCES:**

- 1. Mullen PE, Pathe M: Stalkers and their victims. Cambridge, United Kingdom, Cambridge University Press, 2000.
- Meloy JR: Stalking: an old behavior, a new crime. Psychiatric Clinics of North America 1999; 22:85– 100.

Workshop 27

Thursday, October 30 3:30 p.m.-5:00 p.m.

## ASSERTIVE COMMUNITY TREATMENT: INTERNATIONAL INITIATIVES AND IMPLEMENTATION

American Association of Community Psychiatrists

Leonard I. Stein, M.D., Department of Psychiatry, University of Wisconsin, 302 Cheyenne Trail, Madison, WI 53705-4703; Jeffrey G. Stovall, M.D., Assistant Professor of Psychiatry, University of Massachusetts Medical School, and Medical Director, Outpatient Services, Community Healthlink, 72 Jacques Avenue, Worcester, MA 01610; Angelo Fioritti, M.D.; Pev Jorgensen

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the workshop, the participant should be able to discuss possible new applications of assertive community treatment, and potential obstacles to its implementation. The participant should also demonstrate an understanding of the use of assertive community treatment in Europe.

#### **SUMMARY:**

Assertive community treatment is an evidenced-based practice for providing comprehensive treatment and rehabilitation services to individuals with severe mental illness living in the community. As such, there have been many attempts to provide the service to populations of patients different from the originally studied and treated individuals with chronic psychiatric illnesses with significant functional impairment and frequent use of inpatient services. There have also been obstacles to the wisespread implementation of assertive community treatment in all communities, and to its availability for all patients who might benefit from it. This workshop will review the positive impact of the use of assertive community treatment among individuals with first-episode psychosis in Denmark (Dr. Jorgensen), provide a discussion of the variable use of assertive community treatment in Europe (Dr. Fioritti), and outline frequently encountered obstacles to the dissemination of the treatment model (Dr. Stovall). Presenters will also discuss the culturally specific aspects of assertive community treatment that might determine its acceptance and use in different countries and communities; in particular, the impact of its potentially coercive approach, its implementation based on the existence and structure of other traditional means of community support and the importance of limiting the use of hospital resources.

#### TARGET AUDIENCE(S):

Mental health professionals working in community settings, administrators of community mental health systems of care.

#### **REFERENCES:**

- 1. Jorgensen P, Norentoft M, Abel MD, et al: Early detection and assertive community treatment of young psychotics: the Opus study. Soc Psychiatry Psychiatr Epidemiol 2000; 35:283–287.
- 2. Burns T, Fioritti A, Holloway F, et al: Case management and assertive community treatment in Europe. Psychiatric Services 2001; 52:631–636.

Workshop 28

Thursday, October 30 3:30 p.m.-5:00 p.m.

### DISASTER MENTAL HEALTH: WORKING WITH CULTURE

American Association of Community Psychiatrists Anthony T. Ng, M.D., Medical Director, Disaster Psychiatry Outreach of New York, 141 Fifth Avenue, Third Floor, New York, NY 10010; Patricia Mendoza-Bonewitz, Ph.D.; Marilyn Shitegani

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the workshop, the audience will have a greater understanding of the cultural factors involve in disaster preparedness and response. The audience will also learn the application of that knowledge.

#### **SUMMARY:**

The mental health risks of individuals are of significant concerns since the devastating attack on the World Trade Center on September 11, 2001. While mental health consequences such as anxiety, depression, and symptoms of PTSD have been described in the aftermath of disasters for the general populations, there still remains a small amount of literature that address the mental health sequelae of disasters on populations of different ethnic backgrounds, both the long-term effects and, more specifically, the acute effects. The effects of massive trauma such as disasters can have different impacts on these populations than the general population. These are of important concerns as most people of different cultures now comprise large populations of many areas of the United States.

The discussants in this workshop will provide overviews of the cultural considerations in disaster mental health. A description of the Dakotas Nation in the experience with floods will be described. The effects of mass violence on the African-American population as a result of the Los Angeles riots will be discussed. Lastly, the acute mental health effects of disasters on the Latino population will be illustrated by examples from the crash of AA Fl#587.

The audience for the workshop will be mental health professionals who will likely be called upon to respond to disasters. They can be psychiatrists or any mental health professionals who may interact closely with psychiatrists. The audience will supplement the discussants' presentation through interactive dialogue during the presentation as well as a more formal question and answer session at the end of the presentation. The audience will also be encouraged to relate any previous experience they may have had in the area of culture and mental health preparedness and response to disasters.

#### **REFERENCES:**

- 1. Shalev AY, Yehuda R, McFarlane AC: International Handbook of Human Response to Trauma. New York, Kluwer Academic/Plenum Publishers, 2000.
- 2. Fothergill A, Darlington JD, Maestas EGM: Race, ethnicity and disasters in the United States: a review of the literature, Disasters 1999; 23(2):156–173.

Workshop 29

Friday, October 31 Workshop 30 8:00 a.m.-9:30 a.m.

Friday, October 31 8:00 a.m.-9:30 a.m.

#### NURSE-PHYSICIAN RESEARCH **COLLABORATION IN A GENERAL PSYCHIATRY UNIT**

Janice Barber, R.N.C., Department of Psychiatry, Lehigh Valley Hospital, 2545 Schoenersville Road, Bethlehem, PA 18017; Deidre Van Assche, R.N., B.S.N.; Shirley Giansante, M.S.N., R.N.C.S.; Karen Peterson, A.P.R.N., B.C.; Laurence P. Karper, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the session, the participants will become familiar with the barriers to and the benefits from developing research collaborations on an inpatient psychiatry unit.

#### **SUMMARY:**

Community hospital psychiatric units have undergone unprecedented changes over the past ten years with the advent of new medications and modalities for treatment. In addition, third-party payers and managed care organizations have both required more documentation and evidence-based approaches, while reducing reimbursement for care. This has created a need to develop new approaches to deliver care that is both high quality and cost effective. There has been limited research on how to implement new approaches in a community hospital setting. This has provided an opportunity for nursephysician collaboration to develop new strategies for reducing cost and improving quality on community hospital psychiatric units. This workshop focuses on several nascent projects we have developed to improve outcome and reduce morbidity. Working together, we have developed projects to reduce falls and restraint use and improve nursing interventions to reduce anxiety without medications. Both projects benefit from the multidisciplinary interplay of inpatient psychiatry. Identified "nurse champions" initiated the projects and served to enlist support among members of the multidisciplinary team. Developing the data to demonstrate effectiveness requires time, effort, and resources, but can result in increased knowledge, morale, and cohesiveness among inpatient staff in spite of the enormous pressures present in today's work environment.

#### TARGET AUDIENCE(S):

Nurses and clinicians who want to develop research projects in a community hospital.

#### REFERENCE:

1. Evans D: The effectiveness of music as an intervention for hospital patients: A systematic review. Journal of Advanced Nursing 2002; 37:8-18.

#### **RECOVERY PLANNING:** INTERDISCIPLINARY TREATMENT. REHABILITATION, AND SUPPORT

Joan E. Bishop, M.D., Department of Psychiatry, Riverview Hospital, 500 Lougheed Highway, Port Coquitlam, BC, Canada V3C 4J2; Iona Joseph, R.N.; Bob McDonald, R.P.N.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) define recovery; (2) write "challenge statements" using client/patient strengths, goals, observed behaviors, and barriers to overcome regarding symptoms, functioning, living arrangements, and general health for persons with SMI who are trying to cope with complex psychiatric conditions; and (3) state differences between goals and plans and write examples of each.

#### **SUMMARY:**

Interdisciplinary teamwork is frequently cited as important in helping persons with severe mental illnesses (SMI) recover. Multidisciplinary practitioners each assess the client and then meet with other disciplines to plan the delivery of evidence-based treatment, psychosocial rehabilitation, psycho-education, skills training, vocational rehabilitation, supported education, strengthsbased case management, etc., using a client-centered, "choose-get-keep" approach. However, there is no consensus on how to transform "multi-" into "inter"-disciplinary at the level of individual client service planning. The Recovery planning process described in this workshop addresses this gap. Facilitators will provide a framework for organizing and recording diagnoses, risk management issues, rating scales, strengths, challenges, goals, and plans. Attendees will participate in a mock interdisciplinary recovery planning meeting based on a case history and will write challenge statements that include the client's goals and strengths, behavioral descriptions of current problems, and barriers to be overcome; goals; and comprehensive biopsychosocial plans.

#### **TARGET AUDIENCE(S):**

Mental health disciplines from inpatient or outpatient settings, including psychiatry, psychology, occupational therapy, psychiatric nursing, social work, peer support, addictions, vocational rehabilitation, etc as well as managers/administrators who want to improve processes for comprehensive treatment and rehabilitation planning/ monitoring. Participants require basic knowledge of assessment, treatment, rehabilitation and support for persons with SMI.

#### **REFERENCES:**

- 1. Anthony W, Cohen M, Farkas M: Psychiatric Rehabilitation, 2<sup>nd</sup> edition. Boston, Center for Psychiatric Rehabilitation, 2002.
- 2. Hughes R, Weinstein D (eds): Columbia, MD, International Association of Psychosocial Rehabilitation Services, 2000.

#### Workshop 31

Friday, October 31 8:00 a.m.-9:30 a.m.

## PROVIDING ACCESS TO MENTAL HEALTH SERVICES FOR MINORITIES IN BOSTON AND SACRAMENTO

American Association of Community Psychiatrists

Russell F. Lim, M.D., Assistant Clinical Professor of Psychiatry, University of California School of Medicine at Davis, and Medical Director, Northgate Point, Regional Support Team, 601 West North Market Boulevard, #100, Sacramento, CA 95834; Albert Yeung, M.D.; Catherine Vuky, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) describe the California Cultural Competence Plan, (2) describe how access agencies and bilingual and bicultural coordinators can increase the participation of ethnic minorities, (3) describe how South Cove Community Health Center in Boston provides Asian Americans with medical and behavioral health care through community-based multilingual and multicultural services.

#### **SUMMARY:**

In 2001, the Surgeon General of the United States released a supplement to the report on Mental Health entitled "Culture, Race, and Ethnicity," which stated that "culture counts" in the diagnosis and treatment of the four major ethnic groups, that ethnic minorities bear a higher burden from unmet mental health needs than the general population, and that access to mental health services to ethnic minorities should be increased by providing cultural and linguistically appropriate services. The workshop will present two examples of agencies that are providing services to ethnic minority communities and their contrasting approaches.

The California State Cultural Competence Plan will be presented as a specific example of cultural competence at the state level. An example of a county level cultural competence plan will be presented. Northgate Point Regional Support Team will be presented as an example of a culturally competent community mental health center (CMHC) that was designed to increase access to ethnic minorities. In Boston, South Cove Community Health

Center is an example of a community-based organization that was designed to meet the needs of the community. The audience will participate at various points during the lecture to describe their approaches to increasing access for ethnic minority patients.

#### **TARGET AUDIENCE(S):**

The intended audience is consumers, community psychiatrists, and administrators.

#### **REFERENCES:**

- 1. United States Department of Health and Human Services; Mental Health: Culture, Race, and Ethnicitya Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD: 2001.
- 2. Lefley HP: Approaches to community mental health: The Miami model. Psychiatric Annals 1975; 5(8):26–32.

Workshop 32

Friday, October 31 8:00 a.m.-9:30 a.m.

## CRIMINALS OR PATIENTS? ATTITUDES OF PSYCHIATRISTS TO EMOTIONALLY DISTURBED PERSONS

2002-2004 APA/Bristol-Myers Squibb Fellows

Elizabeth B. Ford, M.D., 2002–2004 Bristol-Myers Squibb Fellow, and Department of Psychiatry, New York University Medical Center, 550 First Avenue, NB-20 N 11, New York, NY 10016-8906; Elizabeth R. LeQuesne, M.D.; Allison M. Wehr, M.D.; Claire M. Belgrave, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to appreciate the issues surrounding treatment of emotionally disturbed persons (EDPs) in urban emergency room settings and identify the role that career choice and personal history play in fueling countertransferential reactions and therefore treatment decisions in resident and attending psychiatrists.

#### **SUMMARY:**

In urban emergency rooms, psychiatrists at all levels of training frequently encounter EDPs, patients who have been arrested, but then diverted from usual police procedure due to the assessment by the arresting officers or crisis intervention team that they are mentally impaired. There have been several studies examining the procedures, efficacy of, and attitudes toward such diversion within the framework of police organizations; however little has been studied on the response that psychiatrists may have to such patients. Recognizing that countertransference, often high in emergency settings

and directly influenced by personal history, plays a role in the treatment of patients, we plan to anonymously survey psychiatrists (residents and attendings) in four urban teaching facilities about their career goals and attitudes toward EDPs both as psychiatric patients and potential criminals. Our hypothesis is that psychiatrists motivated for public sector work will have a more empathic attitude to EDPs in described situations.

#### **TARGET AUDIENCE(S):**

All psychiatric professionals, with particular emphasis on those who have exposure to EDPs. Residents especially encouraged.

#### **REFERENCES:**

- 1. Sulkowitz KJ: Psychodynamic issues in the emergency department. Psych Clinics of N America 1999; 22(4):911–922.
- Rosenberg RC, Kesselman M: The therapeutic alliance and the psychiatric emergency room. Hosp and Comm Psych 1993; 44(1):78-80.

Workshop 33

Friday, October 31 10:00 a.m.-11:30 a.m.

#### DEVELOPING BEHAVIORAL HEALTH TRAINING IN VIETNAM: A CULTURAL COLLABORATION

American Association of Community Psychiatrists

Kenneth S. Thompson, M.D., Director, Institute for Public Health and Psychiatry, Western Psychiatric Institute and Clinic; Associate Professor of Psychiatry and Public Health, University of Pittsburgh Medical Center, and Former APA/Bristol-Myers Squibb Fellow, 4601 Baum Boulevard, Ross Building, Second Floor, Pittsburgh, PA 15213; Jeffrey G. Stovall, M.D., Assistant Professor of Psychiatry, University of Massachusetts Medical School, and Medical Director, Outpatient Services, Community Healthlink, 72 Jacques Avenue, Worcester, MA 01610; Matthew Collins, M.D.; Julie Schirmer, M.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant will recognize the obstacles and opportunities found in collaborating in the development of a psychiatric training program within a family medicine residency in Vietnam, and demonstrate an understanding of cultural issues in the presentation, recognition, diagnosis, and treatment of mental illness in different cultures.

#### **SUMMARY:**

The Vietnamese Ministry of Health and three U.S. family medicine residency programs have begun a long-

term collaborative effort to develop family medicine training programs in Vietnam. As part of the Family Medicine Development Project, behavioral health specialists and psychiatrists at the U.S. programs have collaborated with representatives of the Vietnamese residency programs to develop a psychiatric and behavioral medicine curriculum and training strategy that will match the needs of the residents in Vietnam. The collaboration has also worked to match the training to a proposed integrated system of treating mental illness within the primary care setting in Vietnam. Presenters will provide an overview of the project (Dr. Collins), and perspectives on collaborating in the development of the behavioral medicine components of the programs (Ms. Schirmer and Dr. Stovall). Presenters will also discuss cultural variations in the presentation of mental illness, and the challenges to developing a common understanding of mental illness needed to build a curriculum and training approach for use in Vietnam.

#### TARGET AUDIENCE(S):

Psychiatric educators, mental health professionals working in primary care settings or with diverse cultural and ethnic population.

#### **REFERENCES:**

- 1. Walsh A, Davine J, Kates N: Teaching behavioral science to family medicine residents; integrating training into the family practice unit. Isr J Psychiatry Relat Sci 1998; 35:114–119.
- Schirmer J, Le N: The Vietnamese family medicine development project: a cross cultural collaboration. Families, Systems and Health 2002; 20:303–310.

Workshop 34

Friday, October 31 10:00 a.m.-11:30 a.m.

## IS ACCESS TO MENTAL HEALTH CARE BETTER IN COUNTRIES WITH MANDATED UNIVERSAL COVERAGE?

American Association of Community Psychiatrists

Byron C. Tucker, M.D., Psychiatrist, Thagard Student Health Center, Florida State University at Tallahassee, 363 Milestone Drive, Tallahassee, FL 32312; Duncan Wright, M.D., Department of Psychiatry, Maine Medical Center, 22 Bramhall Street, Portland, ME 04102; Peter A. Gibson, M.D.; Joji Suzuki, M.D.; Steffie Woolhandler, M.D., M.P.H.; Kristina H. Muenzenmaier, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to understand details of how the United States has mental/health care problems of limited access and increasing cost and how some other nations have been more successful in solving those problems, as well as some mental/health practitioners' experiences within those countries that provide universal access to care.

#### **SUMMARY:**

Access to mental/health care in the United States has been contracting for many years despite per capita spending increasing to almost twice as much as the next country. Resources have seeped inexorably from the bedside to the executive suite and into an enormous bureaucratic burden that is a peculiarly American phenomenon. The United States' experiment with corporate control of health care has not been embraced by most of the world's industrialized democracies. If they can keep their systems intact, these countries may not participate in the Center of Medicare and Medicaid Services' recent research predictions that health care spending in the U.S. will double by 2011 to 17% of GDP and \$9,216 per person. They also predicted that health inflation will gradually slow to 5.9% due to "slower projected real income growth, a move toward more restrictive forms of managed care, a rise in the uninsured population, and an increase in the use of consumer cost sharing." At what cost to society and to our humanity and mission as physicians the latter three? It is time to learn from other countries!

#### **TARGET AUDIENCE(S):**

All care providers, administrators, consumers, and patient advocates.

#### **REFERENCES:**

- 1. Himmelstein D, Woolhandler S, Hellander I: Bleeding the patient: the consequences of corporate health care. Common Courage Press, Monroe, ME, 2001.
- 2. Bodenheimer TS, Grumbach K: Understanding Health Policy: A Clinical Approach, third edition. Lange Medical Books/McGraw-Hill, New York, 2002.

Workshop 35

Friday, October 31 10:00 a.m.-11:30 a.m.

### MEDIA AND PSYCHIATRY: FRIEND OR FOE?

2002–2004 APA/Bristol-Myers Squibb Fellows

Leslie L. Buckley, M.D., M.P.H., 2002–2004 APA/Bristol-Myers Squibb Fellow, and Resident, Department of Psychiatry, University of Toronto, 77 Gerrard Street, West, #1709, Toronto, ON, Canada M5G 2A1; Joelle M. Pauporte, M.D.; Caroline E. Fisher, M.D., Ph.D.; Karen S. Wiviott, M.D., J.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to use case examples of media campaigns and articles to discuss the relevance of media to psychiatry including positive effects and negative effects re: mental illness.

To provide an overview of the current literature on media and mental health.

To discuss the results of two studies, analyzing the content of media stories relating to substance use disorders and anorexia nervosa.

#### **SUMMARY:**

The subject of psychiatry and mass media has been a source of discussion and study for decades. Media is pervasive in society and its messages help shape our understanding of the world around us and even impact the values of our society. With expanding communication technology as well as a heightened awareness of the damaging impact of stigma on those with mental illness, media is more relevant than ever. This presentation will include a review of the literature in the area of media and psychiatry, highlighting case examples that reflect both the good and bad of media impact, ranging from successful preventive educational campaigns to others that show that media can be grossly misrepresentative of mental illness, may in some cases increase stigma of disorders, may use sensationalism to attract readers, or lack integral information about epidemiology, symptoms, and risks. Also played out in the media are complicated diagnostic dilemmas that debate controversial issues such as the medicalization of abnormal behavior or the implications of labeling.

This presentation will include information from studies of media in relation to two disorders: substance abuse and anorexia nervosa (AN). In the last two decades AN has been extremely prevalent in the media, highlighted partially for reasons of sensationalism and shock value. Similarly, substance abuse is a topic oft reported in media with fluctuating accuracy of risks and symptoms provided. Both substance use disorders and anorexia nervosa involve a complex interplay of sociological, psychological, biological, and cognitive factors that result in symptoms that have been generally accepted in the medical world as a psychiatric disorder. Of interest in this case are the way the disorders are portrayed in the media in terms of attribution of illness (choice versus disease), sensationalism (i.e., celebrities as the focus of the story), whether risks of behavior are clearly reported, and whether symptoms and epidemiology are accurately reported.

#### **TARGET AUDIENCE(S):**

Psychiatrists, psychologists, social workers, mental health advocates

#### **REFERENCES:**

- 1. Herman PJ: Causes of eating disorders. Annu Rev Psychol 2002; 53:187-213.
- 2. Marcos LR: Media power and public mental health policy. Am J Psychiatry 1989; 146(9):1185-9.

Workshop 36

Friday, October 31 1:30 p.m.-3:00 p.m.

#### CHALLENGES TO DELIVERY OF APPROPRIATE CARE AND TRAINING IN STATE HOSPITALS

APA Caucus of State Hospital Psychiatrists

Jagannathan Srinivasaraghavan, M.D., Professor of Psychiatry, Southern Illinois University School of Medicine, and Medical Director, Choate Mental Health and Development Center, 1000 North Main Street, Anna, IL 62906; Veena Garyali, M.D.; Christopher C. Kennedy, M.D.; Anita S. Everett, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant will be able to recognize the major challenges faced by leaders and managers of state hospitals from different states and innovative solutions from their experience.

#### **SUMMARY:**

We are in the midst of profound changes in the delivery of care to persons with mental illness. There has been significant reduction of private, as well as public hospital beds, with the growth of managed care and lack of mental health parity in many states. Budgetary constraints brought on by economic recession within the past few years has placed the mental health system in further turmoil. Though state hospitals serve the most challenging severely mentally ill patients, they often have a difficult time recruiting well qualified professionals and retaining them. The uncertainty of funding and a lack of educational and research commitment strain the university-state hospital affiliations. Some states have resorted to the rationing of most expensive, newer medications. Stigma of mental illness continues to be an issue and it is much worse when psychiatric patients go for medical treatment in general hospitals. While the Supreme Court has ruled that states must evaluate whether people in mental hospitals could receive treatment in less restrictive settings, often appropriate levels of care are unavailable. All the presenters are leaders and managers of state hospitals from different states and they will discuss challenging issues and innovative solutions from their collective experience. Audience participation will be strongly encouraged.

#### **TARGET AUDIENCE(S):**

Psychiatrists and mental health professionals

#### **REFERENCES:**

- Appelbaum PS: Response to the Presidential Address—the systematic defunding of psychiatric care: a crisis at our doorstep. Am J Psychiatry 2002; 159:1638–1640.
- 2. Hill S: The humiliation of a psychiatric patient when she is a medical patient. Psych Services 2000; 51:8:981–982.

Workshop 37

Friday, October 31 1:30 p.m.-3:00 p.m.

#### DEVELOPING INTEGRATED SYSTEMS OF CARE FOR INDIVIDUALS WITH CO-OCCURRING PSYCHIATRIC AND SUBSTANCE DISORDERS

American Association of Community Psychiatrists

Pamela A. Weinberg, M.D., Clinical Director, Pilgrim Psychiatric Center, 998 Crooked Hill Road, West Brentwood, NY 11717; Kenneth M. Minkoff, M.D., Associate Clinical Professor, Department of Psychiatry, Harvard Medical School, 100 Powdermill Road, Box 319, Acton, MA 01720

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) identify eight principles of evidence-based treatment intervention upon which to base the design of a comprehensive, continuous, integrated system of care, (2) describe the components of a CCISC, using DDC and DDE terminology, (3) identify funding strategies to maximize use of existing resources for treatment of dual diagnosis, and (4) delineate potential change strategies at the system, program, clinical practice, and clinician competency levels to implement CCISC.

#### **SUMMARY:**

This workshop reviews examples of systems difficulties faced by individuals with co-occurring psychiatric and substance disorders in public and private settings, and identifies research-based principles of successful treatment intervention for these individuals in the context of a parallel disease and recovery integrated conceptual framework that uses a common language that makes sense from the perspective of both the addiction field and the mental health field. The workshop then illustrates the application of these principles to the design of a strategy for the resolution of these systems difficulties through the development of comprehensive, continuous, integrated system of care for psychiatric and substance

disorders that maximizes use of all existing resources to initiate integrated treatment. The discussion then illustrates a systematic process for implementing this model, utilizing simultaneous interventions at the system, program, clinical practice, and clinician levels, and reports on progress of various system changing initiatives using an assortment of strategies from different parts of the country.

#### **REFERENCES:**

- Minkoff K: Chair, Panel on Co-Occurring Disorders, SAMHSA Managed Care Initiative. Individuals with Co-Occurring Disorders in Managed Care Systems; Standards of Care, Practice Guidelines, Workforce Competencies and Training Curricula. January, 1998.
- 2. Minkoff K: An integrated model for the management of co-occurring psychiatric and substance disorders in managed care systems. Disease Management and Health Outcomes. 2000; 8(5):251–57.

Workshop 38

Friday, October 31 1:30 p.m.-3:00 p.m.

#### PERCEPTION BECOMES REALITY: PATIENTS' VIEWS ON PHYSICIAN AND PHARMACEUTICAL INDUSTRY RELATIONS

2002–2004 APA/Bristol-Myers Squibb Fellows

Bruce E. Rudisch, M.D., 2002–2004 Bristol-Myers Squibb Fellow, and Resident in Psychiatry, Emory University, 1765 Peachtree Street, Apt. E-3, Atlanta, GA 30309; Grace M. Cotelingam, M.D., 2002–2004 Bristol-Myers Squibb Fellow, and Resident in Psychiatry, University of Maryland, 250 Waxter Way, Baltimore, MD 21217

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to identify the positive and negative aspects of physician interactions with the pharmaceutical industry and be aware of how these interactions are perceived by patients.

#### **SUMMARY:**

The aim of this seminar is to further explore the relationship between physicians and the pharmaceutical industry by including the perspective of the patient. We believe that a symbiotic relationship exists between physicians and the pharmaceutical industry in which both parties benefit. Nonetheless, the above relationship is complex and provokes both internal and ethical conflicts within individual health care professionals.

Attempts to better understand the relationship have almost uniquely focused on the knowledge, attitudes,

beliefs, and practices of physicians regarding their relationships with the pharmaceutical industry. Studies reveal that physicians' interactions with pharmaceutical representatives do impact upon prescribing practices. Further, although most physicians deny that interactions with pharmaceutical representatives influence their own behavior, they do not believe this to be true for other physicians. There have been few, if any, attempts to view how this relationship is perceived by patients.

Examining the issue from the perspective of the patient may help physicians better understand their own internal conflicts when making decisions about how to navigate this complex relationship. The purpose of our workshop is to help physicians become more aware of how their interactions with the pharmaceutical industry are perceived by patients. The role of physicians as public figures will be briefly explored in a historical context. We will then explore the impact of the pharmaceutical industry on physicians' public perception by examining patients' view of physicians and the way they relate to the pharmaceutical industry.

#### **TARGET AUDIENCE(S):**

Physicians and residents

#### REFERENCES:

- Steinman MA, Shlipak MG, McPhee SJ: Of principles and pens: attitudes and practices of medicine housestaff toward pharmaceutical industry promotions. Am J Medicine 2001; 110:551-557.
- 2. Wazana A: Physicians and the pharmaceutical industry: Is a gift ever just a gift? JAMA 2000; 283:373–380.

Workshop 39

Friday, October 31 3:30 p.m.-5:00 p.m.

## TRANSNATIONAL CURRENTS IN COMMUNITY PSYCHIATRY: CROSSING THREE OCEANS

American Association of Community Psychiatrists

Kenneth S. Thompson, M.D., Director, Institute for Public Health and Psychiatry, Western Psychiatric Institute and Clinic; Associate Professor of Psychiatry and Public Health, University of Pittsburgh Medical Center, and Former APA/Bristol-Myers Squibb Fellow, 4601 Baum Boulevard, Ross Building, Second Floor, Pittsburgh, PA 15213; Clemens Witte, M.D.; Alan Rosen, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, participants will be able to compare and contrast the impact of national history and culture on the evolution of mental health policy.

#### **SUMMARY:**

International dialogue among practicing community psychiatrists, even in this age of globalization, is a relatively rare event. This is so even between community psychiatrists practicing in the "developed" nations. Working to overcome this disconnection, for a number of years several community psychiatrists from the Netherlands and Australia have routinely attended the IPS and meetings of the American Association of Community Psychiatrists. Their goal has been to learn about the U.S. approach to mental health services, to seek innovations, and to consider what might or might not be best incorporated into their services back home.

In this session, following the example of a similar dialogue held at last year's IPS, the discussions will focus on what it is we can learn from each other by dialoguing. This year the discussion will be initiated by examining themes that cut through national boundaries. These are: How will services be paid for? What is the purpose of care and how will outcomes be established and evaluated? How can stigma and discriminations work against persons with mental illness and how can it be dealt with? Which profession will do which kind of work? How is innovation fostered and how are innovations brought up to scale? There are a raft of other critical topics that participants will be able to address in a vigorous international exchange of ideas.

#### **TARGET AUDIENCE(S):**

Community psychiatrists, mental health services researchers, psychiatric administrators

#### **REFERENCES:**

- 1. Payer L: Medicine and Culture.
- 2. Hofstede G: Cultures and Organizations; Inter-cultural Cooperation and Its Importance for Survival.

Workshop 40

Friday, October 31 3:30 p.m.-5:00 p.m.

#### CLINICAL EFFECTS OF SEXUAL ABUSE BY CATHOLIC PRIESTS: A FORENSIC PERSPECTIVE

Allan S. Nineberg, M.D., Department of Psychiatry, Harvard Vanguard Medical Associates, Lecturer, Department Ambulatory Care and Prevention, Harvard Medical School, and Private Practice, 26 City Hall Mall, Medford, MA 02155

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should (1) recognize the long-term clinical effects of sexual abuse, mostly in boys, by Catholic priests, (2) understand family dynamics and demography associated with such abuse, and (3) understand the principles of forensic evaluation of victims who have brought suit, and whose sexual molestation may have occurred decades earlier.

#### **SUMMARY:**

There has been extraordinary publicity regarding the abuse of children, mostly boys, by Catholic priests. However, much of this relates to controversy surrounding the Catholic Church, and less about the specific long-term clinical effects of this abuse on individuals. Much is known in psychiatry about the sexual abuse of children, but much less about the abuse of boys by Catholic priests. I have had the opportunity to examine approximately 11 individuals and will present data regarding family dynamics, demography, and clinical symptomatology. I will also discuss the varying forms that the abuse took.

In addition, the victim who has decided to file a civil suit concerning a set of events that may have occurred decades earlier, faces certain legal challenges. I will review some of the case law and clinical principles regarding memory and harmfulness that help to guide the forensic examiner in these cases.

#### **REFERENCES:**

- 1. Lisak D: The psychological impact of sexual abuse. Journal of Traumatic Stress 1994; 7:525–548.
- 2. Ross v. Garabedian (2001) Supreme Judicial Court of Massachusetts SJC-08286, 1-7.

#### Workshop 41

Friday, October 31 3:30 p.m.-5:00 p.m.

# TREATMENT OF PEOPLE WITH UNMEDICATED SCHIZOPHRENIA ON AN ASSERTIVE COMMUNITY TREATMENT TEAM

Ann L. Hackman, M.D., Assistant Professor of Psychiatry, University of Maryland, 630 West Fayette Street, Baltimore, MD 21201; David T. Potter, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to demonstrate an understanding of issues involved in working with people with unmedicated schizophrenia, including reasons for medication refusal, approaches to treatment, and legal considerations.

#### **SUMMARY:**

Although there is extensive literature on medication adherence in schizophrenia, there is scant literature in recent years on unmedicated schizophrenia. However, people with schizophrenia who do not take medications continue to be seen in the community and clinical settings, particularly in states with more laws around outpatient commitment and involuntary hospitalization. This workshop describes a decade of experience at the University of Maryland's Assertive Community Treatment (ACT) team with 15 patients with schizophrenia who were unmedicated for a minimum of 12 months while in treatment with the team. These included eight men and seven who declined to take medication for periods ranging from 12 months to nine years. Reasons for declining medications included side effects, delusional thinking, and denial of illness. These patients received services including case management, financial and housing assistance, supportive therapy, peer counseling, family psychoeducation, and dual-diagnosis treatment. Six individuals had psychiatric hospitalizations, but none needed chronic hospitalization. Nine patients eventually agreed to take medications; four were subsequently transitioned to less intensive services.

After briefly reviewing the literature and describing ACT services, panel will discuss our experience with people with unmedicated schizophrenia. Then, with the audience, we will explore clinical challenges, and the legal and ethical issues involved in working with this patient group, and will discuss implications in working with patients with treatment-refractory illness.

#### TARGET AUDIENCE(S):

Clinicians working with patients with schizophrenia

#### **REFERENCES:**

- Agarwal MR, Sharma VK, Kishore Kumar KV, Lowe D: Non-compliance with treatment in patients suffering from schizophrenia: a study to evaluate possible contributing factors. International Journal of Social Psychiatry 1998; 44(2):92–106.
- 2. Harding CM, Brooks GW, Ashikaga T, Strauss JS, Breier: The Vermont longitudinal study of persons with severe mental illness, I: Methodology, study sample and overall status 32 years later. American Journal of Psychiatry 1987; 144(6):718–26.

Workshop 42

Saturday, November 1 8:00 a.m.-9:30 a.m.

## PRESERVING QUALITY IN THE FACE OF ADVERSITY: SUSTAINING COMMUNITY INPATIENT PROGRAMS

Anne C. Bauer, M.D., Department of Psychiatry, Franklin Medical Center, 164 High Street, Greenfield, MA 01301; Gregory L. Schmidt, M.D., Ph.D.; Bill Mailler, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant will be familiar with critical steps in designing a turnaround plan for an inpatient mental health program, identifying necessary new skills for staff, and implementing the availability of evidence-based care.

#### **SUMMARY:**

In the last decade, numerous pressures have impacted the amount, quality, and content of inpatient psychiatric services in the United States. The managed behavioral health care industry has shortened inpatient stays, discounted payments to hospitals, and pressured clinical decision making by mental health professionals working in community hospitals, often in an adversarial manner.

State mental health authorities have eliminated thousands of psychiatric hospital beds, shifting inpatient care for many with severe and persistent mental illness to the community hospitals. Development of a community-based system of care has lagged behind the downsizing of state hospitals; and current state budget shortfalls are resulting in additional service cuts in many states.

Often, it is the community hospital that has to deal with crises generated by lack of access to mental health services. Inpatient psychiatric care at community hospitals is an essential service. However, many inpatient units are fighting to survive financially and have had to redefine their mission. These units are in need of quality psychiatric leadership at a time when many psychiatrists have left hospital positions because of the pressures outlined above.

This workshop offers practical details of what inpatient psychiatric programs must do in order to reduce financial losses, provide evidence-based care, support their clinical team, and sustain a valuable community resource.

#### **TARGET AUDIENCE(S):**

Mental health professionals interested in inpatient psychiatric services.

#### **REFERENCES:**

- 1. Wise RA: Managed care of the acutely ill psychiatric patient: development of a new delivery system, in Managed Mental Health Care Administrative and Clinical Issues. Edited by Feldman JL, Fitzpatrick RJ. Washington, D.C., American Psychiatric Press, 1992, pp 375–384.
- Committee on Quality of Health Care in America. Institute of Medicine: Crossing the Quality Chasm— A New Health System for the 21st Century, Washington, DC, National Academy Press, 2001.

Workshop 43

Saturday, November 1 Workshop 44 8:00 a.m.-9:30 a.m.

Saturday, November 1 8:00 a.m.-9:30 a.m.

#### **BOTTOM UP: EFFECTIVE STREET-**LEVEL INTEGRATION OF SERVICES TO **HOMELESS PEOPLE**

Jennifer F. Frey, Ph.D., Psychologist, and Assistant Clinical Professor of Psychiatry, Yale University School of Medicine, 34 Park Street, Room 144, New Haven, CT 06519; Michael Rowe, Ph.D.; Deborah A. Fisk, M.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) identify the mechanisms through which street-level outreach and case management services influence service system integration for mentally ill and/or substance abusing homeless persons; (2) identify ways in which collaborative interagency programs facilitate this process; and (3) identify ways in which pushing for enhanced service integration facilitates greater collaboration by state and local authorities.

#### **SUMMARY:**

A federal funded homeless outreach team in inner-city New Haven effectively integrated services for homeless persons with severe mental illness who were disengaged from services. This team consisted of a collaboration between multiple community agencies. At the conclusion of the federal funding period, we expanded our mission to include outreach to substance abusing individuals who do not have severe mental illness. Drawing on the experiences of the outreach team during this transition, we will describe how we applied lessons learned from service integration for the homeless mentally ill to facilitating service integration for the homeless substance abusing population and in what ways the work differs. We will describe the effect that this expansion had on ability to access residential services for homeless substance abusers. We will also describe our successful application for additional resources to facilitate moving homeless substance abusers into treatment and stable housing and the enhanced collaboration in service provision to the homeless by state and local authorities.

#### REFERENCES:

- 1. Rowe M, Hoge MA, Fisk D: Services for mentally ill homeless persons: street-level integration. American Journal of Orthopsychiatry 1998; 68(3).
- 2. Rowe M, Frey J, Davidson L, Fisk D: Engaging persons with substance abuse disorders: applying lessons from mental health outreach to homeless persons. Administration and Policy in Mental Health 2002; 29(3).

#### COORDINATING PSYCHIATRIC CONSULTATION FOR THE DEVELOPMENTALLY DISABLED IN GROUP HOMES

American Association of Community Psychiatrists

Benjamin Crocker, M.D., Associate Professor of Psychiatry, St. Matthews University School of Medicine, P.O. Box 4040, Portland, ME 04102; Dave Noonan, R.N., Registered Nurse, Medical Care Development of Augusta, 65 Bull Run Road, Greene, ME 04236; Russell B. Kimball, M.S., P.A.; Holly A. Bricker, B.S.W.; Nancy Wilber, B.S.N.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should recognize common problems in the coordination of psychiatric and medical care for residents of group homes for people with developmental disabilities, and identify several effective ways of improving the quality and effectiveness of psychiatric intervention through interdisciplinary and interagency collaboration.

#### **SUMMARY:**

This workshop will address problems and solutions in the delivery of quality psychiatric care to people with developmental disabilities living in semirural group homes. Due to problems of geographic distance, a tradition of separation of services for people with developmental disabilities from general public-sector mental health services, and the fact that transportation to clinics can lead to different presentation than the patient presents in their home, the Maine Department of Developmental and Behavioral Services Region II has contracted for in-home psychiatric consultation for selected patients. In most cases, these patients have been receiving psychotropic medications from community mental health or primary care providers. Our workshop will address the efforts of several agencies and disciplines to improve communication and coordination between residential, psychiatric, and medical providers to optimize the ability of each system to respond to and anticipate patient needs as issues of longstanding polypharmacy for behavioral issues are unsorted. We will discuss the appropriate use of modern communication technology to facilitate real-time communication between providers and the use of portable, digitized clinical narratives, constructed as permanent living documents that can travel with the patients as they move between residential, habilitative, vocational, and medical settings.

#### TARGET AUDIENCE(S):

Clinicians, case managers, and administrators working with developmentally disabled clients in the community who are taking psychotropic medication or require psychiatric consultation.

#### **REFERENCES:**

- Howerton K, et al: Psychotropic medications in community based individuals with developmental disabilities: observations of an interdisciplinary team. Mental Health Aspects of Developmental Disabilities 2002; 5:78–86.
- Reiss M, Aman MG: Psychotropic Medications and Developmental Disabilities: The International Consensus Handbook; Columbus, Ohio, The Ohio State University Nisonger Center, 1998.

Workshop 45

Saturday, November 1 10:00 a.m.-11:30 a.m.

## FORMING EFFECTIVE THERAPEUTIC RELATIONSHIPS UNDER DIFFICULT CIRCUMSTANCES

Alex N. Sabo, M.D., Chair, Department of Psychiatry, Berkshire Medical Center, 725 North Street, Pittsfield, MA 01201-4109; Leston L. Havens, M.D.; Donald H. Scherling, Psy.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) identify three psychological "anesthetics" in forming effective relationships, (2) identify three areas to be particularly attentive to in the early work with patients who have psychoses, and (3) identify three benefits of the group process over individual work in forming an effective therapeutic relationship with violent men.

#### **SUMMARY:**

The quality of the therapeutic relationship is a predictor of better outcome in the treatment of patients with chronic and recurrent illness. In this workshop, two master clinicians will describe and illustrate the principles behind their efforts to form effective relationships with two types of difficult patients. First, Leston Havens will describe his approach to forming effective therapeutic relationships with patients who have psychoses. Second, Don Scherling will describe his use of the group process to form a relatively safe and effective holding environment for therapeutic work with violent men. Both will use specific case material to illustrate their points. Participants in the workshop will be encouraged to share their own clinical experience and thoughts on forming effective relationships with these often difficult to treat patients. They will also be asked to identify the common elements and differences in the approaches offered by Havens and Scherling.

#### **TARGET AUDIENCE(S):**

Psychiatrists, psychologists, social workers, psychiatric nurses and nurse practitioners, and any others who do clinical, probation, or case management work with patients who have psychoses or histories of violent behavior.

#### **REFERENCES:**

- 1. Havens L: Making Contact: The Uses of Language in Psychotherapy. London, England, and Cambridge, Massachusetts, Harvard University Press, 1986.
- 2. Sabo AN, Havens L (Editors): The Real World Guide to Psychotherapy Practice. London, England, and Cambridge, Massachusetts, Harvard University Press, 2000.

Workshop 46

Saturday, November 1 1:30 p.m.-3:00 p.m.

#### UPDATE ON CLINICAL AND EDUCATIONAL ISSUES FOR LESBIAN AND GAY PATIENTS

Association of Gay and Lesbian Psychiatrists

Gene A. Nakajima, M.D., Former APA/Bristol-Myers Squibb Fellow, CSP 1700 Jackson Street, San Francisco, CA 94109; Elizabeth R. LeQuesne, M.D., 2002-2004 APA/Bristol-Myers Squibb Fellow, and Department of Psychiatry, Columbia University, 1051 Riverside Drive, Box 84, New York, NY 10032; Robert P. Cabaj, M.D.; Ronald C. Albucher, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the end of this workshop, the participant should be able to understand the educational needs of medical students regarding gay and lesbian issues, and gain insight into how sexual orientation and ethnicity affect psychotherapy.

#### **SUMMARY:**

Over the past three decades, much progress has been made in addressing mental health needs of lesbian, gay, and bisexual patients. In this workshop, we will present current clinical and educational issues concerning this diverse population. Dr. Gene Nakajima will speak about the intersection of ethnicity and sexual orientation issues concerning Asian-American gay, lesbian, and bisexual patients. He will discuss how culture and identity formation, racism, and homophobia affect the treatment of minority gay, lesbian, and bisexual patients. Dr. Elizabeth LeQuesne, a current Bristol-Myers Squibb fellow, will examine education and training in medical schools regarding lesbian, gay, bisexual, and transgender patients. Dr. Ronald Albucher will speak on transference and countertransference issues of importance to the clini-

cian working with gay, lesbian, and bisexual patients. These include internalized homophobia, the degree of self-revelation and coming out, development of healthy self-esteem, attachment to others, and sexuality. Dr. Robert Cabaj will present a review of research on gay, lesbian, and bisexual psychiatric issues, discussing what is really known and supported by clinical data and what is still speculation.

#### **TARGET AUDIENCE(S):**

Mental health professionals who see gay/lesbian/bisexual patients.

#### **REFERENCES:**

- Cabaj RP: Sexual orientation of the therapist, in Textbook of Homosexuality and Mental Health. Washington, DC, American Psychiatric Association Press, 1996, pp 353–370.
- Atkins DL, Townsend MH: Issues for gay male, lesbian, and bisexual mental health trainees, in Textbook of Homosexuality and Mental Health. Edited by Cabaj RP, Stein TS. Washington, DC, American Psychiatric Association Press, 1996, pp 633-642.

Workshop 47

Saturday, November 1 1:30 p.m.-3:00 p.m.

### DEVELOPING SYSTEMS-BASED PRACTICE COMPETENCY IN PSYCHIATRIC RESIDENTS

Stephen M. Soltys, M.D., Professor of Psychiatry, and Director, Psychiatry Residency Training, Southern Illinois University School of Medicine, 3605 Brandonshire Drive, Springfield, IL 62704; David S. Resch, M.D.; Karen Lee, M.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to develop and implement effective program for teaching ACGME systems of care competencies in psychiatry, including strategies for assessing resident skills in clinical settings.

#### **SUMMARY:**

In July 2002 all residency programs were requested by the ACGME to assess resident competence in patient care, medical knowledge, practice-based learning, professionalism, communication skills, and systems-based practice. Teaching and assessing skills in systems-based practice has been a challenge to many training programs who have struggled with how to meet these requirements. In this highly interactive workshop, three psychiatric educators will discuss strategies for teaching in this competency area. Dr. Soltys will discuss the develop-

ment of a didactice curriculum to expand residents' knowledge in this area. Dr. Resch will describe the implementation of a program to provide residents with practical experience in improving the systems of care in which they work. Ms. Lee will focus on the process of assessing residents' ability to apply their knowledge in clinical care settings. Workshop participants will be encouraged to share their own experiences in developing, implementing, and assessing educational programs in this area.

#### TARGET AUDIENCE(S):

Any professional involved in training psychiatric residents.

#### **REFERENCES:**

- McGinty KL, Diamond JM: Teaching system-of-care principles in child and adolescent psychiatry clerkship. Academic Psychiatry 2000; 24(2):93–98.
- Bienfield D, Klykylo W, Knapp V: Process and product: development of competency-based measures for psychiatric residents. Academic Psychiatry 2000; 24(2):68-76.

Workshop 48

Saturday, November 1 1:30 p.m.-3:00 p.m.

### PATIENT SAFETY AND PSYCHIATRY: REDUCING ADVERSE MEDICATION EVENTS

APA Task Force on Patient Safety

Miles F. Shore, M.D., Bullard Professor of Psychiatry, Harvard Medical School, 79 JFK Street, Cambridge, MA 02138-5801; Benjamin C. Grasso, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant will be able to recognize (1) the essential need for a change in clinical culture that will enable effective review of adverse medication events, and (2) elements of a patient safety/quality improvement strategy that supports clinical decision making, encourages staff collaboration, and helps prevent adverse medication events in a psychiatric hospital.

#### **SUMMARY:**

In response to a national groundswell to improve patient safety and reduce adverse medical events in all of medicine, the APA Task Force on Patient Safety delivered major recommendations for psychiatry's concerted efforts. Three primary goals are receiving intense attention: minimized use of restraints and seclusion, reduction of the number of suicides in inpatient/residential settings, and reduction of adverse medication events. This work-

shop will highlight research and several affordable strategies for reducing adverse medication events in a hospital setting. It also will emphasize the necessity for a change from a clinical culture that assigns blame or responsibility to an individual to a culture that establishes staff collaboration to review and improve processes in order to prevent reoccurrence of adverse events. Attendees may participate through a review exercise and a question-and-answer period. This workshop is geared to clinicians practicing in hospital and residential settings.

#### **REFERENCES:**

- 1. Report of the Task Force on Patient Safety, American Psychiatric Association, Approved by Board of Trustees, November 2002. www.psych.org.
- 2. Grasso, BC, Genest R: Use of a personal digital assistant in reducing medication error rates. Psychiatric Services 2001; 52:883–886.

#### Workshop 49

Saturday, November 1 1:30 p.m.-3:00 p.m.

#### THE OHIO COORDINATING CENTERS OF EXCELLENCE PROJECT: PROMOTING EVIDENCE-BASED PRACTICES THROUGH STATE UNIVERSITY COLLABORATION

American Association of Community Psychiatrists

Dale P. Svendsen, M.D., Medical Director, Ohio Department of Mental Health, and Associate Clinical Professor of Psychiatry, Ohio State University, 30 East Broad Street, Eighth Floor, Columbus, OH 43266; Robert J. Ronis, M.D., M.P.H.; Mark R. Munetz, M.D.; Mary Kay Smith, M.D.; Patrick J. Kanary, M.Ed.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) describe the mission and functions of a "Coordinating Center of Excellence," (2) recognize the role of a CCOE or similar agent supporting evidence-based practice, (3) consider the value of state-university collaboration in promoting system change.

#### **SUMMARY:**

As a key element of its "clinical quality agenda," the Ohio Department of Mental Health established seven statewide "Coordinating Centers of Excellence" (CCOEs) in collaboration with several Ohio universities, mental health boards, and statewide clinical organizations. Supported by the creative use of federal block grant dollars, the CCOEs are each dedicated to promote evidence-based practices determined by the department as meeting sufficient criteria for both evidence and salience so as to merit its long-term investment. Projects

include the CCOE for Mental Health and Criminal Justice, the Ohio Medication Algorithm Project, the Ohio Substance Abuse/Mental Illness (SAMI) CCOE, the Center for Innovative Practices in Children and Adolescent Mental Health, Illness Management and Recovery (IMR), the Center for Learning Excellence, CLEx) and the Ohio Council Cluster-Based Planning Alliance. Representatives from four of the CCOEs will discuss the evolution and early results of this project, including successes and failures, impact on clinical practices, developmental issues and challenges, lessons learned and recommendations for the future.

#### **TARGET AUDIENCE(S):**

Mental health professionals, administrators, academicians

#### **REFERENCES:**

- 1. Goldman HH, Ganju V, Drake RE, et al: Policy implications for implementing evidence-based practices. Psychiatric Services 2001; 52(12).
- 2. Drake RE, et al: Implementing evidence-based practices for persons with severe mental illness. Psychiatric Services 2001; 52(1).

#### Workshop 50

Saturday, November 1 3:30 p.m.-5:00 p.m.

### IMPLEMENTING SKILLS TRAINING TO INCREASE JOB TENURE: LESSONS LEARNED

Edward Bailey, M.S., R.N., Coordinator of Community Integration, Mental Health Center of Greater Manchester, 1555 Elm Street, Manchester, NJ 03101; Kim Mueser, Ph.D.; Deborah R. Becker, M.Ed.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of the workshop, the participant should be able to recognize the principles and practices of Individual Placement and Support and the Workplace Fundamental Module and demonstrate a basic understanding of how to implement them into their own program.

#### **SUMMARY:**

Individual Placement and Support (IPS) is a form of supported employment focused on assisting persons with severe mental illness to find and maintain competitive jobs though a process of continuous, integrated care. Studies involving IPS have reported significant gains in obtaining and keeping employment. However, even with the assistance of IPS, job tenure is often a challenge for many persons with SMI. Becker et al have posited that, among this population, job loss is more related to failure

to follow informal social rules (e.g. calling in when sick) and illness issues, than poor job performance. The Workplace Fundamental Module (WPFM) is a learning-based group intervention to improve problem solving, illness management, and social skills in already employed persons with serious psychiatric disorders who are already receiving IPS services. We are evaluating the benefits of adding WPFM to supported employment in an ongoing, two-site, randomized trial. This workshop will describe the principles behind both IPS and WPFM and summarize the research conducted thus far. Staff from an IPS program will describe the challenges faced in implementing WPFM into an existing IPS program and how they worked to overcome these issues.

#### TARGET AUDIENCE:

Care providers of all levels invested in improving vocational outcomes.

#### REFERENCES:

- Becker DR, Drake RE, Bond GR, Xie H, Dain BJ, Harrison K: Job terminations among persons with severe mental illness participating in supported employment. Community Mental Health Journal 1998; 34:71–82.
- 2. Wallace CJ, Tauber R, Wilde J: Teaching fundamental workplace skills to persons with serious mental illness. Psych Services 1999; 50:1147-1149, 1153.

Workshop 51

Saturday, November 1 3:30 p.m.-5:00 p.m.

### ACCESSING LONG-TERM RESIDENTIAL SETTINGS FOR THE CHRONICALLY MENTALLY ILL

Marilyn Seide, Ph.D., Division Chief, Los Angeles County Department of Mental Health, 1925 North Daly Street, Second Floor, Los Angeles, CA 90031; Mary Marx, M.S.W.; Dorene Toutant, M.S.W.; Suzanne Wagner, M.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to recognize the important elements in developing, implementating, and maintaining an effective gatekeeping system and coordinating all the aspects of assuring access into different kinds of long-term residential options for persons with chronic and persistent mental illness.

#### **SUMMARY:**

It has become increasingly apparent that acute-care interventions for seriously mentally ill patients cannot begin to address the long-range needs of this population.

Often, following a period of stabilization and treatment, there is a lack of appropriate settings to which patients can be discharged to continue their recovery, rehabilitation, and return to community-based life and employment, school, or other productive functions. This workshop will address these concerns, presenting some ways of responding to the issue of developing and implementing longer-term residential settings, and barriers to overcome in accessing various kinds of supportive housing options. The presentations will include examples of different kinds of programs for housing and providing services to seriously and chronically mentally ill persons. There will also be descriptions of an initiative that seeks to rationalize and coordinate the entry of patients into the long-term care mental health system as well as a description of an innovative project for developing a database of housing availability that can be accessed by consumers, providers, families, and other interested parties in one geographical area.

#### **TARGET AUDIENCE:**

Clinicians, program developers, and administrators who serve this population.

#### **REFERENCES:**

- Houghton T: A Description and History of the New York/New York Agreement to House Homeless mentally Ill Individuals. Corporation for Supportive Housing, 2001.
- Lamm HR: Deinstitutionalization at the beginning of the new millennium. Harvard Review of Psychiatry 1998; 6:1-10.

Workshop 52

Saturday, November 1 3:30 p.m.-5:00 p.m.

#### GAPS IN MENTAL HEALTH SERVICES FOR SERIOUSLY EMOTIONALLY DISTURBED ADOLESCENTS

American Association of Community Psychiatrists

Paulette M. Gillig, M.D., Ph.D., Department of Psychiatry, Wright State University, P.O. Box 927, Dayton, OH 45401; Charles W. Huffine, Jr., M.D.; William M. Klykylo, M.D.; Patrick Chimenti, M.S.W.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to recognize the challenges inherent in working with adolescents in transition. (1) The participant should become familiar with the manner in which the juvenile justice system and mental health system overlap in the diagnosis and treatment of some adolescents. (2) The participant should be aware of the type of wraparound services necessary to prevent hospitaliza-

tion of transitioning adolescents in crisis. (3) The participant should become familiar with the special challenges inherent in the transfer of vulnerable adolescents from the child mental health system to the adult mental health system.

#### SUMMARY:

Dr. Huffine and Dr. Klykylo will discuss the boundary between the juvenile justice and adult criminal justice systems for individuals who have mental health needs. They will report pertinent data from community mental health services in Seattle, Washington, and a residential treatment facility in Dayton, Ohio. They will discuss the overlap of mental health services with the juvenile justice system, and how DSM-IV designations of conduct disorder and antisocial personality disorder may confuse accurate assessment of adolescents.

Mr. Chimenti and Dr. Gillig will discuss the interface between child and adult mental health systems, and present data on the special impact on children who have been in residential treatment. A focus will be on the development of independent living skills, and the relevance of the Chaffee bill.

Dr. Gillig will present data on adolescent crisis services calls, and the type of community wrap-around services that are necessary to prevent emergency psychiatric hospitalizations.

#### TARGET AUDIENCE(S):

(1) persons who are working in the community or in residential facilities with SED adolescents, children, or with young adults now transitioning to the SMD system. (2) persons who are working with adolescents, children, and young adults with mental health needs who in the juvenile justice system.

#### **REFERENCES:**

- 1. Jenkins RL: I'm not right up here, in Behavior Disorders of Childhood and Adolescence. Springfield, II, Charles C. Thomas, 1973.
- Saigon Pete from Grosse Point, in DSM-IV Casebook. APPI Press, Washington DC, 1994, pp 320– 322.

Workshop 53

Sunday, November 2 8:00 a.m.-9:30 a.m.

## KEEPING MY JOB WHILE LOSING MY MIND: THE PSYCHIATRIST'S ROLE IN MAINTAINING FUNCTION AND WORK

APA Corresponding Committee on Psychiatry in the Workplace

Marcia Scott, M.D., Private Consultant, 19 Sibley Court, Cambridge, MA 02138; Steven E. Pflanz, M.D., Life

Skills Flight Commander, F.E. Warren Air Force Base, U.S. Air Force, 6900 Alden Drive, Cheyenne, WY 82005; Andrea G. Stolar, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to (1) evaluate current functional status in multiple life roles in high functioning patients, (2) provide objective documentation of function and impairment for work and insurance purposes while preserving confidentiality, and (3) help patients anticipate, adapt, and make choices related to work during period of impaired function.

#### **SUMMARY:**

Work is a basic life function. It reflects mental status and adaptive function. Keeping patients at work/employed is a benefit to their overall functioning, their quality of life, and their treatment. Because mental illness is chronic and recurrent, we find that even high functioning people with psychiatric illnesses lose credibility at work long before frank symptoms re-emerge and before any disciplinary response or absence occurs.

A work and functional assessment should be part of the initial evaluation and ongoing assessment of any patient. Work issues can be a revealing focus when evaluating mental status and a productive arena for treatment. During treatment, regular questioning about work function and work persistency can alert the psychiatrist and help the patient retain employment and enhance treatment effectiveness.

Three cases will be presented. The audience will discuss them using a checklist to assess current function and job risk in relation to psychiatric symptoms, impairment, and treatment response. Psychiatrists doing psychotherapy or medication treatment will find it an addition to their ability to monitor patient outcomes.

#### **TARGET AUDIENCE(S):**

Psychiatrists doing psychotherapy or medication treatment.

#### **REFERENCES:**

- 1. Vaillant GE: The natural history of male psychological health: work as a predictor of positive mental health. Am J Psychiatry 1981; 138:603–619.
- 2. Panzarolla JP: The nature of work, job loss, and the diagnostic complexities of the psychologically injured worker. Psychiatric Annals 1999; 21:10–15.

Workshop 54

Sunday, November 2 8:00 a.m.-9:30 a.m.

### THE POLITICS OF POST-SEPTEMBER 11 THERAPY

Howard Telson, M.D., Clinical Associate Professor, Department of Psychiatry, New York University School of

Medicine, 215 East 24th Street, New York, NY 10010; Sally L. Satel, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should (1) recognize how political values are inherently associated with clinical psychiatric practice, and (2) understand the diversity of political perspectives which have influenced American psychiatry's response to the events of September 11, 2001.

#### **SUMMARY:**

Modern psychiatry emerged as a medical specialty that was explicitly influenced by political philosophy. Pinel's unshackling of the mentally ill in Paris' Salpetriere was guided by the French Revolution's call for "liberty." Benjamin Rush's belief that the democratic United States required a new system for the classification and treatment of mental disorders led him to establish the school of American psychiatry.

While the scientific method has played a central role in psychiatry's growth and success, it has not negated the inherent importance of political values in clinical practice. This has, unfortunately, been misunderstood, resulting in a tendency to represent psychiatric treatment as politically neutral.

Psychiatrists have written extensively about the effects of the events of September 11, 2001. Much of the work seems to over-emphasize the expected psychic damage, and the need for treatment to avert posttraumatic stress disorders, and to underestimate the psychological strength and resilience of human beings. Learning debriefing has even been called "an act of patriotism." These formulations are not the result of scientific research, but arise from a complex web of values, attitudes, and motives that have not been subjected to sufficient critical analysis.

This workshop is intended for a general audience.

#### **REFERENCES:**

- Halleck SL: The Politics of Therapy. Science House Inc., New York, 1971.
- 2. Goin MK: When it really hurts to listen: psychotherapy in the aftermath of September 11. Psychiatric Services 2002; 55:561–2.

Workshop 55

Sunday, November 2 10:00 a.m.-11:30 a.m.

#### WHY DON'T I LOOK LIKE MOMMY? CULTURAL ISSUES AFFECTING TRANSRACIAL ADOPTIONS

APA Committee of Asian-American Psychiatrists

Cherry Chevy, M.D., Child Psychiatry Fellow, Department of Psychiatry, Duke University, 22 Striding Ridge

Court, Durham, NC 27713; Jodi E. Star, M.D., Assistant Professor, Department of Psychiatry, University of Florida, 5648 S.W. 104th Terrace, Gainesville, FL 32608; Duru Sakhrani, M.D.; Daphne Dorce, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to identify the impact of transracial adoption on both parents and children. Participants should be able to recognize potential problems in an adoptee's racial and cultural identity development and be cognizant of available resources for adoptive parents.

#### **SUMMARY:**

Legislative changes in the last decade such as the Multiethnic Placement Act of 1994 and the 1996 provisions on Removal of Barriers to Interethnic Adoption have led to increased numbers of transracial placements and adoptions. International transracial adoptions are also becoming increasingly more common. Presenters in this workshop will review available literature on outcomes for adoptees and their adoptive families. Factors that influence psychological adjustment and cultural identity, will be reviewed. Adoption pre-assessment, teaching adoptive families to be culturally competent, and the use of cultural consultants will be evaluated. Presenters will discuss how to help adoptive families cope and what clinicians can do to meet the mental health needs of transracial adoptees.

#### **TARGET AUDIENCE:**

Child and adolescent psychiatrists

#### **REFERENCES:**

- 1. Simon RJ, Altstein, H: Adoption, Race and Identity: From Infancy to Young Adulthood. New Brunswick, NJ, Transaction Publishers, 2002.
- Stams GJ, Juffer F, Rispens J, Hilsbergen RA: The development and adjustment of 7-year-old children adopted in infancy. Journal of Child Psychology and Psychiatry and Allied Disciplines 2000; 41(8):1025– 1037.

Workshop 56

Sunday, November 2 10:00 a.m.-11:30 a.m.

## THE SUCCESSFUL TRANSITION TO OUTPATIENT CARE: WHAT ARE THE ESSENTIAL INGREDIENTS?

Patricia M. Averill, Ph.D., Associate Professor and Director, Department of Research and Program Evaluation Studies, University of Texas Health Science Center at Houston, 2800 South MacGregor Way, Houston, TX

77021; Nurun N. Shah, M.D., M.P.H.; David S. Peeck- Workshop 57 sen, Ph.D.

Sunday, November 2 10:00 a.m.-11:30 a.m.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to recognize predictors of quick to the inpatient setting versus successful outpatient transition, and demonstrate understanding of an integrative treatment approach to help increase outpatient days and improve outpatient care and quality of life.

#### **SUMMARY:**

Mental health care generally has not received parity with other aspects of medical treatment. This is particularly apparent among those with severe mental illness, for whom a "revolving door" phenomenon has been well documented. This may be due to a lack of infrastructure in the outpatient setting, both in terms of inadequate housing and support as well as follow-up psychiatric care. However, little information has been gathered in order to determine what services are important in order to keep patients out of the inpatient setting. In order to understand what services predict rapid readmission, we developed an in-depth interview, as well as other measures, and assessed 330 patients who were readmitted within 30 days of discharge and 241 patients who remained in the outpatient setting at 30 days and 90 days following discharge. Our findings suggest some important ingredients for successful integrated patient care, which will be presented and discussed.

The workshop will be divided into four sections, including relevant literature review, data-driven examination of outpatient predictors of early readmission, predictors at the time of discharge, and summary. Time will be provided for discussion after each section.

#### **TARGET AUDIENCE(S):**

Psychiatrists, psychologists, psychiatric nurses, social workers involved in the treatment of adults with serious mental illness

#### REFERENCES:

- 1. Weiden P, Glazer W: Assessment and treatment selection for "revolving door" inpatients with schizophrenia. Psychiatr O 1997; 68:377-392.
- 2. Johnstone P, Zolese G: Systematic review of the effectiveness of planned short hospital stays for mental health care. BMJ 1999; 318:1387-1390.

#### DEVELOPING RECOVERY-ORIENTED SERVICES THROUGH PARTICIPATORY **DIALOGUES**

American Association of Community Psychiatrists

Wesley E. Sowers, M.D., Medical Director, Allegheny County Office of Behavioral Health, 206 Burry Road, Bradford Woods, PA 15015; Kenneth S. Thompson, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to (1) discuss the dialogue and its application to recovery education, and (2) recognize various applications and formats of participatory dialogues.

#### **SUMMARY:**

Systems of care for persons with severe mental illnesses and addictive disorders have traditionally been organized around paternalistic models of service. There has been growing recognition that the principles of recovery offer persons suffering from these disorders opportunities to expand their potential for realizing productive and hopeful lives. In order to expose consumers of services to these principles, it is essential that service providers understand and promote them. The participatory dialogue is an educational process that enhances this understanding through direct communication and frank interchange between consumers, providers, and various constellations of stakeholders within a system. The dialogue sets the stage for movement toward a more collaborative and mutually satisfying relationships between these parties and provides a method to sustain quality in recovery-oriented services. The experience of this transformational process in Allegheny County, Pa. will be presented. This workshop is intended for behavioral health practitioners, consumers, and administrators. Some familiarity with recovery concepts would be helpful. Participants will be invited to share their own perspectives and experiences in developing recovery-oriented services.

#### **REFERENCES:**

- 1. Anthony A: A recovery-oriented service system: setting some system level standards. Psychiatric Rehabilitation Journal 2000; 24(2):159-168.
- 2. Mueser K, Corrigan P, Hilton D, Tanzman B, Schaub A, Gingerich S, Essock S, Tarrier N, Morey B, Vogel-Scibilia S, Herz M: Illness management and recovery: a review of the research. Psychiatric Services 2002; 53(10):1272–1283.



#### SYLLABUS INDEX

A	Bauer, Anne C	Caligiuri, Michael P 3
Abel, Gene G 5	Beaulieu, Lucie	Cameron, Michael
Abraham, Melissa E	Beck, James C 65	Canuso, Carla M 83, 84, 164
Abramowitz, Wattanaporn 108	Becker, Deborah R	Capece, Judy
Abuzzahab, Sr., Faruk S 85	Becker, Robert B	Carignan, Kelsey
Adames, Jeannette	Beeber, Alan R	Carman, John S
Adams, Bryan 151	Belgrave, Claire M	Carnota-Cohen, Lidia R
Adams, Neal H	Bell, Carl C	Carpenter, Linda L
Addington, Donald E 55	Bellafato, Lisa       246         Bender, William       90	Carson, William H
Ader, Marilyn 175	Benes, Francine M	Cassano, Paolo
Aflon, J. Stuart	Beranek, Martin	Castilla, Ruby C
Aguirre, Blaise A	Bergman, Richard N	Catalano, Karyn J 176
Ait-Daoud, Nassima	Berkowitz, Alan L	Centorrino, Franca
Alluni, Victor C	Berkowitz, Cynthia B 235	Chang, Li-ling127, 128, 161
Akhter, Aafaque	Berlow, Yosef116, 243	Chapin, Karen
Albanese, Mark J	Bhadra, Pritha	Chapman, Daniel P
Alexander, Karen K	Bigelow, Douglas A 142	Chaput, Yves
Alexander, Regi T	Birnbaum, Howard	Chavez, Rosa A
Alger, Ian E	Bisbee, Cynthia C	Chevy, Cherry
Alpert, Jonathan E	Bishop, Gene	Chiles, John A
Amirsadri, Alireza	Bishop, Joan E	Chimenti, Patrick
Amorim, Sandra F	Bisset, Kimberly	Chokroverty, Linda
Amsterdam, Jay D	Biton, Victor	Christensen, Dale
Anderson, Brian A 249	Blaine, Emily J	Christensen, Richard C
Anderson, Peter D	Blakemore, Kathe	Chung, Henry
Anfang, Stuart A	Blamphin, John	Chuong, Helen W
Anthony, William A 7, 24	Blay, Sergio L.       118         Blow, Frederick C.       245	Ciliberto, Natalie
Anziano, Richard J 63	Bogan, Ann M	Clayton, Nancy C
Appelbaum, Paul S 246	Bogunovic, Olivera J	Cloyd, James C
Arfken, Cynthia L 88, 133	Boland, Robert J	Coffey, C. Edward
Arnold, Lesley M	Bono, Albert	Coffey, Kevin
Ascher-Svanum, Haya 72, 73, 74,	Borem, William C	Cohen, Lee S
75, 88, 122	Bose, Anjana	Coldwell, Craig M 90
Asnis, Gregory M	Bossie, Cynthia A 81, 82, 83,	Collins, Gary R 100
Atkinson, Roland M	84, 85, 177	Collins, Matthew
Averill, Patricia M	Bovier, Patrick A	Collins, Michelle A 56, 162
Awad, A. George	Bowden, Charles L18, 20, 21, 145,	Connor, Kathryn M 179
Azar, Viviana	146, 147, 162, 187	Contreras, Virginia
Azhar, Nouman	Bowers, Alexandra	Conway, James B
	Bradford, John M	Corbat, Christiane
В	Brannan, Stephen         155           Brenner, Ronald         190	Corbin, Kenneth
_	Bricker, Holly A	Corey, Kimberly B
Backlar, Patricia	Bridger, Larry	Cortese, Leonardo         2           Corya, Sara Ann         172
Bahrt, Kenneth	Brown, E. Sherwood	Cotelingam, Grace M
Bailey, Edward	Brown, Victoria L 85	Cottereau, Marie-Jose
Balon, Richard	Brunt, David L. van	Cournos, Francine
Banez, Ferdinand	Bruscato, Wilze L	Crandall, David
Barber, Charles	Buckley, Leslie L 257	Crane, Kit
Barber, Janice	Buonopane, Ralph J 213	Crayton, John W
Barner, Jamie C 89	Burns, Kathryn A 8	Criscitello, Amy D
Barnes, William 244	Bursztajn, Harold J 243	Crocker, Benjamin
Barnett, Michael S 153	Burt, Vivien K	Cruz, Carlos 120
Вагт, Nancy M		Cumming, Steve
Barreira, Paul J 23	$\mathbf{c}$	Cunanan, Cedric M
Bartels, Stephen J	Cabaj, Robert P 263	Currier, Glenn W
Batchelder, Sarai	Calabrese, Joseph R145, 146, 147	Cutler, David L 224

D	England, Mary Jane 230	Gangadharan, Satheesh K 87, 116
Damler, Robert M 69, 91	English, Patricia 167, 171	García-Reyna, Juan Carlos 120
Danovitch, Itai	Engstrom, Frederick W 6	Garyali, Veena
Davidson, Jonathan R.T 175	Erkiran, Murat	Gastfriend, David R
Davis-Martinez, Vivian216, 217	Erman, Milton K	Gaudino, Paula
Deak, Andrea H. Marqués 92	Ernst, Frank R	Gaulin, Bruce
Deckersbach, Thilo	Erwin, W. Gary	Gauthier, Serge
Degenhardt, Elisabeth 96, 97	Etemad, Bijan	Gaw, Albert C
Degovine, Donna 30	Everett, Anita S.       258         Eytan, Ariel       123	Gaylord, Barbara68, 70, 158
Deitsch, Sarah E	Lytan, And	Geller, Jeffrey L
DeJong, Sandra M	_	Gergel, Ivan
Delgado, Pedro L	F	Gersing, Kenneth R
Delprino, Robert P	Faden, Dara 101	Gex-Fabry, Marianne
Denys, Damiaan       200         DeQuardo, John R.       92	Falk, William E 59	Gharabawi, Georges81, 82, 83, 84,
Detke, Michael J	Faries, Douglas 72, 73, 74, 122	85, 164, 177
Deutschman, Daniel A 58, 93	Farkas, Marianne 7	Gianfrancesco, Frank D
Deutschman, Douglas H 58, 93	Farlow, Martin	Giansante, Shirley
DeVane, C. Lindsay	Fava, Maurizio11, 59, 107, 134,	Gibson, Joseph
Devine, Nancy	164, 169	Gibson, P. Joseph73, 75, 104
Dew, Rachel	Fehnel, Sheri E	Gibson, Peter A
Dewan, Mantosh J 5	Feldman, Howard	Gilbert, Kenneth G 8
Diamond, Ronald J 78	Feldman, Jacqueline	Gillespie, John A
Dickson, W. Michael	Felix, Alan D	Gillig, Paulette M
Dickstein, Leah J 1, 213, 215, 251	Feltner, Douglas E	Ginsberg, Lawrence D
DiGiovanni, Laura 144	Ferguson, Jack	Godbole, Anil G
Dineen, Mary	Ferguson, Margaret	Goetz, Margaret A
Dizmang, Larry H	Ferguson, Tamara 244	Goin, Marcia K
D'Mello, Dale A	Fernándes, Flavia L	Gold, Joseph
Docherty, John P	Fernandez, Francisco 10	Gold, Paul B
Dolnak, Douglas R 195	Fernández, Francisco	Goldberg, Joseph F
Donohue, Lisa	Fields, Cynthia L. Ardito 116	Goldberg, Richard J 248
Dorce, Daphne	Fine, Michael	Goldfein, Jeff
Dorda, Elizabeth	Fioritti, Angelo	Goldfinger, Stephen M 36, 173
Dorn, Richard Van 67	Fireman, Marian       142         Fišar, Zdeněk       141	Goldman, Charles R
Dubisar, Beth M	Fish, David W	Goldman, Mona L94, 124
Ducate, Suzanne E 58, 109	Fisher, Caroline E	Goldstein, David J150, 189
Duckworth, Kenneth S 209	Fisk, Deborah A	González-Heydrich, Joseph M 183
Duffy, Farifteh F	Fitzgerald, Anna L	Goodman, Wayne K 174
Dukoff, Ruth A.         243           Dunayevich, Eduardo         156	Fleck, David E	Goodwin, Frederick K 145
Duncan, Beth A 204	Fleming, Candace M 4	Grady-Weliky, Tana A 214
Dunn, Judith	Florence, Timothy F	Graff-Guerrero, Ariel
Dunner, David L 156	Flynn, Laurie M	Graham, Stephen M
Dutta, Sandeep 148	Ford, Elizabeth B	Grant, Richard W 170
Dybicz, Sharon B	Forstein, Marshall10, 215, 249 Forster, Peter L236	Grasso, Benjamin C
	Fortier, Marlo	Graziano, Kristi
${f E}$	Fragola, Christina	Greenblatt, Edward
Eakle, A. Jonathan	Francis, Jr, Andrew J 183	Greene, Ross W
Edwards, Natalie C	Frazier, Jean A	Greist, John H
Eerdekens, Marielle	Freeman III, Arthur M 238	Grimes, Katherine E
Eist, Harold I 49	Frese III, Frederick J220, 224	Grogg, Amy
Ellis, Marcia	Frey, Jennifer F 28, 262	Grouphers George T 200
Ellis, Terry	Frye, Mark A	Grossberg, George T.         200           Grossman, Fred         159
Ellison, James M		Grower-Dowling, Kim 105
Ellison, Marsha L	G	Gunderson, John G
Elnitsky, Christine         79           Els, Charl         93	Gabbard, Glen O	Gupta, Sanjay
Els, Chari 93 Ely, Elissa 47	Gagne, Cheryl	Gurrera, Ronald J
Endicott, Jean	Galligan, Larry	Gutiérrez, Benjamín68, 70, 158

Н	Indest, David W	Kleiman, Andrew M 100
	Iosifescu, Dan Vlad	Kleinman, Arthur M
Hackman, Ann L	Isaac, Hwang	Kleinman, Ronald E
Haddad, Luay M		Klotz, Steven G
Hadley, Gary96	Istvan, Szukard       123         Ivanov, Iliyan S       126	Klykylo, William M
Haggerty, Ryan	Ivaliov, myali S 120	Knepfle, Shannon E
Hamner, Mark B 194		<del>-</del>
Hanson, Annette	J	Knight, Edward L
Hanson, Annette L 8	Jackson, E. Anne	Kohn, Larry       32         Kokai, Masahiro       134
Hantas, Yolsel	James, Jin	,
Hardan, Antonio Y	Janu, Lubus	Kolenski, Josef
Harden, Benjamin	Jayaram, Geetha	Kolk, Bessel A. van der
Hardy, John T	Jennings, Sean	Kolodny, Andrew J
Harper, David	Jindal, Shefali	Komaroff, Anthony L
Harris, Lynne	Johnson, Bankole A	Kopecek, Milan
Harrison, David	Johnson, Brian	Koran, Lorrin K
Hartford, Carol	Johnson, Janet E	Kose, Samet
Harvey, Philip D 19, 60		Kotwal, Renu
Hassman, Howard 156	Johnson, Peggy L	Kozma, Chris M 75, 76, 77, 193
Hassuk, Bruce M	Johnson, Robert	Kramer, Michelle
Hatters-Friedman, Susan J 136, 249	Johnson-Patagoc, Katherine 204	Kreditor, David
Hauser, Peter103, 142	Johnston, Donald A	Krishnan, Anupama A127, 128, 161
Havens, Leston L	Jones, Martin	Kuasnička, Tomaš
Hayes, Randy A 205	Jones, Robert	Kujawa, Mary 102
Haynes, Kamlyn R	Jorgensen, Pev	Kunwar, Arun R
Heap, Joann	Josef, Norma C	
Hedges, Dawson W	Joseph, Iona	L
Hellerstein, David J	Jou, Roger J	Labonte, Edith
Henley, Mozettia	Joyce, Amie T	
Herman, Richard	Juthani, Nalini V	Laitman, Leila B
Hernández, Phillip 249	Juthani, Virendra	Lalji, Munira
Herz, Marvin I		Lamberti, J. Steven
Hester, Thomas W	K	Lamborghini, Ruthanne
Hester, Thomas W		Landwehr, Karen A220, 221, 222
	Kabir, Mori	Landwehr, Karen A220, 221, 222 Larmo, Ilkka
Hierholzer, Robert W 240	Kabir, Mori       176         Kaiser, Christopher       96, 97	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156	Landwehr, Karen A220, 221, 222 Larmo, Ilkka
Hierholzer, Robert W.240Hill, Angela62Hirschfeld, Robert M.A.159	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265	Landwehr, Karen A
Hierholzer, Robert W.240Hill, Angela62Hirschfeld, Robert M.A.159Hobart, Marie H.250	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82	Landwehr, Karen A.
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217,	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130         Levine, Janice       .242
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130         Levine, Janice       .242         Levine, Katherine G.       .207
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98 Hsu, Hsiao-Yun 73 Hubbs, Valerie R. 106	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130         Levine, Janice       .242         Levine, Katherine G.       .207         Lewis-Fernandez, Roberto       .4
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130         Levine, Janice       .242         Levine, Katherine G.       .207         Lewis-Fernandez, Roberto       .4         Li, Xin-Min       .131
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238	Landwehr, Karen A.       .220, 221, 222         Larmo, Ilkka       .61         Lasser, Robert A.       .76, 81, 82, 83, 84, 85, 164, 177         Lawrence, Janet M.       .243         Leaderer, Meagan C.       .195         Lebel, Marie Josée       .120         Lee, Grace S.       .184         Lee, Karen       .264         Lee, Thomas C.       .149, 150, 188         Legage, Alain       .108         Lehman, Anthony F.       .227         Lehman, Robert B.       .144         Lenert, Leslie       .79         LeQuesne, Elizabeth R.       .255, 263         Leslie, Douglas L.       .110         Lettich, Louise M.       .130         Levine, Janice       .242         Levine, Katherine G.       .207         Lewis-Fernandez, Roberto       .4         Li, Xin-Min       .131         Lim, Russell F.       .4, 255
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223         Huffine, Jr., Charles W.       266	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223         Huffine, Jr., Charles W.       266         Huizar, Karin       160	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223         Huffine, Jr., Charles W.       266         Huizar, Karin       160         Hussain, Shahid       186	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223         Huffine, Jr., Charles W.       266         Huizar, Karin       160         Hussein, Juhi       111, 170	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100         Kim, Stella P.       176	Landwehr, Karen A
Hierholzer, Robert W.       240         Hill, Angela       62         Hirschfeld, Robert M.A.       159         Hobart, Marie H.       250         Hogue, Susan L.       124, 127, 128, 161         Holter, Mark C.       94         Hoopes, Scott P.       185         Hopkins, Geoffrey M.       128         Horáček, Jiří       86, 87         Horne, Robert L.       186         Horvitz-Lennon, Marcela V.       98         Horwath, Ewald       10         Hoschl, Cyril       87         Houston, John P.       62, 96, 97         Howe, Edmund G.       4         Howes, Oliver D.       98         Hsu, Hsiao-Yun       73         Hubbs, Valerie R.       106         Hucking, Katrin       176         Huffine, Charles W.       223         Huffine, Jr., Charles W.       266         Huizar, Karin       160         Hussein, Juhi       111, 170	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100         Kim, Stella P.       176         Kimball, Russell B.       262	Landwehr, Karen A
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98 Hsu, Hsiao-Yun 73 Hubbs, Valerie R. 106 Hucking, Katrin 176 Huffine, Charles W. 223 Huffine, Jr., Charles W. 266 Huizar, Karin 160 Hussain, Shahid 186 Hussein, Juhi 111, 170 Hutchinson, Dori S. 23, 246	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100         Kim, Stella P.       176         Kimball, Russell B.       262         Kinon, Bruce J.       79, 88, 96	Landwehr, Karen A
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98 Hsu, Hsiao-Yun 73 Hubbs, Valerie R. 106 Hucking, Katrin 176 Huffine, Charles W. 223 Huffine, Jr., Charles W. 266 Huizar, Karin 160 Hussain, Shahid 186 Hussein, Juhi 111, 170 Hutchinson, Dori S. 23, 246	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100         Kim, Stella P.       176         Kimball, Russell B.       262         Kinon, Bruce J.       79, 88, 96         Kisicki, Michael D.       143	Landwehr, Karen A
Hierholzer, Robert W. 240 Hill, Angela 62 Hirschfeld, Robert M.A. 159 Hobart, Marie H. 250 Hogue, Susan L. 124, 127, 128, 161 Holter, Mark C. 94 Hoopes, Scott P. 185 Hopkins, Geoffrey M. 128 Horáček, Jiří 86, 87 Horne, Robert L. 186 Horvitz-Lennon, Marcela V. 98 Horwath, Ewald 10 Hoschl, Cyril 87 Houston, John P. 62, 96, 97 Howe, Edmund G. 4 Howes, Oliver D. 98 Hsu, Hsiao-Yun 73 Hubbs, Valerie R. 106 Hucking, Katrin 176 Huffine, Charles W. 223 Huffine, Jr., Charles W. 266 Huizar, Karin 160 Hussain, Shahid 186 Hussein, Juhi 111, 170 Hutchinson, Dori S. 23, 246	Kabir, Mori       176         Kaiser, Christopher       96, 97         Kakani, K. Sagar       156         Kanary, Patrick J.       265         Kando, Judith       81, 177         Kane, John M.       14, 21, 61, 82         Kaplan, Meg       10         Karcher, Keith       159         Karki, Shyam D.       99         Karper, Laurence P.       28, 215, 216, 217, 240, 254         Keane, Terence       39         Kearns, Gregory       148         Keck, Jr., Paul E.       159, 172         Keitner, Gabor I.       99, 136         Kellams, Jeffrey J.       112         Kelley, Joan E.       99         Kelsey, Douglas K.       182, 196         Kennedy, Christopher C.       258         Kennedy, James A.       25         Kestenbaum, Clarice J.       238         Ketter, Terence A.       173         Khouzam, Hani R.       240         Kim, Edward       100         Kim, Stella P.       176         Kimball, Russell B.       262         Kinon, Bruce J.       79, 88, 96	Landwehr, Karen A

Loescher, Amy	Mendoza-Bonewitz, Patricia 253	O'Leary, Kathleen M 170
Loftis, Jennifer M 103	Metz, Alan 146	Olivos, Guillermo
Long, Beverly	Miceli, Jeffrey J	Ollendorf, Daniel A 64
Longoria, Jason	Miklowitz, David J	Opler, Lewis A 192
Lonut, Viorica	Miller, Gregory A 106	Opler, Mark
Lorberbaum, Jeffrey P 194	Millspaugh, Gary	Opolka, Jayme L
Losonczy, Miklos F	Milner, Karen K	Oquendo, Maria A
Louison, Ann-Marie 247	Milspaugh, Gary29, 216, 217	Oren, Dan A
Lu, Yili	Minkoff, Kenneth M 1, 218, 258	Orlandini, Alvise
Lyakhovetskaya, Lita	Minsky, Shula	Osher, Fred C
Lyon, David E	Miozzo, Ruben A	Oslin, David W
Lyons, John S 191	Morales, Rebecca	Othman, Basim M
•	Mordelet, Patrick	Otuyelu, Foluso
M	Moreadith, Connie W	Otayola, 1 olaso 207
Ma, Jennie	Moriarity, David G	
Mackell, Joan A55, 64, 103, 189, 195	Morita, Yoshio	P
Madhusoodanan, Subramoniam 190	Mousseau, Darrell	Palmer, Ronald
Mahler, Joseph 225	Muenzenmaier, Kristina H 256	Pande, Atul C
Mahmoud, Ramy	Mueser, Kim 265	Pantelis, Christos
Mailler, Bill	Mullen, Jamie A	Papakostas, George I 107, 163
Malhotra, Judy	Mumley, Denise	Papežová, Hana
Malhotra, Shishuka S 188	Munetz, Mark R	Parekh, Ranna I
Mallinckrodt, Craig	Muñoz, Rosario	Parvez, Mulani
Malloy, Fred W	Murakami, Jessica L 133, 163	Patel, Hemantkumar S 58
Maner, Ayse Fulya	Murphy, Elizabeth T	Patel, Jayendra K
Mann, Nancy A	Murray, Stephen R 55, 60, 80, 105, 106	Pato, Michele T 5
Manson, JoAnn	Murthy, N	Patterson, William B 99
Marcil, William A 198	Myers, Michael F	Paul, Robindra K 243
Marder, Stephen R		Pauporte, Joelle M
Margolies, Jonathan	N	Peecksen, David S
Markowitz, Jeffrey S78, 150	Nadelson, Carol C	Perel, James
Markowitz, John S	Nakajima, Gene A	Periclou, Antonia
Marneros, Andreas 166	Narrow, William E 227	Perovic, Aleksandar
Martini, Shahm	Nasrallah, Henry A 20, 193	Pessin, Neil
Marx, Mary 266	Nayer, André de 57	Petersen, Timothy J
Marynchenko, Maryna 117	Ndlela, J. Charles 4	Peterson, Karen
Masson, Ella L 107	Neafsey, Edward J 140	Petzel, Janis B.       117         Pflanz, Steven E.       244, 267
Matthews, Daniel M	Needell, Nancy J 247	Phillip, Antunes
McCall, William V	Nelson, J. Craig	Phillips, Alison C
McCombs, Jeffrey         104           McDonald, Bob         254	Nestor, Paul	Phillips, Edward M 24, 26
McDougall, Monica	Neto, Francisco Lotufo	Phillips, Katharine A 41
McElroy, Susan L 147, 162, 188, 191	Newcorn, Jeffrey 126	Piat, Myra 108
McFarland, Bentson	Newton, Thomas E	Pierre, Joseph M
McGinnis, Ronald A 105	Ng, Anthony T	Pierre-Antoine, Paul 247
McGrady, Angele 105	Nierenberg, Andrew A 107, 134, 163	Pinals, Debra A
McGuire, Marsden H 242	Nihalani, Nikhil D111, 170	Pinals, Stephen L
McIntyre, John S 226	Ninan, Philip T	Pitts, Khalid R 45
McLeod, Lori	Nineberg, Allan S 260	Plakun, Eric M
McMumch, Stephanie	Noonan, Dave 262	Plewes II, John M
Medeiros, Laurie	Normand, Sharon-Lise T 98	Pollack, David A
Mee, John		Pollack, William S
Mee-Lee, David	0	Pondrom, Michael F
Megen, Harold van		Porsteinsson, Anton P
Meigs, James B	O'Connor, Christopher M 140	Post Robert M 15
Meisler, Neil       27         Meletiche, Dennis       150, 151	O'Donnell, Brian       125         Ogntha, Jacqueline       138	Post, Robert M
Mellman, Lisa A	Oh, Eun-Young	Potts, Alison
Mena, Shirley	Ohta, Masayuki	Prado, Euthymia Brandaj 92
Mendelsohn, Debbie	Olds, Jacqueline 242	Preval, Horacio
	, varagerame v	

Price, Lawrence H	S	Silbaugh, David
Privitera, Jr., Michael		Silberman, Edward K 5
•	Sabo, Alex N	Silver, Michael A 9
	Sacco, Linda	Simionescu, Mihai
Q	Sachs, Gary S 15, 145, 146, 147, 165	Simkowitz, Philip
	Sageman, Sharon L,	Simon, Naomi M
Qing, Hong	Said, Tewfik 7	
Quinn, Tricia	Sajatovic, Martha136, 137	Simons, W. Robert
	Sakhrani, Duru	Simpson, John C
	Saleh, Fabian M	Siu, Cynthia O55, 60, 63, 80, 106
R	Salisbury, Dean	Skaer, Tracy L71, 167
Dodler Alam O	Sandel, Meagan	Small, Joyce G 112
Radke, Alan Q	The state of the s	Smelson, David A 199
Ragins, Mark	Santos, Susan	Smith, George W
Ramaswamy, Krishnan 193	Satel, Sally L	Smith, Mark J
Ramaswamy, Shriram	Sautter, Frederick J 190	Smith, Mary Kay
Ramsey, Janet L 110	Schatzberg, Alan F 59	Smith, Maureen
Ranz, Jules M	Schecter, Jordan	
Rao, Niranjan	Scheifler, Patricia L 221	Smith, Michael W 4
Rapaport, Mark	Scherling, Donald H 263	Smith, Shubulade
Rasheed, Aref	Schieldrop, Peter	Sneed, Joel
Raskin, Joel	Schippers, John L	Soares, Jair C
Rau, Douglas	Schirmer, Julie	Socherman, Robert
	Schloss, Heather M	Solimo, Angela 100
Regan, Kathleen		Solis, Ana Cristina 92
Regier, Darrel A	Schmidt Jr., Chester W	Solomon, David I 136
Reimberr, Frederick 185	Schmidt, Gregory L 261	Soltys, Stephen M 3, 264
Reminajes, Alfeo V 245	Schoenauer-Ceypek, Martina 112	Sommerville, Kenneth W
Resch, David S	Schooler, Nina R 80	
Revicki, Dennis A	Schubmehl, James Q	Southard, Robert
Riba, Michelle B 47	Schuermeyer, Isabel N 136	Sowers, Wesley E219, 236, 269
Ricard, Nicole	Schuh, Kory	Spahic-Mihajlovic, Aida 140
Richey, Joyce M 176	Schultz, Amy	Spaid, Wanda M 233
Riesenberg, Robert A 167	Schulz, S. Charles	Spencer, Barbara H 247
Roache, John	Schwam, Elias M	Spencer, Roger F 247
Robert, Sophie	Schwartz, Richard S 242	Spratlin, Vicky E
Roberts, Laura Weiss	Schwartz, Thomas L 170, 197	Srinivasaraghavan, Jagannathan 258
·	Sclar, David A	Stafford, Randall S 170
Robinowitz, Carolyn B		Star, Jodi E
Robison, Linda M 71, 167	Scott, Marcia	Stárková, L
Roca, Robert P	Secnik, Kristina	
Rodriguez, Lori	Sederer, Lloyd I	Stein, Leonard I
Rodriguez, Stephen C 82, 83	Segal, Scott D 167	Steinbrenner, Birgit K
Rohling, Meghan A 94	Seide, Marilyn	Stensland, Michael 88
Rojas, Veronica M	Seifertova, Dagmar 86	Stockton, Gwendolyn G 65
Rojas-Fernández, Carlos 194	Seok-Nam, Yoon	Stöffer, Albrecht
Romano, Steven J55, 60, 63, 80,	Sernyak, Michael J 110	Stolar, Andrea G
106, 156	Shah, Chandresh	Stone, Walter N
Ronis, Robert J 249, 265	Shah, Nurun N	Stoner, Steven Clark 168
Rosania, Mark A 23	Shapiro, Nathan A 191	Stotland, Nada L
Rosen, Alan	Sharfstein, Steven S	Stovall, Jeffrey G 201, 250, 252, 256
Rosenbaum, Jerrold F	Sheikman, Michael B 70	Strakowski, Stephen M
		Styron, Thomas H
Rosenheck, Robert A	Shelton, Richard C	
Rosenheck, Stephen D	Shepski, John71	Subberra, Jacquelyn
Rosenthal, Murray H156, 195	Sherman, Tyler	Summer, Calvin
Rosenthal, Norman R	Sherr, Jay 82, 84	Sumner, Calvin
Rowe, Michael 262	Shiovitz, Thomas M	Sun, Shawn X
Rudisch, Bruce E 259	Shitegani, Marilyn 253	Suppes, Patricia
Rueda, Walfred 120	Shore, Miles F	Suzuki, Joji
Rupnow, Marcia F.T 76, 77, 78, 79	Sicuro, Franco	Sved, Margery249, 251
Russakoff, L. Mark 6	Siddiqui, Yahya 64	Svendsen, Dale P
Russell, James M64, 165, 195	Siddiqui, Zakaria	Swann, Alan C
Russinova, Zlatka L	Siegel, Rebecca S	Swanson, Jeffrey 225
		Swanson, Jeffrey W 67
Rutter, Michael	Sierles, Frederick S	
Ryan, Christine E	Signorelli, Darin D	Swartz, Marvin S

Swenson, J. Robert       140         Swerdlow, Michael E.       30         Swift, Rachel H.       63	V           Vaillant, George E.         38           Vaugier, Victor         120	Williams, John199Williams, Richard3Wilson, Michael G.160
Witt, Naciol II.	Veenhuis, Philip E.         6           Vega, Evette         216, 217	Wilson, William H.       142         Windhager, Elmar       67
Т	Venbrux, Nuchanart	Wirshing, Donna A.       143         Wirshing, William C.       143
Tafesse, Eskinder 114	Ventura, Daniel	Wirth, Yvonne
Tajuddin, Meraj 87	Vevera, Jan	Withall, Adrienne Lee
Talukdar, Nazmul	Vickar, Garry M 221	Witte, Clemens
Tandon, Rajiv 18, 19, 66, 124	Virk, Subhdeep 129, 197	Witterholt, Suzanne T
Tariot, Pierre N 200	Vogt, Joel A	Wiviott, Karen S
Taylor, T.N	Voruganti, Lakshmi N.P	Wohlreich, Madelaine M 151, 169 Wolsko, Peter M 54
Telingator, Cynthia J	Vreeland, Elizabeth	Woolhandler, Steffie
Telson, Howard	Vuky, Catherine 255	Worchel, Jason
Tensfldt, Thomas	$\mathbf{W}$	Wozniak, Patricia J
Thase, Michael E	Wade, Michael	Wright, Duncan
Thatcher, R. James	Wagner, Suzanne	<b>2</b> /
Thivierge, Susan	Waldeck, Reg 114	
Thomas, Vince S	Waldinger, Robert J 242	X
Thompson, Kenneth S 232, 250, 256,	Wang, Jin 163	Xu, Jimmy
259, 269	Wang, Peter Feng 68, 69, 70, 158	,
Thompson, Randy L	Wang, Qin	
Thomson, Karin E	Warnken, William	Y
Thorpe, Cathy	Warrington, Lewis E	Yang, Min 89
	Wasylenki, Donald A	Yehuda, Rachel
Tisminetzky, Mayra	Wehr, Allison M 255	Yeung, Albert
Tohen, Mauricio	Weiden, Peter J	Youssef, Ibrahim
Tolchin, Matthew A,	Weilburg, Jeffrey B	Ysern-Gonzáles, Iris E 241
Toles, Mark P	Weinberg, Pamela A	
Toscani, Laetizia	Weinstein, Henry C 8	z
Toto, Anna Marie	Weisler, Richard H 171	
Totten, Susan L 203	Weisman, Robert L101, 135	Zaborski, Larry 98
Toutant, Dorene	Weisser, Lydia E	Zack, Matthew M
Tran, Pierre Van	Welge, Jeffrey A	Zelan, Wei
Tretiak, Roma	Wensley, Lori	Zeman, Lori
Truckenmiller, James	Wessenberg, Herman         200           West, Joyce C         227	Zerbe, Kathryn J 6  Zhang, Yiming
Tsuang, Ming T	Wewiorski, Nancy J	Zhao, Zhongyun68, 69, 70, 91,
Tucker, Byron C	Whaley, Robert E 204	102, 158
Tucker, Daniel M	White, Andrew	Zheng, Hongie
Twerski, Abraham J 50	White, Robin	Zhu, Baojin 72, 73, 74, 122
Tyrka, Audrey R 154	Whitehead, Ashlee 103, 142	Zhu, Young 76, 81, 84, 85
	Whitman, Anne	Ziedonis, Douglas M
	Whittler, June 244	Zil, John S 8
${f U}$	Wilber, Nancy	Zubritsky, Cynthia M
IIII. Waldan M	Wilder, Chip	Zuchowski, Steven J
Uddo, Madeline M	Wilk, Joshua E	Zucker, Jeffrey M
Ulmer, Helen G 194	Williams, Emily	Zun, Leslie