
AMERICAN
PSYCHIATRIC
ASSOCIATION
IPS: THE MENTAL HEALTH SERVICES CONFERENCE
Oct. 8-11, 2015 • New York City
When Good Care
Confronts Red Tape
Navigating the System for Our Patients and Our Practice
New York, NY | Sheraton New York Times Square

POSTER SESSION

OCTOBER 09, 2015

POSTER SESSION 1

P1- 1

ANGIOEDEMA DUE TO POTENTIATING EFFECTS OF RITONIVIR ON RISPERIDONE: CASE REPORT

Lead Author: Luisa S. Gonzalez, M.D.
Co-Author(s): David A. Kasle MSIII
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SUMMARY:
For many drugs, the liver is the principal site of its metabolism. The most important enzyme system of phase I metabolism is the cytochrome P-450 (CYP450). Ritonavir, a protease inhibitor used for the treatment of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS), has been shown to be a potent inhibitor of the (CYP450) 3A and 2D6 isozymes. This inhibition increases the chance for potential drug-drug interactions with compounds that are metabolized by these isoforms. Risperidone, a second generation atypical antipsychotic, is metabolized to a significant extent by the (CYP450) 2D6, and to a lesser extent 3A4. Ritonavir and risperidone can both cause serious, and even life threatening, side effects. An example of one such rare side effect is angioedema which is characterized by edema of the deep dermal and subcutaneous tissues. Here we present three cases of patients residing in a nursing home setting, diagnosed with HIV/AIDS and comorbid psychiatric illness. These patients were all on antiretroviral medications such as ritonavir, and all later presented with varying degrees of edema after long term use of risperidone. We aim to bring to awareness the potential for ritonavir inhibiting the metabolism of risperidone, thus leading to an increased incidence of angioedema in these patients.

P1- 2

EVIDENCE BASED ASSESSMENT IN CHILD AND ADOLESCENT PSYCHIATRY: BRINGING SYSTEMATIC ASSESSMENT AND MONITORING FROM THE IVORY TOWER TO THE TRENCHES

Lead Author: Lila Aboueid, D.O.
Co-Author(s): Cathryn A. Galanter, M.D.

SUMMARY:
Background: Over the past several decades, investigators have developed standardized assessment tools that have led to increased diagnostic accuracy in clinical and epidemiological studies. However, these assessment methods are rarely utilized in everyday community clinical practice.

Objective: We argue for further study of implementation of evidence based assessment and systematic monitoring of symptoms and adverse effects in clinical practice.
Methods: Review of literature on misdiagnosis as a medical error, standardized assessment and monitoring of symptoms and adverse effects, their implementation in the community, barriers to their implementation, the role of monitoring in health care reform and recommendations for future research.
Conclusions: Although the field of child and adolescent psychiatry has been rapidly evolving, the method and extent of systematic assessment and monitoring has not been fully established. Research is needed to establish whether evidence based assessment and monitoring tools are feasible, valid, reliable, and demonstrate improved outcomes following administration.

P1- 3

ENHANCING RECOVERY THROUGH AN INTEGRATED INDIVIDUAL AND FAMILY MODEL FOR TREATING TRAUMA IN SERIOUS MENTAL ILLNESS

Lead Author: Madeleine S. Abrams, L.C.S.W., M.S.W.
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SUMMARY:
Historically, and even currently despite its lack of political correctness, families have been blamed and stigmatized for serious mental illness in a family member. This attitude is even more exaggerated in cases of trauma, particularly when it occurs within the family. Thus, families with both serious mental illness and trauma frequently have been ignored, dis-empowered, and marginalized. In working with this population, we have seen how the exclusion of the family has contributed to lack of progress in working with an individual coping with serious mental illness and trauma. When the family has been integrated into the treatment, we have seen evidence that the individual progresses and the family suffering and guilt are alleviated. Whenever possible, families are able to be reconnected in a more positive manner. Family involvement contributes to reintegration of the individual into the community. This poster will outline a four phase model developed in our program for working with families coping with trauma and serious mental illness. Central to constructing the model are several premises and assumptions that we consider to be basic to an understanding of the experience of families fitting these criteria. The model consists of strategies for engagement, interventions, reintegration of the family, and consolidation, thus enabling the development of improved relationships. Application of the model will be discussed and reinforced with clinical illustrations. This model can be used for training service providers in community settings.

P1- 4

PHENOMENOLOGICAL DILEMMA: THOUGHT DISORDER OR APHASIA IN A PATIENT WITH SCHIZOPHRENIA AND A LEFT TEMPORAL LOBE GLIOBLASTOMA?

Lead Author: Alicia Adelman, M.S.
Co-Author(s): Christine Winter, D.O., David Williamson, M.D.

SUMMARY:
Introduction:

Language and the ability to communicate is an essential social competency. Neurologists and psychiatrists use different nosology to describe impairment of spoken language. When there is a lesion in language regions of the brain, such as a stroke or tumor, the result is called aphasia. When mental illness interferes with our communication abilities, it is called thought disorder. Clinically, it can be hard to differentiate neurological and psychiatric causes of disordered language.

Case:

The patient is a 56-year-old right-handed Caucasian male with a thirty-year history of schizophrenia. He had been stable on clozapine for several years and was the caregiver for his elderly mother. The patient and his family noticed cognitive and speech changes over several weeks, which prompted him to present to the emergency department. He had tangential thought processes, and displayed elements of fluent aphasia, notably anomia and neologistic paraphasic language. Imaging revealed a tumor in the anterior medial portion of the left temporal lobe. Histology confirmed the tumor was a glioblastoma and he underwent surgery. Two weeks following surgical resection, he was transferred to the neuropsychiatric inpatient unit for cognitive rehabilitation, management of his schizophrenia and further treatment of his tumor. Because of the risk of bone marrow suppression with clozapine, an alternative antipsychotic was necessary. Ziprasidone was chosen as the patient had been cross tapering from clozapine to ziprasidone prior to hospitalization. Two days after discontinuing clozapine, the patient began ziprasidone. During this time, he began to display increased language disorganization, perseverating on his "situation," and showing loose associations. Over several days, the patient became increasingly agitated, was no longer able to be re-directed to complete tasks and was unable to answer yes/no questions. Ten days after discontinuing clozapine, risperidone was added. Following the addition of risperidone to ziprasidone, the patient's sensorium began to clear. Although he continued to remain slightly aphasic, he was able to speak in sentences and participate in his treatment plan decisions.

Discussion:

This case illustrates how complex the differential diagnosis can be for patients who present with disorders of language. It initially appeared as if the patient's left-sided temporal lobe tumor may have been causing the patient's worsening aphasia. However, the patient showed an improvement in speech after beginning risperidone, suggesting that exacerbation of his schizophrenia during the transition from clozapine to ziprasidone and risperidone may have been the underlying cause of the patient's language abnormalities. Clinically his presentation was consistent with a fluent aphasia. This case illustrates that aphasia and thought disorder may describe the same clinical presentation and different nosological systems describe the same clinical findings

P1- 5

FACTITIOUS FLORA; A RARE CASE OF SELF INDUCED BACTEREMIA.

Lead Author: Saba Afzal, M.D.

Co-Author(s): Humaira Shoaib, MD, Rashi Aggarwal, MD.

SUMMARY:

Introduction: Factitious disorder (FD) is a condition in which a person acts as having an illness by deliberately producing, feigning or exaggerating symptoms. Different presentations have been reported. Episodes of multiorganism bacteremia (MOB) in psychiatric patient have also been reported but are rare. Patients without any psychiatric history and treatment across different hospitals make diagnosis challenging. We hereby report a case of a patient without any known psychiatric illness who was admitted with bacteremia and was found to have MOB without any identifiable organic cause.
Case Presentation:50 year old male with chronic lower extremity (LE) erythema, recurrent episodes of right knee septic arthritis (SA), requiring multiple incision drainage procedures and recent placement of antibiotic spacer, presented to emergency room (ER) for evaluation of acute kidney injury (AKI) and worsening bilateral (B/L) LE erythema. In ER, he had edema, erythema and tenderness of B/L LEs with stable vital signs, elevated creatinine and leukocytosis. Orthopedics consult and LE imaging ruled out SA. Blood cultures (BC) were sent; empiric antibiotics and IV fluids were started and he was admitted to hospital. Initial BCs came back positive for Enterococcus Faecium.
Repeat BCs came back positive for staphylococci epidermidis and hemolyticus. Peripherally inserted central venous catheter (PICC) was placed, antibiotics were adjusted accordingly. Repeat set of BCs were positive for multiple different organisms. All work up for etiology was negative. Patient adamantly refused manipulation of PICC or needle use and rather responded angrily and defensively when enquired. Finally PICC was removed.
Patient did not allow obtaining records from outside hospital. He was placed on one to one precaution to rule out the possibility of injecting himself. After this, multiple BCs started coming back negative. Thus, only explanation was that he was most likely injecting himself and/or manipulating his PICC. Supportive confrontations were done but patient denied self-injection. After arranging appropriate psychiatric follow-up, patient was discharged.
Discussion: FD is the falsification of medical or psychological signs and symptoms that are associated with the identified deception. The diagnosis requires demonstrating that the individual is taking surreptitious actions to misrepresent, simulate or cause signs or symptoms of illness or injury in the absence of obvious external rewards. Exact pathogenesis of FD is still obscure. Although factitious illness behavior is by definition consciously produced, the underlying motivation for the behaviors is largely considered to be unconscious.
Conclusion: High index of suspicion and physician's persistence are necessary for correct diagnosis of FD. Recognizing the disorder, getting records from other hospitals, and requesting psychiatric consultation early is crucial to avoid expensive procedures and unwarranted use of medications

P1- 6
ANIMAL HOARDING - A CASE REPORT
Lead Author: Afiah A Ahsan, M.D.
Co-Author(s): Najeeb U Hussain MD

SUMMARY:
INTRODUCTION:

This case report is about a 52 yr. old divorced Puerto Rican female with 31 pets which ultimately resulted in the Health Officer sealing her house and rendering it unfit for habitation. She had past medical history of hypertension and fibromyalgia and past psychiatric history of unspecified depression. Lacking insight into the extent of deterioration in the habitation of her pets the patient came in for suicidal ideations in the context of major depression secondary to multiple psychosocial stressors. Animal hoarding is a behavior characterized by a compulsive need to obtain animals, coupled with a failure to recognize their suffering. This phenomenon is reported in the literature and is more common than it was thought to be at one time and deserves more attention. It should be classified in the next update of Diagnostic and Statistical Manual of Mental Disorders V (DSM-V) specifically as a 'subtype of hoarding disorder'. To address and explore this behavior a broad treatment approach could be helpful with more probe into dysfunctional attachments, personality type, childhood trauma and sense of control over the pet or any triggering traumatic event that lead to the development of this behavior.

Hoarding involves the compulsive acquisition and accumulation of objects, animals, trash and other debris. The causes of hoarding are not clear though biological and environmental factors link it to grief or loss. The Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) published in 1994 (text amendment in 2000) lists Compulsive Hoarding as a symptom of Obsessive Compulsive Disorder (OCD) however the latest diagnostic manual DSM-V, published in 2013, defines compulsive hoarding as a discrete disorder rather than being a symptom of OCD.

The issue of animal hoarding is considered rare but is increasingly coming to light though data is scant and inconsistent. Worth and Beck mention it in their paper on animal owner ship in 1981 [9], and Patroneck remains the only substantial work regarding animal hoarding [6]. Due to the lack of proper reporting this phenomenon has not been scientifically explored in depth. Frost, Patronek and Rosenfield raised the question whether the behavior of animal hoarding should gain a place as a subtype of hoarding disorder or at least a text description in DSM-V while explaining the differences between object and animal hoarding [47].

Animal hoarding is characterized by an accumulation of an unusually large number of animals, failure to provide adequate care and living environment for the animals and impairment in the health, safety and social functioning of the animals [5]. There are 700 to 2000 new cases of animal hoarding in the United States each year [6]. Only two states, Illinois and Hawaii, have animal hoarding specific laws.

P1- 7

MUSICAL HALLUCINATION: A CASE REPORT AND BRIEF LITERATURE REVIEW

Lead Author: Faith Aimua, M.D.

SUMMARY:

Background: Musical hallucination (MH) is a form of auditory hallucination whereby patients report hearing music, instruments, tunes or other aspects of music when none is being played. It is a rare phenomenon with poorly understood pathology. This poster reviews the background and existing scientific literature on musical hallucinations focusing on pathophysiology and treatment modalities along with a clinical case illustration in a 90 year old with unilateral MH who responded to low dose antipsychotic (olanzapine) treatment.

Methods: PubMed search was conducted using the following key words: "musical hallucinations", "elderly", "treatment" which yielded 57 citations. This was further narrowed down with the following filters: "last 10 years", "review article" yielding 4 articles of which 1 article was excluded as it was specific for musical obsessions and not hallucinations.
Results: Review of literature suggests the etiology to be associated with hearing impairment, older age, gender, focal brain lesions, psychiatric and neurological disorders. While no definitive mode of treatment has been identified, case reports suggest addressing underlying organic hearing pathology. In addition, pharmacotherapy including acetylcholinesterase, antipsychotics, anticonvulsants, and ECT has shown positive results.
Conclusion: Musical hallucinations can be distressing and unpleasant with a negative impact on quality of life. This patient's presentation and response to low dose olanzapine is consistent with several cases that have been reported in the literature. Further evidenced based research is necessary to optimize patient care and improve quality of life in those suffering from this phenomenon.

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SUBSTANCE WITHDRAWAL CATATONIA: A NEW DSM-5 DIAGNOSIS?

Lead Author: Salmahn Alam, M.D.
Co-Author(s): Gregory Gale M.D., Nancy C. Maruyama M.D.

SUMMARY:

Introduction: Benzodiazepine withdrawal catatonia (BWC) is a rare complication of benzodiazepine withdrawal that is scarcely described in the literature. Most catatonia occurs secondary to psychiatric reasons including psychotic and mood disorders. It has been reported to occur in up to 35% of psychiatric inpatients and in 2-3% of psychiatric consultations on medical inpatients. The DSM-5 divides catatonia into three categories: catatonia associated with another mental disorder, catatonia due to another medical condition and unspecified catatonia (where the etiology is unclear or the criteria for catatonia are not met). We present two cases of catatonia during acute withdrawal from benzodiazepines in patients with benzodiazepine dependence. The patients had no comorbid psychiatric, medical or seizure disorder typically associated with catatonia. We summarize the literature on this phenomenon, explore the possible pathophysiology of BWC and propose treatment recommendations.
Methods: A literature review was conducted by searching PubMed using the keywords "benzodiazepine withdrawal catatonia." Non-English publications were omitted.
Results: The search produced 21 case reports in 15 papers. Of the 21 cases, only four were in benzodiazepine using patients who had no diagnosis that might otherwise produce catatonia (mood, psychotic, and medical or seizure disorder). Very few papers made global treatment recommendations.
Discussion: BWC is a rare complication of benzodiazepine withdrawal that can occur in the absence of other catatonia producing disorders (mood, psychotic, seizure or medical). Our two cases underscore the importance of recognizing BWC as an independent phenomenon of withdrawal that should be considered in the differential of catatonia. BWC appears to require an extremely slow taper. We propose a separate category in DSM-5, substance withdrawal

catatonia, to ensure these patients are appropriately diagnosed, treated and receive substance use disorder referrals.

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ANALYSIS OF 30-DAY READMISSIONS IN THE CONTEXT OF AN ATYPICAL PSYCHIATRIC PRESENTATION

Lead Author: Sean T. Allan, M.D.
Co-Author(s): Ami Baxi, Silky Singh, Sahil Munjal, Ruth Shim

SUMMARY:

In an attempt to increase quality and decrease healthcare costs, the Affordable Care Act (ACA) has directed the Centers for Medicare and Medicaid Services (CMS) to address and improve 30-day readmission rates in psychiatric hospitals. Multiple readmissions may be the result of poor quality care, or poor community health services, but they could also signal a need for increased diagnostic accuracy, particularly as it relates to possible medical illnesses with psychiatric symptoms.

This case highlights the diagnostic challenges encountered in a 24 year old female with no prior psychiatric history, with multiple psychiatric hospital readmissions (four admissions in three months). Details of her course were obtained from diagnostic assessments and observation, interviews with the patient and family, consultation with neurology, and review of medical records.

The patient was initially admitted after an acute onset of manic and psychiatric symptoms. Differential diagnosis was narrowed to presumed bipolar disorder with psychotic features. She was readmitted 18 days after initial discharge with new symptoms of depression and catatonia. She continued to have two subsequent admissions for increasing social withdrawal and mutism. The patient's symptoms did not response to treatment with several medications or ECT. Although early in the hospital course her head CT was normal, her atypical presentation of rapidly changing symptoms, treatment-resistant symptoms, and multiple hospital readmissions prompted a neurology consult for further imaging. A brain MRI showed multiple hypodensitites with progression to additional lesions on repeat scans. Combined with her clinical presentation, neurology suggested a diagnosis of multiple sclerosis vs. acute disseminated encephalomyelitis (ADEM). The patient was treated with a course of steroid infusions, and did not present for further psychiatric hospitalizations.

Psychiatrists must remember that many medical and neurological disorders can initially manifest with psychiatric symptoms. Thus, multiple psychiatric admissions accompanied by an atypical symptom presentation and course should trigger the need to more closely examine all possible causes of illness. Collaboration and consultation with neurology and medicine is essential to diagnosing and effectively treating difficult cases. Therefore, in working to reduce multiple psychiatric admissions, and ultimately, to improve the quality of patient care outcomes, psychiatrists should consider an expansive differential diagnosis and work closely with other physicians and providers.

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AN ANTIPSYCHOTIC TREATMENT THAT PROVIDES A THREE MONTH DOSING INTERVAL TO DELIVER PALIPERIDONE: A RELAPSE-PREVENTION TRIAL ASSESSMENT

Lead Author: Larry D Alphs, M.D., Ph.D.
Co-Author(s): Joris Berwaerts, Isaac Nuamah, Srihari Gopal

SUMMARY:
Introduction: An investigational long-acting injectable formulation of paliperidone palmitate (PP) provides a 3-month dosing interval (PP3M), offering the potential of effective antipsychotic treatment with administration 4 times per year. An international, placebo-controlled, relapse-prevention study evaluated the efficacy and safety of PP3M in patients with schizophrenia (NCT01529515).
Methods: Adults with schizophrenia (per DSM-IV-TR) were stabilized with PP once-monthly (PP1M) in an open-label (OL) 17-week transition phase, followed by a single PP3M injection in an OL 12-week maintenance phase. Qualifying subjects were then randomly assigned to PP3M or placebo in a double-blind (DB) relapse-prevention phase. An interim analysis after 42 relapse events was overseen by an independent data-monitoring committee (IDMC) for recommendations regarding whether to continue the study or terminate it early. Time to relapse of complete study data was assessed using the Kaplan-Meier method (with a log-rank test for treatment difference). The efficacy of PP3M vs placebo was further evaluated using the Cox proportional hazard models after adjusting for age group (18-25, 26-50, 51-65, and >65 years), sex (male, female), and OL baseline body mass index (BMI) category (normal: <25 kg/m2; overweight: â‰¥25 kg/m2 to <30 kg/m2; obese: â‰¥30 kg/m2).
Results: A total of 305 (60.3%) were randomly assigned to PP3M (n=160) or placebo (n=145). At the interim assessment, PP3M was associated with a significant delay in relapse of psychotic symptoms compared to placebo (2-sided log rank test p<0.001). The Cox analysis showed a 3.45-fold greater risk of relapse with placebo vs PP3M (hazard ratio [HR], 3.45; 95% confidence interval [CI], 1.73-6.88; p=0.0004). Based on this interim analysis, the IDMC recommended early study termination for proof of efficacy. Final study results were consistent with the interim analysis (HR: 3.81; 95% CI, 2.08-6.99; p<0.0001). These findings were consistent regardless of age, sex, or BMI (p<0.0001, regardless of factor included in the model). Treatment-emergent adverse events more frequently reported by subjects receiving PP3M than placebo in the DB phase included weight gain (8.8% vs 3.4%), headache (8.8% vs 4.1%), nasopharyngitis (5.6% vs 1.4%), and akathisia (4.4% vs 0.7%).
Conclusion: The long-acting injectable antipsychotic PP3M has been formulated to deliver paliperidone with a 3-month dosing interval. PP3M significantly delayed relapse of psychotic symptoms compared to placebo in patients with schizophrenia who were initially treated with PP1M for 4 months.
Support: Janssen Pharmaceuticals Inc.

P1- 11

GENETICS AND MENTAL HEALTH DISORDERS: STUDY OF THE ROLE OF GENETICS IN THE RISK OF MENTAL HEALTH DISORDERS

Lead Author: Natasha Anand
Co-Author(s): Brian Meshkin, Sanford Silverman, MD, Derrick Holman, MD

John Hubbard, RPT, May Hafez, MD, Svetlana Kantorovich, Ph.D

SUMMARY:
Background:
According to the CDC, 25% of adults in the United States suffer from mental health disorders. Many studies have shown that genetics play a role in the predisposition and treatment of mental health disorders. Further understanding this relationship may be pivotal to prevention and treatment of mental health disorders
Objective:
The objective of this study is to identify genes that may be associated with mental health disorders.
Subjects:
A sample of 760 subjects was obtained from a 20 research sites in the United States. Within this sample, 377 patients were diagnosed with mental illness according to ICD 9 codes 296 series and 300 series (33 attention deficit disorder, 179 anxiety disorder, 57 bipolar affective disorder, 108 major depressive depression) and 383 controls (ICD 9 code 724) were matched for age, race, and gender.
Methods:
Subjects were genotyped using Taqman® SNP Genotyping Assays (Life Technologies, Carlsbad, CA) for a panel of 12 single nucleotide polymorphisms in genes encoding for proteins expressed in the mesolimbic reward pathway. These genes include: 5HT2a, 5-HTTL, COMT, ANKK1/DRD2, DRD1, DRD4, DAT, DBH, MTHFR, OPRK1, GABA-A receptor gamma2, and OPRM1.
Results:
Chi square tests using SPSS V23 found significant associations between mental health disorders and 5 SNP's. These SNP's include: 5HT2A (rs7997012) (overdominant model: G/G-A/A vs G/A, p=0.018), DRD1 (rs4532) (recessive model: T/T-T/C vs C/C, p=0.041), DAT1 (rs27072) (overdominant model:C/C-T/T vs C/T, p=0.036), MTHFR (rs1801133) (dominant model:C/T-T/T vs C/C, p=0.035), GABA (rs211014) (recessive model:C/C-C/A vs A/A, p=0.022). After correction for multiple testing (Bonferroni), none of the SNPs were statistically significant.
Conclusions:
This study suggests that 5HT2A, DRD1, DAT1, MTHFR, and GABA may play a role in genetic predisposition to mental health diseases. Findings in this study and additional similar studies may help with prevention, diagnosis, and treatment of mental health disorders.

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TO CONSENT OR NOT CONSENT?: PATIENTS PERSPECTIVES ON THE ACCESSIBILITY OF A NEW FORM OF INFORMATION SHARING

Lead Author: Simone L. Anderson, B.S.
Co-Author(s): Samantha Ellis, Beth Broussard, Neely Meyers, Michael Compton

SUMMARY:
To Consent or Not to Consent:

Patient Perspectives on the Acceptability of a New Form of Information Sharing between the Local Mental Health Service and Police Officers

Why would someone with a serious and persistent mental illness want to consent to disclosing their mental health status to law enforcement agencies? It has been observed that patients with a serious and persistent mental illness (SPMI) are often repeat offenders suspected of low-level crimes or exhibiting nuisance behavior, without positive outcomes (Reuland, Schwarzfeld, Drapper, 2009). Could a portion of these arrests be prevented by the patient having assistance from mental health providers during the time of an encounter with an officer? We are conducting a study to examine whether having a licensed professional on call 24/7 will improve outcomes for patients with SPMI, as well as aid law enforcement, during such encounters in a sample of 200 participants with SPMI who have a history of arrests within the past 5 years. Once a participant provides informed consent and enrolls in the study, they allow us to enter their identifying information into the state-wide registry for law enforcement. If they have another encounter with the police after being entered into the registry, a message will appear when the officer runs a standard background check, which will alert the officer of the subject's participation in the program and give a number to call to be connected to our Linkage Specialist, a licensed mental health professional at the participant's local service provider. When connected with the Specialist there is an exchange of information in regards to the participant, his or her current situation and current mental health condition and treatments, in an attempt to connect the participant to mental health services instead of incarceration, when appropriate. Though novel and potentially effective, such disclosure in a police encounter does hold risks. Focus groups have been conducted with those consenting to participate to get their perceptions of the project and its risks and benefits. There were several mixed responses to our focus group questions that ranged from asking about their perception of the project to what prompted them to give consent. This poster will give an overview of these responses and main topics of discussion, as well as themes that emerged from these focus groups.

References

Reuland, M., Schwarzfeld, M., & Drapper, L., (2009). Law Enforcement Responses to People with Mental Illnesses: A Research Guide to Research-Informed Policy and Practice. Retrieved May 19,2015 from http://csgjusticecenter.org/wp-content/uploads/2012/le-research.pdf

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IMPACT OF IMPLEMENTING NOVEL LEVEL OF CARE CRITERIA FOR GROUP HOMES

Lead Author: Cynthia Arfken, Ph.D.
Co-Author(s): Alireza Amirsadri MD, Timothy Chapman MD, MBA, Michael Wagner
Nakia Young LBSW

SUMMARY:

Hypothesis: Limited budgets for publicly funded mental health systems present challenges and tradeoffs. We examined the process and impact of changing criteria for housing expenditures.
Methods: Following funding reduction and administrative change, Gateway Community Health (GCH), a Southeastern Michigan-based mental health managed care provider,

reexamined all their expenditures including housing payments. In 2009, group home payments reflected 12 level of care categories determined by clinically indicated personal care services and community living supports. Rates were also negotiated with individual group homes. To simplify administration and minimize negotiations, GCH implemented in 2010 a system of 4 levels of care. The new system is driven by trained GCH staff administering a modified Positive and Negative Syndrome Scale (mPANSS). The evaluation examined payments incurred by a cohort (n=1,178) in group housing at least once in
each year from 2009 to 2011. Not included in the cohort were consumers (between 74 and 107 per year) at large group homes where daily payments (averaging >$170) included treatment. Overall in 2009, 1,892 consumers spent at least one day in group homes.
Results: In 2009, over $3.7 million per month was spent on housing payments for the cohortÍ¾ 49% incurred group home payments greater than $91 per day. In 2011, less than 2% of the cohort incurred such high payments. Monthly group home payments for the cohort dropped to $2.7 million per month. By 2011, housing payments for the cohort declined 25.0%, psychiatric hospitalization payments declined 26.7%, and outpatient services payments declined 31.4%. After initial opposition, owners supported the change. Among the cohort, only 4.4% refused the mPANSS administration. Those participating had a mean score of 3.44 per item (3=mild, 4=moderate).
Discussion: Specifying criteria for levels of care simplified administration for both the funder and the owners of group homes. It also resulted in lower housing payments without concurrent increased expenditures for psychiatric hospitalizations or outpatient services. Limitations include other cost cutting measures implemented.
Conclusions: Limited budgets create difficult choices but offer opportunities. Levels of care for housing can be simplified, clinically appropriate and cost effective.

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SPONTANEOUS MOVEMENT DISORDERS IN FIRST EPISODE SCHIZOPHRENIA

Lead Author: Yevgenia Aronova, M.D.
Co-Author(s): Houssam Raai, MD, Panagiota Korenis, MD

SUMMARY:

Spontaneous Movement Disorders (SMDs) have been widely recognized in patients with schizophrenia and other psychotic disorders. It has been universally accepted that they are the consequence of treatment with antipsychotic medications. However, SMDs have also been observed and reported in patients who are naÃ¯ve to psychotropic medication. Reviewed literature suggests that SMDs are related to a heavily dysregulated dopamine system, particularly in the nigrostriatal tract of the basal ganglia. They have been associated with both cognitive and negative symptoms in psychotic disorders as well as a poor prognosis and poor response to medication. While some studies have commented on the existence of comorbid SMDs with negative psychotic symptoms, very few have described any effective psychiatric treatments for such complex clinical presentations.
Here we present a case of a 24 year old man who was admitted to an inpatient psychiatric unit for management of first break psychosis. He presented with SMDs and negative symptoms of schizophrenia. He was assessed by both psychiatry and neurology services for this atypical

presentation and was found to have no acute neurological condition or medication induced explanation for his abnormal movements. He initially responded poorly to psychotropic medication and after two failed attempts with both first and second generation antipsychotic medications he was prescribed Clozapine. He began to show an amelioration of both his psychotic symptoms and atypical movements and was subsequently discharged to the community with outpatient follow up.
Abnormal movements as a symptom of psychosis are poorly understood and not a common presenting symptom reported in the literature. This case aims to illustrate the potential for exploring both psychiatric as well as neurological bases for unusual psychiatric presentations and hopes to add to the growing list of evidence for Spontaneous Movement Disorders as atypical presenting symptoms of psychosis.

P1- 15

INTO THE COMMUNITY: THE IMPACT OF CULTURAL GROUP OF STAFF FOR AN URBAN INNER CITY ACT TEAM DOING COMMUNITY VISITS

Lead Author: Theodora G. Balis, M.D.

SUMMARY:

Assertive community treatment is a comprehensive community-based model for delivering psychiatric and substance abuse treatment, case management, and rehabilitation services to individuals with severe and persistent mental illness, often with co-occurring substance use disorders. The people treated often have the greatest level of functional impairment and have experienced multiple challenges and traumas including multiple hospitalizations, homelessness, unemployment, limited family support, street violence, legal problems, and living in impoverished communities. The primary, and often most challenging task for the team, is to engage the person in treatment. The people served have typically been unable to engage in treatment at a traditional mental health and substance use services in the past. The ACT model thus includes "assertive" techniques like home visits, in-the-field skill development, close collaboration with families and other people significant in their lives. So, ACT staff primarily meet and work with clients in the communities where they live. For an urban inner city ACT team, these communities are often impoverished, have many problems related to substance use, and also have a higher percentage of African Americans and other people of color. The communities are often very different from the ones that ACT staff live in. This can add to the challenges to engagement already faced by the team. Staff need to be able to engage with the client, their family, and others in their community, to be able to navigate through the community and to understand the culture of the people they serve. Staff need to learn how to be safe, how to interact with neighbors, do job development in the area, and understand the values and interests of clients and their families. Thus, we need to better understand the specific populations of persons more likely to be living in inner cities such as immigrants, African Americans, and persons from other ethnic minorities.

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SAFETY AND LEGAL IMPLICATION OF HOARDING DISORDER IN A GERIATRIC SCHIZOPHRENIC PATIENT : A CASE REPORT

Lead Author: Ramneesh Baweja, M.D.
Co-Author(s): Teresa Wu MSIII, Lissette Cortazar M.D., Luisa Gonzalez M.D.

SUMMARY:
Hoarding disorder includes difficulty parting from possessions in order to save them, which leads to accumulation of items that affect living areas and can cause functional impairment.It was up to recently considered a symptom of obsessive compulsive disorder and a common symptom observed in patients with schizophrenia. The potential consequences of serious hoarding include health and safety concerns, such as fire hazards, tripping hazards, and health code violations. Older adults with hoarding disorder are at increased risk of poor hygiene and nutrition, medication mismanagement and social isolation. The legal interventions in cases of hoarding often involve removing vulnerable individuals from their home, sanctions, mandatory cleaning or eviction. While little has been written about schizophrenic elderly patients with hoarding disorder and its legal implications, here we describe the case of a 69 year-old African-American woman with established chronic schizophrenia and hoarding disorder. This patient was removed from her apartment by the Mobile Crisis Team and New York Police Department (NYPD) for psychiatric evaluation and treatment. It was subsequently determined that she was incapable of caring for herself, and was exhibiting bizarre behavior in a pest infested apartment filled with debris and old furniture. This paper will further explore treatment challenges posed by these complicated patients alongside safety and legal implications.

P1- 17
CRISIS PSYCHIATRY FROM THE COMFORT OF HOME: CLINICAL CONSIDERATIONS FOR CRISIS TELEPSYCHIATRY
Lead Author: Hind Benjelloun, M.D.

SUMMARY:
Telepsychiatry is growing in popularity as more psychiatrists desire to work from home, cut time traveling between multiple facilities and minimize the inconvenience of overnight calls. Clinical research has shown telepsychiatry to be an effective and efficient tool for increasing access to care in a variety of settings (Bidargaddi et al., 2015). In many cases, especially with children and adolescents, it has even been more effective than face-to-face sessions (Pakyurak, Yellowlees & Hilty, 2010).
One model of telepsychiatry that is growing in popularity, but has received little attention to date, is crisis telepsychiatry. Crisis telepsychiatrists are able to immerse themselves in the buzz of a hospital emergency department or crisis center from the comforts of their home office. By "beaming in" to hospital EDs, crisis telepsychiatrists are able to offer much-needed psychiatric expertise on an on-demand basis that can reduce the amount of time patients in crisis wait for proper care. Utilization of crisis telepsychiatry results in patients receiving the least restrictive and most appropriate level of care quickly even during times that are difficult to staff, such as nights and weekends when the majority of psychiatric crisis occurs.
This poster will discuss the benefits and challenges of working as a crisis telepsychiatrist. It will compare issues like the positive work-life balance and practicing in a growing field to the

potential negatives of working in an environment removed from peers and overcoming licensure hurdles.
Next, it will review the practical considerations of beginning to work as a crisis telepsychiatrist. Learning to adapt your clinical approach to translate well through technology requires communication adjustments a well as new environmental and cultural considerations. It is also vital that a telepsychiatrist is thoroughly trained and comfortable with the video technology, remote connection tools and EMRs they will be using to serve patients. Additionally, the training section of this poster will discuss tips for collaborating with onsite clinicians and navigating the murky waters of collecting collateral, ordering tests, making community referrals, writing prescriptions and staying up to date on relevant nuances, all while practicing remotely.
Lastly, after establishing the foundation for appropriate and quality crisis telepsychiatry from an informed physician, this poster will look at several crisis telepsychiatry case studies and review how a practicing telepsychiatrist dealt with each unique patient encounter via televideo. This section will discuss practical lessons learned while weaving in clinical research studies surrounding the efficacy and best practices for telepsychiatry with several different patient-populations.
This poster will give crisis telepsychiatrist hopefuls a comprehensive perspective on all of the considerations necessary to delve into this booming form of care.

P1- 18

CABERGOLINE IN THE TREATMENT OF RISPERIDONE INDUCED HYPERPROLACTINEMIA: A CASE REPORT.

Lead Author: Maninder S. Bhutani, M.B.B.S.
Co-Author(s): Srinath Gopinath, MBBS, DPM, Pongsak Huanthaisong MD

SUMMARY:
Antipsychotics with potent D2 antagonism are known to cause hyperprolactinemia (HPRL) by blocking D2 receptors in the nigro-striatal pathway. Though common, prevalence of antipsychotic-induced HPRL is unclear. The distinction between asymptomatic and symptomatic HPRL is not well studied. HPRL is associated with side effects such as decreased libido, sexual dysfunction, infertility, gynecomastia, galactorrhea & amenorrhea. Cabergoline is a long acting and more potent agonist of Dopamine D2 receptors that has been used in the treatment of antipsychotic-induced HPRL.
We present a case of risperidone-induced HPRL in a 52-year-old lady with schizoaffective disorder currently in remission. She also has a history of hypertension, hyperparathyroidism s/p thyroidectomy and parathyroid exploration. She was diagnosed at the age of 22 years and had multiple inpatient psychiatric admissions. She was psychiatrically stable on valproate and risperidone. But due to considerable weight gain, risperidone was cross titrated to aripiprazole 30 mg/day over a period of 2 months during which she developed nightmares and paranoia. Hence she was cross titrated back to risperidone 3 mg/day. Her serum prolactin levels were raised to 221 ng/ml after about 3 months of re-starting her on risperidone. Patient was re-started on combination of risperidone 3 mg/day and aripiprazole 2 mg per day due to evidence of PRL decrease with aripiprazole. Prolactin levels dropped to about 200 ng/ml on this regimen

but aripiprazole had to be stopped as she developed recurrence of psychotic symptoms. She was started on bromocriptine 5 mg/day for 6 months, up to 10 mg/day for about 2 months with little effect on prolactin levels (168 ng/ml). She was then started on cabergoline 0.5 mg twice weekly and aripiprazole 1 mg/day. With minimal change in PRL levels and not complete relief in psychotic Sx; this regimen was then changed to Risperidone 3mg/day, divalproex sodium 1500mg/day and Cabergoline 0.5mg twice/week. Her PRL levels came down to 38 ng/ml on this regimen in 4 weeks. Patient has been psychiatrically asymptomatic during this course of treatment with cabergoline and risperidone.
A recent meta-analysis shows the superiority of cabergoline in reducing PRL when compared to bromocriptine. Cabergoline can be considered as a promising treatment for antipsychotic induced hyperprolactinemia, micro and macro-pituitary adenomas and in bromocriptine resistant patients. Despite of this commonly encountered clinical barrier in treatment, there exist no clear guidelines for treatment of antipsychotic-induced hyperprolactinemia, frequency of prolactin measurements and the cut-off for starting treatment for antipsychotic-induced HPRL. After reviewing the data regarding possible treatment options and having had success in our case. We feel that more strides in research domain should be made towards this effort to have better guidelines

P1- 19
SCHIZOTYPAL PERSONALITY DISORDER AND DEPRESSION: AN ECCENTRIC BUT IMPORTANT COMORBIDITY.
Lead Author: Azka Bilal, M.D.
Co-Author(s): Samuel Wedes, M.D.

SUMMARY:
BACKGROUND
Schizotypal personality disorder (SPD) is characterized by unusual cognitive perceptions, eccentric behavior and difficulty maintaining interpersonal relationships. SPD is often comorbid with mood disorders and can complicate their diagnoses and treatment. We present the case of a 29 year old male patient with SPD admitted to a community hospital for a major depressive episode.
CASE
The patient is a 29 year old male with a previous diagnosis of bipolar disorder who was committed involuntarily for treatment. His mood had been depressed and irritable for the past one and a half month. He denied any suicidality. He endorsed a long-standing and pervasive history of suspiciousness toward others and a paucity of interpersonal relationships, confirmed by collateral information from his girlfriend (and only social support). He was dishevelled on exam with constricted affect. His thought form was metaphorical and circumstantial without evident derailment or thought blocking. He expressed intellectualized thought content and magical thinking, though there was no evidence of frank psychosis.
We diagnosed the patient with major depressive disorder and schizotypal personality disorder. We encouraged him to accept treatment in the hospital, but he desired to leave as soon as possible because hospital staff "take away your freedom, your bodily fluids, puncture you". He went on to say "cooperating with you is asking me to cooperate with my rapist". With

supportive interventions, he became more open to the idea of seeking outpatient treatment. He was discharged on the third day of his hospitalization with outpatient follow up arranged.
The patient voluntarily returned to the hospital two months later, reporting a depressed mood but also with suicidal and homicidal thoughts with a "plan to burn down the society". He also expressed terrorist thoughts towards the president. He refused pharmacological treatment again, and was committed involuntarily since he was a threat to himself and others. We continued to offer supportive therapy which resulted in a positive response. The patient's depressive symptoms improved over a period of a week. His suicidal and homicidal thoughts resolved, so he was discharged.
DISCUSSION
Mood disorders are common in patients with SPD. Misdiagnosis is common among these patients. Moreover, comorbid SPD can complicate the diagnosis, treatment and prognosis of depression. Further research is necessary to elucidate the relationship between depression and SPD, and develop strategies to improve outcomes in patients with comorbid depression and SPD.

P1- 20
ECONOMIC AND QUALITY IMPACTS OF A PSYCHIATRIC SHORT STAY UNIT
Lead Author: Rajeev Billing, M.D.
Co-Author(s): Richard Holt, MD

SUMMARY:
Background
Readmission rates after hospitalization are used as one measure of quality care. The Affordable Care Act requires CMS to reduce payments to hospitals with excess 30 day all-cause readmission for a growing list of applicable conditions.
Regions Hospital, a tertiary care hospital located in St. Paul, MN, maintained a 16-bed short-stay psychiatric unit from 2008-2012 to develop methods of shortening length of stay while monitoring comparative quality measures. In 2012, Regions inpatient psychiatry moved into a new facility with 100 general inpatient psychiatric beds distributed across five 20-bed units. This study compares patient mix, length of stay and readmission rates on each of these floors to characterize the impact of a short stay psychiatric care model on measures of quality and cost.
Methods
From July 1, 2013 through June 30, 2014, we compared the diagnostic mix, average length of stay and readmission rates for units NE7 and NE8. We then used the CMS Inpatient Psychiatric Facility Prospective Payment model to estimate cost to CMS per case, and to conduct an analysis of economic impact of differences in lengths of stay and readmission rates between the two units.
Results
For the six most common discharge diagnoses, the DRG distributions between the two units were very highly correlated (r=.9979). The average length of stay (ALOS) on NE7 was 4.34 days, compared to 6.20 days on NE8 (Ï‡2=11.48, p= 0.042). The ALOS for readmitted patients on NE7 was 5.11 days, compared to 6.64 days on NE8 (Ï‡2=4.00, p=0.55). Using the FY 2014 per

diem of $713.19, the CMS cost savings per case is $1,362.19 for a patient admitted to NE7 versus NE8 based on ALOS differences. Using the FY 2014 per diem of $713.19, the CMS cost savings per case is $1,091.95 for a patient readmitted to NE7 versus NE8 based on ALOS differences.

Discussion

The data indicates that the two studied units are highly similar in terms of patient mix. Over the study period, NE7 had a statistically significant lower ALOS. It is possible the severity of cases, rather than the absence of a short-stay approach, on NE8 accounts for the difference in ALOS. NE7 and NE8 started with the same ALOS, but throughout the 12 months of the study, NE7 consistently outperformed NE8 on ALOS, suggesting that the collective short-stay experience of the staff was at least a partial factor. Moreover, the readmission rates on each floor were similar, and if fact marginally favor the short stay unit (NE7), indicating comparable quality. The comparison shows that efficiencies of a high-quality short stay model can reduce costs for CMS and still be a net financial positive for hospitals through increased volume. In fact, we estimate that over the course of a 12 month period, the total revenue difference attributable to ALOS differences on these floors could be as high as 429,739.77. To further clarify these findings, subsequent research will focus on the impact of a short stay approach on NE8.

P1- 21

HIV/AIDS AND MENTAL HEALTH SYSTEMS: HISTORICAL LESSONS FROM SAN FRANCISCO

Lead Author: Thomas Blair, M.D., M.S.

SUMMARY:

Mental health professionals were central to both clinical and community-level responses to HIV/AIDS, with far-reaching implications for behavioral health and care delivery systems. Despite these providers' seminal roles, the historical record of HIV/AIDS typically ignores mental health professionals, and the systems they helped to transform, in favor of other medical specialties. This presentation will examine the roles of psychiatrists and psychologists in responding to the epidemic, at both individual and health-systems levels, specifically in San Francisco in the early 1980s. Data presented come from original interviews with health care providers, archival materials, and primary sources in the medical literature. Mental health professionals' responses to HIV/AIDS will be considered in three contexts: shoe-leather epidemiology, in which a team of psychologists broke investigative ground in the city's bathhouses; bedside-level care, in which consult-liaison psychiatrists learned to manage a new and neurotoxic disease by trial and error; and community health, in which professionals and laypeople created new tools for health promotion. Products of these efforts included the then-largest survey of sexual practices among men who have sex with men, a local redefinition of health counseling that would set international standards to the present day, and the modern discovery of "safe sex." Implications for contemporary practice, including integrated care and behavioral health, will be discussed.

P1- 22

CHILDREN'S ETHNIC ESTEEM, COGNITIVE DEVELOPMENTAL LEVELS, AND RACIAL STEREOTYPING

Lead Author: Tara E Brennan, Ph.D.
Co-Author(s): Gary Kose, Ph.D.

SUMMARY:
Clark and Clark's (1950) introduction into American public consciousness of the social impact of racial prejudice on young children's emergent self-other concepts coincided with the emergence of Jean Piaget's (1954) theory of epistemology. This study examined the role of children's cognitive development and ethnic self-concept on stereotypic beliefs. The purpose of the research was to examine whether children's transition from pre-operational into concrete operational level cognitive processes along with positive ethnic esteem would predict lower levels of racial stereotyping.
The sample consisted of 55 children between 3 and 10 years separated into three developmental periods: preschool, early elementary, and late elementary school and one-third of study participants belonged to a U.S. designated racial group other than European American. General cognitive levels were assessed with classic Piagetian conservation and classification tasks. Derived directly from two themes of the Multigroup Ethnic Identity Measure (MEIM, Phinney, 1992), a simply worded, orally administered questionnaire was constructed to assess ethnic esteem. Explicit and implicit stereotyping was measured with the Preschool Racial Attitudes Measure-II (PRAM-II: Williams et al., 1975) and a modified adaptation of Bigler and Liben's (1993) Implicit Stereotypic Beliefs Memory Task.
Contrary to study hypotheses, neither increased cognitive levels alone, nor when combined with positive ethnic esteem predicted lower stereotyping. In fact, increases in age and higher cognitive developmental levels (specifically the acquisition of conservation) were associated with higher implicit stereotyping. In contrast, explicit stereotyping levels were not correlated with children's age or cognitive stage. Overall, study findings suggest a limited and complex relationship between the emergence of concrete operations in childhood and ethnic and racial attitudes.

P1- 23

PRIMARY CARE INTEGRATION FOR INDIVIDUALS WITH SERIOUS MENTAL ILLNESS: IMPACT OF HOMELESSNESS ON CARDIOVASCULAR RISK FACTORS

Lead Author: Carolyn J. Brenner, M.D.
Co-Author(s): Lydia Chwastiak MD, MPH, Mark Snowden MD, MPH, Imara I. West, MPH, Antoinette Krupski PhD, Nancy Sugg MD, MPH, Kelly Paananen MN, ARNP, James R. Hopfenbeck MD.

SUMMARY:
Background: Individuals with serious mental illnesses (SMI), such as schizophrenia, have higher rates of cardiovascular risk factors than the general population, contributing to substantial premature mortality. Metabolic effects of antipsychotic medications, poor health behaviors and limited access to medical care contribute to these health disparities. Homeless individuals with SMI have particularly elevated cardiovascular risk. In 2008, SAMHSA established the

Primary and Behavioral Health Care Integration (PBHCI) grant to increase access to primary care. This study evaluates the impact of homelessness on engagement and outcomes with a PBHCI program at two community mental health centers in Seattle.
Methods:
Participants: 783 adults enrolled in primary care through the PBHCI demonstration project.
Setting: Two community mental health centers in Seattle WA funded by SAMHSA PBHCI to integrate on-site primary care services: the mental health center at the safety net hospital for Seattle, and a downtown program that provides mental health treatment for primarily a homeless population.
Intervention: Primary care clinics were co-located at each mental health center. The clinical team included a part time primary care nurse practitioner, a full time nurse care coordinator, and a part time mental health peer specialist.
Analyses: Descriptive statistics were used to compare demographics and clinical characteristics between participants who were homeless and those who were housed at the time of entry into the PBHCI program. Clinical cut-offs determined by SAMHSA were used to identify the proportions of participants "at risk" for hypertension, diabetes, obesity and hyperlipidemia at baseline and at 12-month follow up.
Results: 783 mental health center clients enrolled in the study between 2008-2014. 447 individuals received primary care for at least 12 months and had follow up data on blood pressure, BMI, A1c, and LDL. The mean age of the sample was 48.2 years. 67% had a diagnosis of schizophrenia or other psychotic disorder. 34% (n= 107) were homeless at baseline. The homeless individuals differed from the housed individuals (n= 340) with respect to cardiovascular risk factors: higher rates of elevated blood pressure (39% vs 32%), and lower rates of obesity (61% vs 73%), elevated A1c (40% vs 49%), and elevated LDL (27% vs 29%): At the 12-month follow up visit, both groups showed similar improvements with respect to the percentages at risk for these risk factors.
Conclusions: In this demonstration project of integrated primary care at community mental health centers, both homeless and housed individuals with SMI had high levels of cardiovascular risk factors In these two sites, homeless individuals were less likely to engage in the intervention for at least 12 months. However, among individuals who did engage in care for at least 12 months, clients who were homeless appeared to have similar clinical outcomes.

P1- 24

A MANIC EPISODE FOLLOWING SEXUAL ENHANCEMENT SUPPLEMENT USE

Lead Author: Andrea Bulbena, M.D., M.Sc.

SUMMARY:

There is a dramatic increase on the trend of the herbs and supplements use to enhance erectile function as well as sexual arousal of desire. These substances are easily found on internet and are labelled as "natural" or "herbal" but represent a challenge to the public health system as they have importance psychoactive properties that cause unwanted harm and addictive behaviors. In the literature there are four substances identified as the psychoactive substances including yohimbine, maca, horny goat weed and Ginkgo biloba. In this reported we present the case of a patient with an extensive history of bipolar disorder that became manic after

using PowerZen Gold®, a sexual enhancer supplement that contains Yohimbine. Physicians and mental health professionals should be aware of this new trend as patients with psychiatric disorders are at high risk for sexual dysfunction. Furthermore, the long term effects of these supplements remain unknown.

P1- 25
ANIMAL HOARDING DISORDER, AN EMERGING HEALTH PROBLEM.
Lead Author: Andrea Bulbena, M.D., M.Sc.

SUMMARY:
Animal Hoarding disorder has gained attention form the community in recent years as it is becoming a major public health problem. Although it remains a poorly understood human behavior, animal hoarder is defined as someone who has accumulated a large number of animals who fails to provide minimal standards of nutrition, sanitation and veterinary care. Despite good intentions, hoarders are frequently unaware to the extreme suffering of the animals. Cats and dogs are the most commonly hoarded species. In this report we described the case of 2 animal hoarders that required psychiatric care to gain insight about their illnesses. The collaboration among animal protection agencies, veterinarians, social work and mental health service it is crucial, as it allows and earlier intervention that can prevent escalation to more serious outcome.

P1- 26
ASSOCIATION OF TRAIT ANXIETY WITH STATE ANXIETY AND ITS PREVALENCE IN THE ADOLESCENTS
Lead Author: Pamela Siller, M.D.
Co-Author(s): Shajiuddin Faraz Mohammed, MD, MPH, Carmel Foley, MD

SUMMARY:
Aim: To examine the prevalence and recognition of state and trait anxiety in the adolescent psychiatric in-patient population.
Hypothesis: We hypothesized that state and trait anxiety have higher prevalence in the psychiatrically hospitalized adolescents and they are under-recognized in the community.

Methods: Data was collected randomly from 50 (36-male; 14-female) in-patient adolescent participants who met the inclusion and exclusion criteria at Zucker Hillside Hospital, New York. The inclusion criteria were a) Ages 14-17 years at the time of admission to the adolescent psychiatric unit, and b) Children who were literate enough to understand the questionnaire and the concept of Likert scale. The exclusion criteria were: a) Children who carried a diagnosis of mental retardation and, 2) Patients who were acutely psychotic and therefore unable to provide assent. The State Trait Anxiety Inventory (STAI) was used to measure the state and trait anxiety levels in the adolescents. The STAI is a 40 item self-report scale specifically designed to measure and distinguish between state and trait anxiety in the target population. This scale is validated for the adolescent population and has high internal consistency and high test-retest reliability. The results of the STAI were collected and subsequently analysed and

compared against the STAI scores within the general population obtained from STAI manual. After each patient was discharged, the admission and discharge diagnoses and the patient's discharge medications were obtained from the electronic medical record, and compared with the patient's STAI score. The results were analyzed to determine whether a high trait anxiety level had been reflected by documented anxiety disorder being diagnosed at admission or discharge.
Results: The results of the study showed that a reciprocal relationship exist between the state and trait anxiety (f=46.8; p=0.00) and the presence of state anxiety was predictive of trait anxiety and vice versa. On pearson correlation analysis, state (p=0.76) and trait anxiety (p=0.07) were not significantly correlated to the admission or discharge diagnoses of anxiety disorders. On descriptive analysis it was found that state anxiety (mean=0.58; SD=0.3) and trait anxiety (mean=0.72; SD=0.3) are higher in the in-patient adolescent population when compared to the general population.
Conclusion: According to literature strong association has been shown between panic disorders and suicide attempt than between depression and suicide attempt. According to our study in-patient adolescents tend to have higher state and trait anxiety when compared to general population of their age group. The presence of one type of anxiety will predict the co-occurrence of other. Hence the assessment of state and trait anxiety should be made mandatory on initial assessment of adolescents in the in-patient unit in deciding therapeutic interventions, regardless of their diagnosis.

P1- 27
THE MGH CHELSEA OUTPATIENT CLINIC
Lead Author: Simon A. Sidelnik, M.D.
Co-Author(s): Michael Soule, MD

SUMMARY:
Background:
Collaborative care interventions have a robust evidence-base in treating depression and are characterized by systemic psychiatric assessment, use of care managers in longitudinal symptom monitoring and care coordination, and stepped-care recommendations to mental health specialists. In May 2014, the MGH Chelsea Outpatient Clinic initiated a collaborative care model that has screened a total of 2436 patients. This study performs a process analysis to characterize flow of patients through the model and to identify areas for potential improvement.
Method:
An IRB approved, health process study was conducted using data collected at MGH Chelsea from May 2014 to March 2015. The analysis evaluated 2436 initial PHQ-2 screenings and characterized the subsequent treatment of those patients including evaluations by a case manager, referrals to higher levels of psychiatric treatment, and declining or dropping out of care.
Result:
Over 8 months, the collaborative care model successfully screened a total of 2436 patients with 341 initial positive PHQ-2 and subsequently 103 with positive PHQ-9 screenings. Of the

103 who screened positive for PHQ-9, 85 were subsequently followed by a case manager with 46 referred to higher level of behavioral health care. 115 patients either declined further treatment or dropped out of care.
Conclusion:
The initiation of a collaborative care model at MGH Chelsea has been successful in screening a large number of patients, coordinating care with primary care physicians, and successfully referring to higher levels of care when indicated. Further investigation is needed to address patient retention.
Educational objectives:
- Upon reviewing the poster, audience members will be to describe potential challenges in implementing a collaborative care model.
- Upon reviewing the poster, audience members will be able to describe potential ways to improve retention of minority patients in a a collaborative care model.
- Upon reviewing the poster, audience members will develop an understanding on how to evaluate the implementation of a collaborative care model.

P1- 28

PREDICTORS OF LENGTH OF STAY IN AN INPATIENT PSYCHIATRIC UNIT OF A GENERAL HOSPITAL IN PERUGIA, ITALY

Lead Author: Luca Pauselli, M.D.
Co-Author(s): Michael T. Compton, M.D., M.P.H.c,d, Roberto Quartesan, M.D.

SUMMARY:
Purpose: The aim of this study was to understand which of a number of factors are most associated with psychiatric inpatient Length of Stay (LoS). We hypothesized that a longer LoS would be predicted by: older age, male gender, unmarried marital status, foreign nationality, being hospitalized involuntarily, reason for admission (specifically, thought disorders/psychotic features or behavioral disorders/impulse dyscontrol/impulsivity), discharge diagnosis (specifically, schizophrenia and other psychotic disorders or personality disorders), not having a substance use disorder, treatment with more than one class of medications, and being discharged to a community residential facility.
Methods: All admissions to the Psychiatric Inpatient Unit of Santa Maria della Misericordia, Perugia Hospital, Umbria, Italy, from June 2011 to June 2014, were included in a medical record review. Bivariate analyses were performed and multiple linear regression models were built using variables that were associated ($p<.05$) with LoS in bivariate tests.
Results: The study sample included 812 patients. In the final, most parsimonious regression model, four variables independently explained 16% of variance in LoS: being admitted involuntarily, being admitted for thought disorders, not having a substance-related disorder, having had more than one hospitalization, and being discharged to a community residential facility.
Conclusions: LoS on this inpatient psychiatric unit in Umbria, Italy was associated with a number of sociodemographic and clinical characteristics. Knowledge of these and other predictors of LoS will be increasingly important to, when possible, reduce the length of restrictive, costly hospitalizations and embrace community-based services.

Key words: Length of stay; Inpatient psychiatry

P1- 29

OVERCOMING RESTRUCTURES: USING A MODIFIED MBT-I PROGRAM TO INCREASE CONFIDENCE IN STAFF WORKING WITH PATIENTS WITH BORDERLINE PERSONALITY DISORDER

Lead Author: Soumitra Burman-Roy, M.B.B.S., M.Sc.
Co-Author(s): Dr Wayne Parry, Dr Anne Boocock, Dr Giovanni Polizzi

SUMMARY:

AIMS AND HY**POTHESIS**

To evaluate whether a modified Mentalization Based Therapy - Introduction (MBT-I) programme can improve staff confidence when working with clients with Borderline Personality Disorder (BPD).

BACKGROUND

In the UK, recent economic difficulties coupled with shifting care into the community as part of the 'NHS: five years forward view' have resulted in restructured clinical services. This has resulted in specialist Psychotherapy services having reduced clinical capacity and reconsidering how they can provide high quality care for their patients.

MBT-I is a psychoeducation intervention for clients entering into MBT, an evidence-based psychotherapy for clients with BPD. It aims to educate about BPD and mentalizing. We modified the MBT-I programme and used therapists to deliver it to healthcare professionals working in a Community Mental Health Team (CMHT). The course was well received, with participants finding it clinically relevant and useful in facilitating reflection on emotions and behaviours.

Following this we ran another modified MBT-I group to a second cohort of CMHT staff and more formally evaluated changes in terms of their confidence in working with clients with BPD. We thought this might facilitate high quality clinical care including psychotherapeutic approaches, despite systemic challenges.

METHODS

We delivered the 6 week MBT-I Educational Programme to16 healthcare professionals and students.

We used questionnaires to measure self-reported confidence in performing certain tasks before and after the course as well as gathering qualitative feedback at the end of the course.

RESULTS

7 participants completed both the pre and post course questionnaires.

There was a 16% mean increase in confidence in the ability to recognise BPD (maximum 60% increase) and help clients with BPD recover when they are upset (maximum 60% increase). There was a 13% mean increase in participant confidence in talking to clients with BPD about their thoughts and feelings and a 15% mean increase in having such conversations when clients with BPD are upset. There was an 11% mean increase in participants' confidence in being able to quickly recover their own composure after difficult interactions.

Participants stated they found learning about MBT interesting and expressed their intent to use such a framework when interacting with clients in the future and to learn more about MBT.

CONCLUSIONS

The results suggest that the CMHT MBT-I Educational Programme achieved the aim of stimulating thought about mentalization and increased confidence when working with clients with BPD. It demonstrates a novel way for psychotherapeutically trained staff to use their skills to improve client care in a landscape that is being restructured.

In light of this positive feedback we are running similar courses in different settings (such as Psychiatric Liaison in the Emergency Department) with further evaluation.

P1- 30

ADVOCATING FOR PSYCHIATRIC PATIENTS IN THE NURSING HOME SETTING: AN INPATIENT PSYCHIATRY PERSPECTIVE

Lead Author: Kerrie Byer, M.S.W.

Co-Author(s): Antoinette Jones-Perrin, LMSW, Lila Aboueid, D.O. (PGY2), Amjad Hindi, M.D.

SUMMARY:

Introduction: Following the deinstutionalization movement in the 1970s, adults diagnosed with mental illness have been increasingly placed in nursing homes in order to maintain medical and psychiatric stability. However, studies have shown that nursing homes across America have not always met patients' psychiatric needs with adequate and effective psychotherapeutic care (Mintzer, 2002). This can lead to continuous and inappropriate referrals to acute psychiatric inpatient facilities, which in turn creates unnecessary stress and chaos for patients.

Case Studies: We present three case studies to demonstrate some gaps in service in the nursing home setting as identified by patients and our inpatient psychiatry treatment team. First, we consider patients who are deemed psychiatrically unstable by nursing home providers due to behavior disturbances that are not truly psychiatric in nature, as these patients do not present with symptoms of acute psychosis, mania or negative symptoms. Next, we present patients who are in need of psychiatric treatment and are admitted and stabilized, but are subject to a lengthy discharge process through PASRR (Preadmission Screening and Annual Resident Review) procedures. Finally, we look at patients who present with acute psychiatric symptoms and are treated and stabilized on our inpatient unit, but are subjected to various measures aimed at blocking the return to their nursing home due to stigma surrounding psychiatric illness in the nursing home setting.

Discussion: In all of these cases, the treatment team has worked to advocate for patients so that they can return to and receive appropriate care in their nursing homes, a setting that is comfortable and familiar. We acknowledge that it is appropriate at times for patients to receive care in inpatient units, but often, the process of returning patients to their homes is long, confusing and unduly stressful. We advocate for improvements to the existing system, including staff who are trained to engage in appropriate behavioral and psychotherapeutic interventions, appropriate diagnosis of acute psychiatric symptoms versus behaviors born out of low frustration tolerance which is not psychiatric in nature and engagement with nursing home administrators to reduce stigma surrounding patients with psychiatric illness.

P1- 31

THE NEUTROPHIL-TO-LYMPHOCYTE RATIO AS A DIAGNOSTIC MARKER FOR MANIC EPISODE IN BIPOLAR DISORDER

Lead Author: Okan Caliyurt, M.D.
Co-Author(s): Bengu Ozcan, Yasemin Gorgulu, Rugul Kose Cinar, Bulent Sonmez

SUMMARY:

The neutrophil-to-lymphocyte ratio as a diagnostic marker for Manic Episode in Bipolar Disorder

Introduction

There are studies suggesting the involvement of immunoinflammatory system in the pathophysiology of bipolar disorder. The neutrophil-to-lymphocyte ratio (NLR) is an useful inflammatory marker. NLR can be used to detect possible inflammatory changes during manic episode. In this study, we aimed to investigate the relationship between neutrophil-to-lymphocyte ratio and manic episode in patients with Bipolar Disorder.

Methods

One hundred and seventy two patients with manic episode and 91 euthymic bipolar patients included in the study retrospectively. All manic episode patients were the inpatients hospitalized in Trakya University Hospital, Psychiatry Department between January 1, 2012 to December 31, 2014 with the diagnosis of Bipolar I Manic Episode. Euthymic controls selected form the outpatient psychiatry department of Trakya University Hospital between the dates November 1, 2014 to February 28, 2015. Patients who had cancer, alcohol use disorder, medical conditions require drug treatment and inflammatory diseases excluded from the study. Patients who were repeatedly admitted to inpatient unit only their last episode data were used. NLR of the patients calculated based on a complete blood count by dividing the number of neutrophils by number of lymphocytes. The study was approved by the Trakya University Ethics Committee.

Results

Mean NLR value was 2.58Â±1.51 for the manic episode group and 1.73Â±0.73 for the euthymic group (t=5.05, P=0.000). Mania severity measured by Young Mani Rating Scale was not found correlated with NLR (r=-0.18, P=0.07) in manic episode group. There was no significant effect of gender on NLR in both groups. Mean NLR of manic episode group was 2.40Â±1.36 in females and 2.76Â±1.63 in males (t= -1.56, P=0.12) ; mean NLR of euthymic controls was 1.77Â±0.78 in females and 1.65Â±0.64 in males in (t=0,75, P=0.45).

Discussion

In this study, it was found that mean NLR was significantly higher in patients with bipolar disorder manic episode compared to patients with euthymic bipolar disorder. Because, NLR is easily calculated with using the routine hemogram this cheap technique can be used for patient follow up. Significant increase in NLR during follow up may add important contribution to clinical diagnosis of manic episode. Since there was no significant gender effect on NLR, there is no need to further analyze NLR in both sexes during follow up. On the other hand, lack of correlation between NLR and mania severity displays a dichotomous relationship leading to a diagnosis. In the future, accumulated data related with the NLR in other psychiatric disorders may help differential diagnosis of manic episode

P1- 32

HISPANICS AND GAMBLING: A MIXED METHODS STUDY OF GAMBLING BEHAVIOR AND ATTITUDES TOWARDS TREATMENT

Lead Author: Michael D Campos, Ph.D.
Co-Author(s): Alvaro Camacho

SUMMARY:

Because gambling problems are associated with a wide range of serious negative personal, social, health, and mental health consequences, they are a serious public health concern. Despite some data that suggests that gambling problems may be more prevalent among Hispanics, little research has been done on gambling problems in this community. We conducted a mixed-methods study of gambling behavior and attitudes towards gambling, those with gambling problems, and professional treatment for gambling problems in a publicly funded health center serving a primarily Hispanic clientele. Study participants included clinic staff and clinic patients. All participants completed a brief, self-report survey; however, staff participated in a focus group on gambling issues and patients were interviewed individually about gambling issues. Results indicated that nearly 80% of patients had gambled in the past month, as compared to about 36% of clinic staff. Patients could be characterized as being at greater risk for gambling problems due to the presence of a number of risk factors. Focus group and interview information indicated that most viewed gambling problems as a form of addiction, the elderly were seen as being at increased risk for gambling problems, and gambling outings represented one of the few recreational opportunities in the region. The majority of both staff and patients believed there was a need for gambling-related treatment services in the county; however, a notable minority of patients said that they would first seek help from a trusted relative or family member. Possible avenues to increase awareness of, screening for, and treatment for gambling problems may include collaborations with publicly funded health care centers and the training of promotoras to serve as an interface between health services and the community.

P1- 33

INTERPLAY BETWEEN SPIRITUALITY AND RELIGIOSITY ON THE PHYSICAL AND MENTAL WELL-BEING OF CANCER SURVIVORS POST-TREATMENT

Lead Author: Anthony J Cannon, M.D.
Co-Author(s): Jesus Garcia, Fausto R. Loberiza, Jr, MD, MS

SUMMARY:

Objectives: A diagnosis of cancer influences patients' physical and mental quality of life (pQOL/mQOL). Similarly, spirituality and religiosity have been shown to be independently associated with both pQOL and mQOL and are commonly the patients' way of coping with the stressful situations. Although spirituality and religiosity are often used interchangeably, they have different conceptual meanings. We conducted this study to better elucidate the interplay between spirituality and religiosity and answer the question: do they act independently or

work synergistically in affecting the QOL of cancer survivors? Our findings should inform how best to use spiritual/religious interventions to clinically improve QOL.
Methods: This prospective cohort study included adults â‰¥19 years who received treatment for various malignancies from March 2006-July 2008 at a large academic medical center. Patients' QOL was obtained at baseline, 6, and 12 months from the start of the study, and was measured using SF-12. Spirituality was quantified with the Functional Assessment of Cancer Therapy Spirituality Scale (FACT-SP). Religiosity was assessed using targeted questions regarding intensity of religious belief and practice. Patient cohorts were categorized according to spirituality/religiosity levels: 1) low spirituality-low religiosity (LSLR); 2) low spirituality-high religiosity (LSHR); 3) high spirituality-low religiosity (HSLR); and 4) high spirituality-high religiosity (HSHR). Mixed model regression was used to evaluate differences among the above four groups while adjusting for covariates. pQOL and mQOL were evaluated separately.
Results: Of the 551 eligible: 248 (45%) had HSHR, 196 (36%) had LSHR, 75 (14%) had LSLR, and 32 (6%) had HSLR. The pQOL of LSLR were significantly lower than those with HSHR ($p = 0.02$). The difference in pQOL between LS and HS were observed among those who have HR ($p < 0.0001$). The pQOL of individuals with LS or HS was not different among those who have LR. The mQOL of patients with LSLR are significantly lower than those with HSHR ($p < 0.0001$). The mQOL of those with HS is significantly higher than those with LS in both the cohorts with LR ($p < 0.0001$) or HR ($p < 0.0001$). pQOL decreased while mQOL increased over time regardless of level of spirituality and religiosity.
Conclusions: Higher spirituality can improve the pQOL and mQOL of cancer patients, while religiosity may have some impact on pQOL. Preserving QOL is an important component of cancer treatment/survivorship, and our study lends support to including a brief spirituality/religiosity history during medical encounters with cancer survivors to better understand the role of spirituality/religiosity for each patient. Psychiatrists charged with helping render recommendations to improve QOL for cancer patients now have some empirical assurance that interventions aimed at improving spirituality can be an effective means to improving both pQOL and mQOL of cancer patients.

P1- 34
TREATMENT OF DEPERSONALIZATION DISORDER WITH HIGH FREQUENCY LEFT-SIDED REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION
Lead Author: Marc Capobianco MD, M.D.
Co-Author(s): Bianca Cabrera-Karris, MD

SUMMARY:
The patient is a 30 year old single Asian male, physician in the US Navy referred for rTMS for the treatment of MDD and Depersonalization Disorder (DPD). He is healthy and has no medical or illicit drug use. He has a history of depersonalization symptoms as a teenager that later resolved. His current symptoms started during his deployment to Afghanistan and he was later diagnosed with MDD and DPD. His symptoms of DPD include feelings of unreality, emotional numbing, feelings of detachment, and feeling that his mind is empty of thoughts and memories. He does not meet criteria for any anxiety disorder. He was started on bupropion which improved his depressive symptoms though continued to have

depersonalization symptoms and was referred for treatment with rTMS. Bupropion XL 300mg daily was continued during his treatment with rTMS.
Pretreatment Montgomery-Asberg Depression Rating Scale (MADRS) was 12, Hamilton Anxiety Scale (HAM-A) was 4 and Cambridge Depersonalization Scale (CDS) was 149 (endorsed 20 of 29). He began rTMS (with the NeuroStar device) to target depressive and depersonalization symptoms using low frequency (1 Hz) stimulation applied to the right DLPFC. Each treatment consisted of 1 Hz per second for a total of 1200 pulses delivered over 20 minutes at 110% of motor threshold (MT). MT was determined by visible twitch of the left abductor pollicis brevis in the "MT Hunt position" as per Neuronetics guidelines and was 1.28 which was higher than the published average (1.0) of the Neuronetics system. The coil was 6 cm anterior to the location where MT was determined. Coil angle was 0 degrees. He tolerated the procedure well and at session 7 noted a continued improvement in his mood but continued depersonalization symptoms. At that time MADRS was 8, HAM-A was 2 and CDS was 132 (endorsed 17 of 29). Depressive symptoms continued to gradually improve through session 21 but depersonalization symptoms continued, albeit improved, with MADRS being 2, HAM-A was 2 and CDS was 100 (endorsed 17 of 29). He continued right sided rTMS through session 25 without any further improvement in depersonalization symptoms. At that point he was switched to high frequency (10 Hz) rTMS applied to the left DLPFC. Each treatment consisted of 10 Hz over 4 seconds with a 26 second quiet interval, for a total of 3000 pulses delivered over 37.5 minutes. Coil angle was 0. He initially experienced discomfort with treatment being at 95% of MT. MT was gradually increased to 110% as tolerated. He continued treatment through session 22 and at that time noticed an improvement in his depersonalization symptoms and MADRS was 2, HAM-A was 1 and CDS was 43 (endorsed 13 of 29).
Discussion:
There have been two case reports in which rTMS was effective in reducing symptoms of DPD, both using high frequency (20 Hz) rTMS to the left DLPFC [8], [9].Given its effectiveness in our patient, the use of high frequency rTMS to the left DLPFC for treatment of DPD should be further explored.

P1- 35

ARIPIPRAZOLE LONG ACTING INJECTION AND QUALITY OF LIFE IN SCHIZOPHRENIA: A TWO CASE REPORT

Lead Author: Carrillo de Albornoz Carmen M., M.D.
Co-Author(s): Navarro-Barrios Juan Carlos

SUMMARY:
Schizophrenia is a severe mental illness with a lifetime prevalence of approximately one percent worldwide. In the last decades, there has been increased interest in the field of quality of life in mental disorders in general, and particularly in schizophrenia. In addition, the appearance of the atypical antipsychotic drugs (aripiprazole, clozapine, olanzapine, quetiapine, risperidone, and ziprasidone) with different therapeutic and side-effect profiles, has promoted a greater interest in assessing the quality of life of schizophrenic patients.
Quality of life is defined by the World Health Organization as "Individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation

to their goals, expectations, standards, and concerns." . Schizophrenia is a severe, disabling, lifelong disorder, associated with severe social and occupational dysfunction.
Aripiprazole Long Acting Injection ('Aripiprazole LAI'), is indicated for maintenance treatment ¨of schizophrenia in adult patients stabilised with oral aripiprazole. It is the fourth second-generation antipsychotic (SGA) depot formulation approved for treating schizophrenia
In this paper we evaluate of quality of life in 2 subjects with diagnosis of paranoid Schizophrenia (with less 10 years of diagnostic), male, age 42 and 45 years, with poor adherence of oral treatment.
This patients received Aripirazol LAI 400 mg/month. We evaluate quality of life at baseline and after 3 months. We used the Quality of Life Scale (QOLS) and WHO-Quality of Life-Bref (WHOQOL-BREF).
Results demonstrated significant greater improvements in all QLS scores in two subjects. No significant changes in the WHOQOL-BREF total, but improvement in subscale scores.
The quality of life in schizophrenia is adversely influenced by the presence of clinical symptoms, especially negative and depressive. Depot medications can improve treatment adherence, however, long-term antipsychotic use can lead to irreversible adverse effects (dyskinesias), which in some cases were reduced by using newer antipsychotics (Risperidone, Paliperidone, Aripiprazole).
Aripiprazole Long-Acting Injection can be useful for improve quality of life, needing open study and double-blind.

P1- 36

NEW-ONSET PSYCHOSIS IN A PATIENT WITH UNTREATED HIV INFECTION

Lead Author: Arthur Thomas Carter, M.D.

SUMMARY:
An infection by the human immunodeficiency virus (HIV) causes damage to the central nervous system directly and indirectly which can result in different psychiatric syndromes associated with the onset and progression of the infection including cognitive impairment, dementia, depression, mania, obsessive-compulsive disorder, and psychosis. We present the case of a patient that came to the outpatient psychiatric clinic with acute psychotic symptoms in the context of HIV infection and antiretroviral treatment non-adherence. She reported new onset of disruptive auditory hallucinations and paranoid delusions; at that time all her laboratories (including for infectious disease) were within normal limits except for decreased level of CD4+ T cells and high viral load (247,000 copies/mLm). She denied any illicit substance use and her head CT was negative for any acute disease. Patient required a brief psychiatric hospitalization where she was started on low doses of risperidone and her symptoms resolved after her CD4+ T cells and the viral load values improved secondary to the antiretroviral treatment. A review of the literature shows that psychiatric symptoms are common in patients infected with HIV. Whether these complications are due to the direct or indirect effects of HIV, a careful diagnosis and treatment are necessary.

P1- 37

ESTIMATING THE PREVALENCE OF TREATMENT-RESISTANT PSYCHOTIC DISORDERS IN THE NEW YORK STATE OFFICE OF MENTAL HEALTH SYSTEM USING MEDICAID CLAIMS DATA

Lead Author: Enrico G Castillo, M.D.

SUMMARY:

Background: It has been estimated that up to one-third of consumers with schizophrenia are treatment-resistant, meaning they have inadequate or no response to multiple trials of antipsychotic medications. Clozapine has been proven to be more effective compared to other antipsychotic medications for this population. Research, however, has shown clozapine to be substantially underutilized. The New York State Office of Mental Health (NYS OMH) has a Best Practices Initiative on Clozapine to increase its evidence-based use in NYS OMH facilities. The aim of this project was to create an automated method to identify those in the NYS OMH adult outpatient system who have treatment-resistant psychosis. The author tested whether an algorithm using Medicaid claims data could be developed and validated to identify this population.

Methods: The project's inclusion criteria were adults in New York State ages 18-64 with continuous Medicaid eligibility during the study period of 1/1 - 12/31/13 and at least 2 claims with primary schizophrenia-spectrum diagnoses (ICD 295.1-3, 2.5.6-9). Medicaid/Medicare dual eligibles and Medicare Part D beneficiaries were excluded. A small validation sample (n = 36) was selected randomly using Medicaid claims criteria from within 2 NYS OMH adult outpatient clinics. The gold standard validation methods were retrospective chart reviews and interviews of subjects' clinicians. The initial case identification algorithm had 4 criteria: a new antipsychotic medication start during the study period, 2 or more different non-clozapine antipsychotic prescriptions during a 1-year look back period, an antipsychotic medication possession ratio (a surrogate for medication adherence) of > 0.75 during the study period, and 1 or more psychiatric hospitalizations during a 6-month period before the last antipsychotic medication start.

Results: Compared to our gold standard, the initial algorithm had a specificity of 100% but a sensitivity of 0%. To increase the algorithm's positive predictive value and sensitivity, the algorithm was modified. These changes involved increasing the look back period, decreasing the number of different antipsychotic trials required, and including psychiatry ER visits in the algorithm. These modifications led to an algorithm with a Cohen's kappa of 0.21, which categorizes its performance as "fair" (0.21-0.40). With a PPV of 67% the algorithm performs in the "moderate" range using FDA Mini-Sentinel Project standards.

Conclusions: This project describes how the clinical criteria for treatment-resistant psychotic illnesses can be translated into a claims-based algorithm. The final algorithm performed in the fair to moderate range. This algorithm can be used to identify consumers who may most benefit most from a clozapine trial. Such a data collection method can potentially allow the NYS OMH and other provider systems to target clozapine-related resources to consumers and their providers.

MENTAL HEALTH INTEGRATED INTO ELDER ABUSE SERVICES TO TREAT DEPRESSION: PRELIMINARY DATA AMONG ABUSE TYPES

Lead Author: Stephanie A Chambers, M.A.
Co-Author(s): Ashley Halkett, M.Phil., Jacquelin Berman, Ph.D., Patrick Raue, Ph.D., & Jo Anne Sirey, Ph.D.

SUMMARY:
Background: Elder mistreatment is a critical concern in the United States, affecting approximately 1 in 10 older adults (Acierno et al., 2010) with one third of victims screening positive for depression (Sirey et al., 2014). Psychological abuse is not only the most prevalent form of elder abuse (Acierno et al. 2010; Laumann, Leitsch, & Waite, 2008; Mouton, 2003), but may also be the most emotionally damaging. Psychological abuse has been linked to higher rates of low self-esteem (O'Leary, 1999), emotional distress (Begle et al., 2011), suicidal ideation (Wu et al., 2013) and greater impairment in physical functioning (Post et al., 2010) compared to other abuse types. Yet, victims of abuse rarely accept referrals for mental health services.
Objective: We pilot tested the feasibility and client acceptability of integrating Problem Solving Therapy (PST) into a large, New York City elder abuse service to treat depression concurrently with abuse resolution services. The aim of this analysis was to examine differences in depression severity and treatment response between older adults experiencing psychological abuse alone or a combination of abuse types.
Methods: Elder abuse victims who sought assistance were screened for depression using the Patient Health Questionnaire-9 Item scale (PHQ-9) (Kroenke, Spitzer, & Williams, 2001). Clients with clinically significant symptoms were randomized to receive either abuse resolution services combined with PST modified for this population, or abuse services with a standard mental health referral. Clients were contacted after four months via telephone to reassess depression severity and satisfaction with services.
Results: Across all clients, 60 (87%) reported psychological abuse at baseline, with a little over half (52%) endorsing psychological mistreatment alone. Among those clients with multiple forms of abuse, 14 clients (23%) had concurrent financial abuse, 10 clients (17%) had concurrent physical abuse, and 5 (8%) indicated all three. T-test comparisons of depression severity on the PHQ-9 found a trend towards clients with psychological abuse alone reporting greater depression severity at baseline (M=15.3, SD=5.1) compared to clients experiencing multiple abuses (M=13.1, SD=3.6); $t(54) = 1.86$, $p = .06$. At follow-up, both groups had improved with no significant difference in percent change. Clients with psychological abuse only tended to report greater satisfaction with services: 71% felt "very satisfied" compared to 37% of combination abuse victims, $X2$ (2, N=37) = 5.40, $p = .06$.
Conclusion: Psychological abuse alone was both more common and associated with heightened depressive symptoms among elderly victims seeking abuse services. Our preliminary results suggest that elder abuse victims with psychological abuse may experience more severe depression than those with other forms, and thus may feel more satisfied when mental health treatment is integrated into elder abuse services.

LESSONS LEARNED FROM IMPLEMENTATION OF A DECISION SUPPORT CENTER ON A PSYCHIATRIC INPATIENT UNIT IN RURAL PENNSYLVANIA

Lead Author: Penelope Chapman, M.D.
Co-Author(s): Dean Ann Farris, DO; James Schuster, MD, MBA; Manish Sapra, MD, MMM

SUMMARY:
The focus of recovery principles have largely been applied to the outpatient population. We were interested to see if bringing recovery principles to a rural psychiatric inpatient unit using a decision support center would improve patient satisfaction, patient outcomes and engagement in recovery principles upon discharge.
Method: A survey was completed by all patients on the inpatient unit during the implementation of the Decision Support Center. A proprietary software (Commonground) was used by peer specialists on the inpatient unit to engage patients and their doctor in shared decision making. The analysis of the results of this survey will be presented. We will analyze claims data to measure participation in follow-up treatment upon discharge and these results will also be presented.

P1- 40

DESTRUCTIVE FACIAL GRANULOMA AS A SEQUELA OF PERVASIVE COCAINE DEPENDENCE AND COMORBID PSYCHOPATHOLOGY

Lead Author: Jigar K Chotalia, M.D., M.P.H.
Co-Author(s): Reena Kumar MDCheryl Person MD

SUMMARY:
We describe a case of 33 year old African American female with past history of cocaine dependence, syphilis (treated) and progressively enlarging erosive facial mass presented to the emergency department with complaints of suicidal ideation secondary to the disfigurement and, depression, auditory visual hallucinations and paranoia. ENT performed debridement with biopsy of the facial lesion. Differential diagnosis including infections (fungal, TB, syphilis and viral), malignancy (NK-T cell, nasal type, lymphoma), cocaine use and vasculitis (Wegner's granulomatosis) were considered. Infectious, vasculitic and malignant work ups were negative. While in the hospital she was treated with antibiotics for colonizing bacteria for future reconstruction, and Sertraline and Risperidone for her depressive and psychotic symptoms, respectively. She was discharged with diagnosis of cocaine induced destructive midline granuloma.
Our patient had a history of pervasive cocaine dependence by "snorting" and running down her lips for 11 years (documented by UDS). Her facial lesion started on the lips about 4 years before this presentation. Patient had lost custody of her children to CPS due to her cocaine use. Her insight in the cocaine use was extremely poor reflected by her DAST score of 6 (5 years ago) and 4 (this admission). Her suicidal ideation and depressive symptoms were related to the facial disfigurement and feelings of shame and disgust to be in public and with her family. Her depressive and psychotic symptoms improved over the hospital stay and she was no longer suicidal at the time of discharge.
Conclusion:

We had two objectives for this presentation: first, to make psychiatrists aware of this severe sequelae of chronic cocaine dependence, second, to describe vicious cycle of cocaine dependence, comorbid psychopathology and use of cocaine to "alleviate" psychiatric symptoms. Our patient developed disfiguring facial lesion from cocaine use, became depressed with suicidal ideation and used cocaine to "alleviate" her symptoms. We recommend strategies to improve patients' insight by making them aware of this dreadful consequence of chronic cocaine dependence.

P1- 41

VIVITROL USED TO TREAT SELF-MUTILATION BEHAVIOR: A CASE REPORT

Lead Author: Omar A Colon, M.D.
Co-Author(s): Samuel Azeze, Steven Cho, M Wangi, Asghar Hossain, M.D.; Edward Hall, M.D.

SUMMARY:
Self-injurious or self-harm behaviors have been increasingly a topic of great controversy in current society. Previous estimates state the prevalence of adolescents engaging self-injurious behaviors in their lifetime to be between 12-45% (1). Many risk factors have been implicated in these prevalence estimates including anxiety and depressive symptoms, illicit drug use, and delinquent behavior (2). Borderline personality disorder, characterized by chronic feelings of emptiness and identity disturbances, is diagnosed by nine criterion, one being self-injurious behaviors. The estimated prevalence of self-injurious behaviors in BPD is between 70-75% (3). With the increasing access to healthcare more individuals with borderline personality disorders behaviors are seeking help from medical professionals. Although personality traits are extremely difficult to treat, the use of naltrexone in BPD has shown promising results in recent case reports and some trials in reducing self-injurious behaviors (4). The mechanism of action is founded in reducing the neurochemical reward associated with self-injurious behaviors. This case report discusses the treatment of a 31 y/o patient in the outpatient clinic suffering from Mood Disorder Nos; Alcohol Dependent with PD and Borderline personality disorder with multiple psychiatric hospitalizations. The patient also constantly was self mutilating herself that was treated with Vivitrol 380mg Intramuscular injection of Naltrexone with significant diminish of Self injurious behavior. Our case report discuss the possibility of looking forward the use of vivitrol to reduce the self -injurious behavior.

P1- 42

DECREASED UROTENSIN II LEVEL IN FIRST EPISODE PSYCHOSIS

Lead Author: Umit S. Copoglu, M.D.
Co-Author(s): Umit Sertan Copoglu, M. Hanifi Kokacya, Gokhan Cakirca, Bulent Gogebakan, Sedat Motor, Yüksel Kıvrak, Mustafa Ari, Aslan Ozden, Murat Semiz

SUMMARY:
Indroduction: Urotensin II (U-II) is a cyclic peptide. Effects of UII in peripheral tissues especially the cardiovascular system have been investigated, and it has been shown that UII involved in many metabolic regulations. Besides it has been shown that UII and urotensin receptors are widely distributed in the central nervous system. Animal studies show the role of UII in the

regulation and formation of behavior. Nevertheless there studies about UII in psychiatric disorders are limited. In our previous study we found higher level of UII in schizophrenia patients. We hypothesized that U-II may play a role the ethiopathogenesis of psychotic disorders and there may be a relation between UII and oxidative stress. Therefore in order to test our hypothesis we aimed to assess the UII level and oxidative stress levels in first episode psychosis (FEP).
Method: This study includes 36 patients with first episode psychosis and 38 healthy controls. First contact psychotic patients whose duration of untreated period was less than 24 months, and who was diagnosed before and whose treated period was less than 6 months psychotic patients were included. UII levels were measured by using the commercial Enzyme-Linked Immunosorbent Assay (ELISA) kit (Uscn Life Science Inc., Wuhan, P.R. China). The total antioxidant status (TAS) and the total oxidant status (TOS) of the plasma was measured using a novel automated colorimetric measurement method for the TAS and TOS developed by Erel 1, 2.
Results: Urotensin level was significantly lower in FEP compared to the healthy controls ($p<0.001$). There were no significant differences were found in TAS and TOS levels between groups ($p=0.646$; $p=0.218$ respectively). There were no significant correlation between U-II level and, TAS, TOS, Positive and Negative Syndrome Scale, and Clinical Global Impression's "Severity Scale scores ($P>0.05$).
Discussion: Urotensin level was found significantly lower in FEP compared to the healthy controls. There is only one study about UII level in schizophrenia patients and that study shows higher UII level in schizophrenia patients. Studies focusing on UII and related behavior suggested that UII may affect the cholinergic and dopaminergic system and catecholamine transmission. And it can be suggested that lower UII level may cause cholinergic and dopaminergic system dysfunction and thereby lead to psychotic sypmtoms.
Conclusion: We suggested that UII take a part of etiopathogenesis in psychotic disorders independent from oxidative stress. And treatment studies should also focus on the UII in schizophrenia patients

P1- 43
MALE PATHOLOGICAL GAMBLERS : COMORBID PSYCHIATRIC DIAGNOSES IN PATIENTS AND THEIR FAMILIES
Lead Author: Pinhas Dannon, M.D.

SUMMARY:
Objectives: Pathological gambling is a highly prevalent and disabling impulse control disorder. Recent studies have consistently demonstrated that pathological gamblers respond well to treatment with selective serotonin reuptake inhibitors, mood stabilizers and opioid antagonists. These findings have supported the observation thatpathological gambling is associated with anxiety and mood spectrum disorders as well as addictive disorders.
Methods: Fifty-two male pathological gamblers and their first-degree relatives (n=93) completed a semi-structured DSM-IV-based diagnostic interview as well as a series of data collection instruments including the South Oaks Gambling Scale, the Hamilton Rating Scale for Depression, the Hamilton Rating Scale for Anxiety, the Yale-Brown Obsessive- Compulsive

Scale, and the Young Mania Rating Scale. The study subjects and their first-degree relative were compared to demographically matched normal controls (n=96).
Results: We found higher prevalence of alcohol, substance abuse, problematic gambling, depression, and anxiety disorders in the pathological gamblers and their first-degree relatives than in the control group. In particular, the scores on the Hamilton Rating Scale for Depression, the Hamilton Rating Scale for Anxiety, and the Yale-Brown Obsessive-Compulsive Scale were higher in the study group than in the control group.
Conclusions: Our finding of a high prevalence of psychiatric comorbidity in pathological gamblers and their families raises the question of the proper classification of pathological gambling in the DSM.
Furthermore, the pattern of psychiatric disorders seen in the first-degree relatives can lead to new insights about the etiopathology of pathological gambling.

P1- 44
A CRITICAL PSYCHIATRY READING GROUP FOR PSYCHIATRY RESIDENTS
Lead Author: Vivek Datta, M.D., M.P.H.
Co-Author(s): Matthew Ilesh-Shih, M.D., M.P.H., Ippolytos Kalofonos, M.D., Ph.D., Rebecca Hendrickson, M.D., Ph.D.

SUMMARY:
The evidence-base for conventional psychiatric treatments has attracted renewed criticism in recent years. Criticisms include the overestimation of the efficacy for psychiatric interventions, the underestimation of their risks, the undue influence of the pharmaceutical industry on the publication of research and clinical practice, the privileging of a biological discourse in the formulation and management of psychiatric illness, and the lack of attention to alternative models of mental health care. In an effort to explore the evidence-base for these criticisms, and to learn more about emerging psychosocial models of mental health care, psychiatry residents at the University of Washington formed the Critical Psychiatry Reading Group. Now in its third year, the group has sought to critically assess the evidence base for the use of neuroleptics, antidepressants, mood stabilizers, psychostimulants, and psychotherapies, as well as for psychosocial interventions such as Open Dialogue, Soteria House, and Hearing Voices Groups. When possible, a focus on the evidence for long term and functional outcomes has been maintained. We suggest that a reading group such as this may provide a forum for residents to learn about current controversies in psychiatry and alternative models of care that receive little to no attention in residency training, while simultaneously developing critical appraisal skills, and building a sense of professional community.

P1- 45
AMERICAN SNIPER: A TRIGGER FOR PTSD EXACERBATIONS IN UNITED STATES VETERANS
Lead Author: Jennifer Davis, D.O.
Co-Author(s): Andrew Pierce, MD; Camilo Leal, MD; Joel Fernandes, MD; Ana T. Turner, MD

SUMMARY:

Introduction:
PTSD has presumably been around as long as humans have been exposed to trauma, and understanding of the disorder has varied tremendously. Psychologist Edward Tick postulates that PTSD has assumed over 80 different titles throughout history including names associated with military action like "Soldier's Heart", "Combat Exhaustion", and "Stress Response Syndrome." PTSD was emblazoned in the mental health lexicon when brought to prominence by inclusion in the DSM-III. There has been refinement of the criteria required for a diagnosis of PTSD since its introduction and increasing awareness has buoyed research leading to new insights into this long observed phenomenon. Furthermore, PTSD is a current epidemic with often crippling exacerbations. Therefore, it is essential for providers treating veterans to gain insight into PTSD exacerbation triggers.
Case Summary:
There were at least 3 cases within a week in veterans with a similar presentation regarding PTSD exacerbations after viewing the film, American Sniper. The representative case report details the initial presentation, mental status examination, and hospital course.
Discussion:
In comparison to other war movies shown to trigger PTSD exacerbations in veterans, American Sniper frequently depicts the intense psychological burden of combat while displaying less graphic battle scenes. American Sniper places unique focus on the protagonist's psychological struggle associated with the decision to take an "innocent" civilian life and the gravity of the choice bestowed to a soldier. All of the observed cases involved patients struggling with PTSD and this made the protagonist and his PTSD struggle more relatable to their situation. Therefore, this could potentially be more likely to lead to a PTSD exacerbation and decompensation after viewing the film. PTSD awareness is a relatively new phenomenon. Further research regarding the aspects of film and other media likely to exacerbate the condition of traumatized individuals is paramount to greater understanding of these disorders.

P1- 46

TREATMENT OVER OBJECTION: REVISING RULES, REDUCING GUARDIANSHIPS

Lead Author: Alexander de Nesnera, M.D.
Co-Author(s): David G. Folks, M.D.

SUMMARY:
New Hampshire statute describes a clear mechanism for involuntary hospitalization of individuals suffering from mental illness who are a danger to themselves or others. This statute provides for involuntary admission to designated receiving facilities (DRF), with due process rights that ensure judicial review. Involuntary hospitalization to a DRF does not equate to involuntary treatment.Individuals retain the right to refuse psychiatric treatment, unless a psychiatric emergency is declared due to imminent risk of harm to self or others.
The New Hampshire Code of Administrative Rules describes two rules that define how an individual may receive treatment over their objection. The first (He-M 305) authorizes short-term involuntary treatment for no longer than is necessary to resolve an emergency, but in no case longer than 24 hours.The second (He-M 306) allows for involuntary treatment, up to 45 days, for individuals hospitalized on a long-term probate commitment to a DRF.

A significant revision in the He-M 306 rule in 2009 allowed for up to four treatment authorizations over an individual's objection, with a limit of two such treatment authorizations during one continuous DRF hospital stay.The definition of a psychiatric emergency includes an exacerbation of a psychotic disturbance (as was initially defined), and/or psychiatric decompensation as a serious condition warranting immediate psychiatric intervention.
This revision to the He-M 306 rule has resulted in a 75% increase in the number of He-M 306 petitions filed by clinicians requesting authority to treat individuals over objection. Additionally, there was a 40% decrease in petitions filed for guardianship, a more restrictive treatment alternative for individuals refusing psychiatric care. The enhanced He-M 306 rule has resulted in treatment over objection in a timelier manner, thus avoiding the more restrictive alternative of guardianship. Other states may wish to revise their administrative rules regarding treatment over objection to expedite the care of individuals with severe psychiatric disturbance who refuse psychiatric intervention.

P1- 47

RANDOMIZED CONTROLLED TRIAL OF ART THERAPY IN CONJUNCTION WITH COGNITIVE PROCESSING THERAPY FOR VETERANS WITH COMBAT PTSD

Lead Author: Kathleen Decker, M.D.
Co-Author(s): Melissa Campbell, MA, Kerry Kruk, MA

SUMMARY:
OBJECTIVE: This was a mixed methods study to determine if individual art therapy might enhance treatment of combat PTSD compared to Cognitive Processing Therapy (CPT) alone.

METHODS: Twelve veterans with combat PTSD were randomized to receive either eight sessions of Cognitive Processing Therapy (CPT) or eight sessions of CPT with eight sessions of concurrent individual art therapy.
RESULTS: Veterans who received art therapy and CPT (n=6) had a reduction of PCL-M score that was statistically greater than that of veterans receiving CPT alone (n=6) (11.5 vs. 2.0, p=0.01). Satisfaction with art therapy was rated an average of 4.7 out of 5 and satisfaction with CPT was rated an average of 4.0 out of 5 on a Likert scale (5=best). Comments from veterans receiving art therapy indicated that individual art therapy increased trauma processing and enhanced recollection of repressed memories compared to CPT alone, and provided a sense of safety. Veterans engaged in art therapy indicated they would like it to continue at the conclusion of treatment. Both sets of veterans endorsed that the therapeutic relationship contributed significantly to a positive outcome of treatment.
CONCLUSIONS: The results of this study supported the hypothesis that individual art therapy in combination with CPT may enhance treatment of combat PTSD. It also suggests that non-verbal forms of therapy, such as art, may enhance access to repressed memories and facilitate processing of trauma by a different mechanism than verbal trauma therapy.

P1- 48

MEDICATION & TREATMENT COMPLIANCE AND MORTALITY OF VETERANS WITH PSYCHOSIS AND SUBSTANCE USE DISORDERS FOLLOWING PSYCHIATRIC HOSPITALIZATION

Lead Author: Kathleen Decker, M.D.
Co-Author(s): Stephanie L. Peglow, D.O., Gregory Briscoe, M.D.

SUMMARY:
OBJECTIVE: To assess medication compliance, treatment compliance and mortality in a cohort of veterans prescribed antipsychotics following psychiatric hospitalization.
METHOD: The sample was comprised of 137 veterans who were hospitalized on an inpatient psychiatric unit from 2008-2009. Data was collected on all veterans who were prescribed antipsychotics during their inpatient hospitalization. The Veterans' Affairs national electronic medical record was used to determine medication and outpatient psychiatric visit compliance, re-hospitalization for medical or psychiatric purposes or emergency room visits. Medication compliance was determined using the total number of days of medication possessed divided by the days in the study period, excluding days while hospitalized. High medication compliance was defined as > 0.80 for the year. The number of ER visits and the days of inpatient hospitalization for medical and psychiatric reasons were calculated from medical records for one year following index hospitalization. Mortality rates were calculated based upon information from the electronic health record over a six-year period following index hospitalization. De-identified data was analyzed via SPSS, version 18.
RESULTS:
Analysis of variance (ANOVA) demonstrated that antipsychotic medication adherence was higher in those with more hospitalizations ($p<0.01$) and those with more outpatient visits ($p=0.08$). There was no significant difference in MPR by number of medications prescribed, nor by dose frequency. More veterans with psychosis and comorbid alcohol use disorder had a low MPR than those with psychosis without comorbid alcohol use disorder (73% vs. 44%, $p=0.005$). There was no significant difference in MPR for those with psychosis and other comorbid substance use disorders (cocaine, marijuana, opiates, and nicotine). Veterans with major depression with psychosis had a lower mean MPR than those with bipolar disorder with psychosis (0.42 vs. 0.72, $p=0.02$). A higher percentage of homeless veterans had a low MPR than those who were housed (78.7% vs. 58.8%, $p=0.02$). Veterans who were homeless on index admission did not differ significantly in the number of days of medical or psychiatric rehospitalization or ER visits from those who were housed prior to admission. Homeless veterans had a more days of subsequent treatment in mental health residential recovery treatment (20.0, SD 40.5 vs. 2.0, SD 10, $p<0.001$). The death rate was 18% overall and was much higher for veterans from Vietnam and Post-Vietnam service eras than in the general population of the same age (21%, 25% vs 5%, respectively). Veterans who died within 6 years had tended to have fewer psychiatric outpatient visits in the year following index hospitalization (2.7 SD 3.6 vs. 1.2 SD 2.1, $p=0.06$).
CONCLUSIONS: Comorbid alcohol use disorder and psychosis, as well as homelessness were associated with poorer compliance in veterans with severe psychiatric illness.

THE MENTAL HEALTH CARE FOR LOW INCOME/UNINSURED CHILDREN IN AN EASTERN IOWA COMMUNITY AS IT RELATES TO MENTAL HEALTH DISPARITIES

Lead Author: Nicole S. Del Castillo, M.D.
Co-Author(s): Elizabeth Homan MD MPH, Coreen Frank M.S.Ed, Hong Dai, Nancy Beyer MD

SUMMARY:
Objective: Assess differences suggestive of a mental health disparity in children seen in a University of Iowa Child Psychiatry Clinic (UC) verses a School Mental Health Clinic (SMHC) in an Eastern Iowa community.
Methods: Demographic data of school aged children (5-18 yrs) served at the UC and SMHC from August-May each year from 2010-14. Data included: DOB/age, sex, ethnicity/race, payer source/insurance, date of appointment, city and county.
Results: Most patients were males around 12.5yrs. The SMHC clinic is 1 morning/week, so the SMHC sees ~5% the patients the UC sees. From 2010 to 2014 both the UC and SMHC increased in providers. The SMHC students seen increased by about 50% with the additional provider. Approximately 25-30% at the UC are minority patients versus >60% Black and Latino patients at SMHC. From 2010-11 most Blacks and Latinos in the SMHC were uninsured. By 2012, the number of uninsured Latinos decreased by about 20% and the majority of Blacks were on Medicaid. As of 2014 at the SMHC, <25% are uninsured, >50% are on Medicaid, and about 18% have private insurance. Majority UC patients have private insurance or Medicaid/Medicare which has remained unchanged from 2010-2014. Most Blacks and Latinos at the UC are on Medicaid/Medicare and most Asians and Whites have private or "other" insurance. Multiracial patients often are on Medicaid.
Conclusions: The SMHC serves a high proportion of low income/ uninsured and minority/underserved populations in Iowa City, IA. A high proportion the minority/underserved populations are receiving medicaid/medicare or are uninsured. The number of SMHC patients remained the same from 2010-11 to 2011-12, but there was a decrease in uninsured likely due to increased resources to identify needs and facilitate resource utilization, and to increased resources in the state through Affordable Care Act.
The SMHC reduces barriers to care by providing services more accessible to students and families. The support of student family advocates enhances service provision to a higher proportion of the low income/uninsured and minority/underserved students in this community. Collaboration of the SMHC with primary care optimizes outcomes by addressing disparities in health care that may contribute to problems in academic achievement, legal difficulties, and overall health.
Expanding this SMHC helps identify sources of mental health disparities in Eastern Iowa with the hope of reducing and possibly eradicating these disparities with their devastating effects. Strengthening the resource capacity of schools improves identification, assessment and treatment services.

P1- 50

COPROPHAGIA IN A 69 YEAR OLD PATIENT WITH RECURRENT PSYCHOSIS

Lead Author: Fabrizzio A. Delgado, M.D.
Co-Author(s): Rabia Akram, Raj V. Addepalli MD

SUMMARY:
Coprophagia is defined as consumption of feces, which can be a common finding in animal behavior however it rarely presents in humans and can be related to an unusual form of pica. Coprophagia is typically associated with psychiatric or mental illnesses such as mental retardation, schizophrenia, Obsessive Compulsive Disorder, dementia, and brain tumors. It often presents with signs of malnutrition and infections. We discuss a case of a Caucasian elderly male with a history of schizophrenia and untreated psychosis that resulted in coprophagic behavior without significant malnutrition and infection but disorganized behavior. Through the use of antipsychotic medication patient's delusions subsided, behavior became less disorganized and coprophagic behavior resolved.

P1- 51

ARE THE PARAMETERS FOR CLOZAPINE DISCONTINUATION APPROPRIATE OR SHOULD THEY BE CHANGED?

Lead Author: Arashinder Dhaliwal, M.D.
Co-Author(s): Richard H McCarthy, MD,CM,PhD

SUMMARY:
Clozapine is only available on a No Blood/No Drug basis in the United Stages. Clozapine cannot be started if the WBC/ANC are equal to or less than 3500 mm3 and 2000 mm3 respectively. At WBC/ANC of 3000 mm3 and 1500 mm3 the treatment must be interrupted but clozapine can be restarted. Once the WNC/ANC drop below 2000 mm3 / 1000 mm3 clozapine must be discontinued and cannot be restarted. Blood test frequency is prescribed; under ordinary circumstances they are weekly for the first 6 months, then once every 2 weeks for 6 months and after one year bloods are required every 4 weeks. Patients taking clozapine for years must have blood tests every 4 weeks. In the face of a low WBC/ANC blood test frequency increases, appropriately so, since a low WBC/ANC may predict a potential agranulocytosis. There are rare case reports of late occurring agranulocytosis with clozapine but we know nothing about their risk factors or likelihood. The risk of a clozapine-induced agranulocytosis is seen to continue indefinitely and never goes to zero. The blood test requirements do not change.
We will present the cases of two women, both of whom have taken clozapine for more than 20 years and are largely recovered. Since starting clozapine both women live on their own in apartments that they maintain. Both have graduated from community college, and both have meaningful social lives and volunteer activities that they engage in daily. Both women spent at least 3 years in psychiatric inpatient facilities before starting clozapine; neither has been readmitted since clozapine was begun. Both women are well aware of clozapine's benefits and risks and both fully adhere to medical and psychiatric treatment recommendations. In the past year both women were healthy when they had an inexplicable drop in their WBC/ANC to slightly above the 2000/1000 discontinuation without the option of restart range. This precipitated a crisis for both patients and their families. In these specific cases the WBC/ANC rapidly recovered and the patients did not become medically ill nor were they rehospitalized.

However, a slightly lower WBC/ANC would have resulted in the loss of clozapine for both of them, something they both regarded as a disaster.
In the long term clozapine patient, we screen for neutropenia but deny care to avoid agranulocytosis. We assume that neutropenia and agranulocytosis that occur in the presence of clozapine are also caused by clozapine. We respond reflexively as if there was no place to recognize the wishes of patients to influence and cooperate in their treatment. We act as if neutropenia and agranulocytosis are as unmodifiable and untreatable now as they were when clozapine was reintroduced. We fail to recognize that other new medications with similar neutropenia and agranulocytosis risks are not so rigidly controlled. We will discuss these questions and present information on how patients finesse their low WBC/ANC counts in order to stay on clozapine at any cost.

P1- 52

RESULTS FROM EXPERT CONSENSUS SURVEY: SUBOPTIMAL OUTCOMES AND ADHERENCE TO MEDICATION IN SERIOUS MENTAL DISEASE

Lead Author: John P. Docherty, M.D.
Co-Author(s): Ainslie Hatch, DClinPsych, PhD, Daniel Carpenter, PhD, Ruth Ross, MA, Peter J Weiden, MD

SUMMARY:
Introduction:Many patients with severe mental illness do not achieve optimal outcomes. Clinicians need to assess the possible reasons why outcomes have fallen short, and then consider suitable responses. Underlying causes often remain obscure, but can include limited efficacy, medical or substance abuse comorbidities, and problems with adherence. There is no consensus guide to the relative importance of these causes, the order in which they should be investigated or, specifically, the methods to ascertain degree of adherence accurately.
Objective:To conduct a quantitative expert opinion survey on the causes of suboptimal outcome and on the modalities used to assess treatment adherence in patients with schizophrenia, bipolar disorder, and major depressive disorder.
Methods:The survey followed the expert consensus methodology previously used by this group[1] to expand and clarify the results from a prior expert survey on adherence in serious mental illness. This method provides quantitative and replicable data to inform practice in areas where literature is scant or ambiguous. A panel of 58 experts in psychiatry with an average of ~30 years experience in clinical practice and research completed the survey, which contained 23 questions with responses on a 9-point Likert scale (eg, 1=not at all important to 9=extremely important). In this report, we show results from the 4 survey questions related to causes of suboptimal outcome and the 2 survey questions related to current strategies of adherence assessment. A chi-square test of distributions of scores grouped into 3 levels (1-3, 4-6, 7-9) was used to determine consensus ($P<0.05$) for each response. The designation of first-line categorical rating was based on the 95% confidence interval (CI) of the mean rating with a CI lower boundary of >6.5.
Results:The experts rated treatment adherence, inadequate medication efficacy, active substance abuse, and psychosocial stress or life changes as the most important factors (first-line) to evaluate when there is suboptimal response such as persistent residual symptoms,

fluctuation of symptoms or acute symptom exacerbations. None of these factors was rated as assessable with accuracy, and adherence was rated as least likely to be assessed accurately. A negative correlation (-0.63) was found between the responses to questions related to frequency of use of various methods of assessing adherence and their perceived accuracy. In sum, the strategies most frequently used by clinicians to assess adherence are also deemed the least accurate.
Conclusions:Medication adherence status was rated as the most important factor to assess in a patient with suboptimal outcomes. Non-adherence was deemed least amenable to accurate assessment with the current methods available in clinical practice. These results suggest an urgent need for more accurate and reliable adherence assessments for use in routine clinical practice.
1. Kahn DA et al. Psychopharmacol Bull.1997;33:631-9.

P1- 53
3D SHAPE ANALYSIS OF THE HIPPOCAMPUS IN INDIVIDUALS AT HIGH FAMILIAL RISK FOR DEPRESSION
Lead Author: Turkan Ece Durmusoglu, M.D.
Co-Author(s): Onur Ugurlu, Ph.D., Sebnem Tunay, Ph.D, Fatma Simsek, M.D., Omer Kitis, M.D., Ali Saffet Gonul, M.D.

SUMMARY:
INTRODUCTION: Hippocampal volume reduction is one of the repeated finding in major depressive disorder (MDD), however the results are inconsistent. Some of the studies did not detect any volume reduction in first episode patients and some of them detected volume reduction only in highly reccurent and treatment resistant patients, supporting that it is a consequence of depression and occur over time after disease onset. On the other hand, some studies suggested that smaller hippocampal volume might be a predisposing factor before the onset of the clinical symptoms and influences the development and course of illness. It is not yet clearly known that if the smaller hippocampal volume is a pre-existing vulnerability risk factor or a result of high cortisol toxicity reported in depressed patients on the long-term. One way to solve this problem is to investigate hippocampal volume in high risk population before they experience a depressive episode. Therefore, as the family history is the
strongest risk factor for depression here we investigated hippocampal formation (HF) in healthy daughters of mothers with reccurent familial depression and their healthy controls. To detect the minor changes in the hippocampus of the highrisk group, we further did shape analyses in addition to volume analyses.
METHODS: We recruited 27 healthy daughters of mothers with reccurrent familial depression as high familial risk for
depression group and 26 healthy girls without any personal or family history of depression as low familial risk for
depression group. Participants were evaluated with SCID-I, HAM-D-17, STAI and 3 Tesla MRI was performed. Hippocampal borders were outlined manually using ITK-SNAP software. The 3D HF shape analysis is based on the use of Spherical Harmonic Basis Functions (SPHARM).

MANCOVA with Risk (high-risk, low-risk) as between subjects factor and TBV and age as covariates was used to compare right and left HF volumes and
shapes between the groups.
RESULTS: Although total right and left HF volumes did not differ between the groups, shape analyses revealed a significant group effect in the right hippocampus. The highrisk group showed some contracted and expanded shape deformations in right hippocampal head (subiculum, CA1, CA2-3).
DISCUSSON: Our results suggested that, although they might not cause total volume differences among the groups,some subregional deformities might be present in the hippocampus of the high-risk group before symptoms occur. The observed deformities in the right hippocampal head might be a vulnerability risk factor and play
a role in development of symptoms in long term. Therefore, the pre-existence of hippocampal deformities in genetically high-risk group might be accepted as an endophenotype marker for depression.

P1- 54

EVALUATING BEHAVIORAL HEALTH-PRIMARY CARE INTEGRATION AT BOSTON HEALTH CARE FOR THE HOMELESS PROGRAM

Lead Author: Elizabeth Elman, B.S.
Co-Author(s): Lakshmi Karra, M.S., Nikhil A. Patel, M.S., Esther Valdez, M.D.

SUMMARY:
BACKGROUND: People with mental illness have more than double the risk of all-cause mortality than the general population and increased morbidity from many medical conditions. In addition to the excess risk imposed through a high prevalence of mental illness, people who are homeless are subject to additional stresses that result in mortality rates two to five times the general population. Boston Health Care for the Homeless Program (BHCHP) determined that integrating behavioral health services with primary care (Integration) would be necessary to provide comprehensive care to their clients, who are homeless and have a high burden of mental illness.
OBJECTIVE: This study seeks to assess baseline Integration practices through provider and client perspectives in order to inform Integration-focused quality improvement efforts at BHCHP.
METHODS: Provider and client surveys were developed with stakeholder input, harnessing items from the RAND evaluation of the SAMHSA Primary and Behavioral Health Care Integration Grant Program to evaluate all four subdomains of Integration (Co-location, Shared structures and systems, Integrated practice, and Culture). The provider survey was administered electronically to all BHCHP clinical staff. The client survey was administered by volunteers to a convenience sample of clients at the BHCHP main clinic site. No demographic or identifying information was collected. The study was deemed exempt from the institutional review board at the Harvard T.H. Chan School of Public Health.
RESULTS: Seventy five providers (31% response rate) and 45 clients responded to the respective surveys. Less than one third of providers endorsed having shared treatment plans for more than half of their patients. Just over one third of providers reported at least weekly

transdisciplinary meetings. 93% of clients indicated that all their health needs were met at today's appointment, and 64% of respondents indicated that psychosocial issues had been addressed at their appointment.
CONCLUSIONS: The prospectively developed and employed framework measures all subdomains of Integration in a way deemed informative to key BHCHP stakeholders. Results from this study indicate baseline high patient satisfaction with care and room for improvement on process metrics for Integrated care. Results of the baseline Integration evaluation are currently being used to inform efforts to improve Integration at BHCHP. This pragmatic Integration evaluation framework could be easily adapted to other clinical organizations looking to improve Integration.

P1- 55

TREATMENT RETENTION AND CLINICAL AND REHABILITATION OUTCOMES OF PATIENTS WITH SEVERE SCHIZOPHRENIA. A 6-YEAR FOLLOW-UP

Lead Author: JUAN J. FERNANDEZ-MIRANDA, M.D., Ph.D.
Co-Author(s): Díaz-Fernández S, MHN.

SUMMARY:
Background: to increase treatment compliance is important to reach clinical and rehabilitation goals in people with severe schizophrenia.
Objectives: To know the retention in treatment (and reasons for discharge) of people with severe schizophrenia enrolled in a specific programme for them and factors related, and also treatment (clinical and functional) outcomes.
Methods: A 6-year prospective, observational, open-label and not randomized study of patients with severe schizophrenia (IDC 10: F 20; CGI=>5) undergoing specific severe mental illness programme. The study was conducted from January 2008 to September 2014 in Gijón (Spain) (N=200; average age=43.1+/-10.6 years old; 58% men and 42% women). Assessment included the Clinical Global Impression severity scale (CGI-S), the Camberwell Assessment of Needs (CAN) and the WHO Disability Assessment Schedule (WHO-DAS). Time in treatment and reasons of discharge were measured. Laboratory tests (haematology, biochemistry and prolactin levels), weight, medications prescribed and adverse effects were reported.
Results: CGI at baseline was 5.86+/-0.7. After six years 48% of patients continued under treatment (CGI= 4.31+/-0.8; p<0.01); 31% were medical discharged (CGI=3.62+/-1.6; p<0.001) and continued non intensive treatment in mental health units; DAS decreased in the four areas (self-care and employment p<0.01; family and social p<0.005) and also CAN (17.2+/-2.8 vs. 9.1+/-3.2; p<0.01); 7% had moved to other places, continuing treatment there; 8% were voluntary discharges. Eight patients dead during the follow up; three of them committed suicide (1.5%). 45% of all of them were treated with atypical long-acting antipsychotics, with good tolerability and few side effects or relevant biological parameters alterations (among them, only 4% were voluntary discharges).
Conclusions: Retention of severe mentally ill patients with schizophrenia in a specific programme was really high, getting remarkable clinical and functional improvement. Long-acting medication seemed to be useful in improving treatment adherence.

P1- 56

PLAYING SICK: MALINGERING AND MOTIVATING FACTORS FOR ADMISSION TO AN ACUTE CARE INPATIENT PUBLIC SECTOR HOSPITAL

Lead Author: David G. Folks, M.D., M.S.
Co-Author(s): Matthew Davis, M.D., Alex de Nesnera, M.D.

SUMMARY:
New Hampshire Hospital (NHH) is a 158-bed subspecialty hospital treating individuals involuntarily hospitalized due to being a danger to themselves or others as a result of mental illness. Approximately 2000 admissions of adults occur annually with 2% receiving a diagnosis of malingering. Half of individuals found to have malingering have a co-morbid personality disorder and two-thirds are diagnosed with substance use disorder.
An analysis of 40 cases seen over the course of a year reveals that most often, these individuals possess five distinct motivating factors that are motivating factors to seek admission. These include homelessness, legal issues, drug-seeking, avoidance of harm from others, and, disability-seeking.
Five case examples are provided to illustrate the clinical presentation, mental status examination, and pertinent psychosocial history for each of the more common case scenarios. Differential diagnosis includes factitious disorder with psychological presentation and somatic symptom disorder. Other clinical and psychosocial factors are identified that serve to facilitate discharge from inpatient care and prevent re-admission except when medically necessary.
Management principles are outlined with respect to inpatient settings. The person who is suspected purely of malingering is more of a management problem than a therapeutic issue. Malingering may not be conclusively affirmed. However, our cases suggest that subtle communication and ongoing observation will often rule in malingering while ruling out differential diagnoses. Co-occurring substance use disorders and co-morbid psychiatric disorders should be assiduously evaluated and treated accordingly. Face-saving mechanisms for allowing the person to discard their feigned symptoms or alter their history has been of value. Often, those individuals seeking drugs or shelter will leave treatment, and upon discharge from hospital level care have been known to seek treatment elsewhere. Others, through observation, created such sensational caricatures of illness that their malingering became obvious to all. Nevertheless, these cases represent a challenge to those who work in emergency department and inpatient settings, and represent the extreme end of the continuum of abnormal illness behavior.
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Bass C, Halligan P: Factitious disorders and malingering: challenges for clinical assessment and management. Lancet 2014; 383: 1422-1432.

P1- 57

CULTURAL TENDENCIES RELATED TO EXORCISM AS A TREATMENT ALTERNATIVE TO TREATMENT RESISTANT PSYCHOSIS, COMMONLY REFERRED AS DEMONIC POSSESSION

Lead Author: Suhey G Franco Cadet, M.D.
Co-Author(s): Maria Saiz, M.D., Edward Hall, m.d., Asgar Hossain, M.D., Navaid Iqbal, M.D.

SUMMARY:
Many cases of demonic possession have masked major psychiatric disorders. Failure of conventional therapies and treatment, together with different cultural beliefs, have increase the frequency of other alternatives when managing a individual presenting with psychotic symptoms.
This is the case of a 16 year old female with no previous history of psychosis, that presented with mood symptoms and after hospitalization, started to exhibit psychotic symptoms. She was very disorganized, agitated, spitting at the staff. Later on, she reported auditory hallucinations of multiple voices telling her to hurt herself, making her believe she was "possessed". Despite multiple medication trials with different antipsychotics, she remained aggressive and exhibited the symptoms. An exorcism was considered based on poor treatment response and cultural tendencies of her family, of hispanic origin. After a long discussion, medications were continued and the patient responded after several months of treatment, only partially. A priest was called to offer prayers for the patient, but no formal exorcism was performed.

P1- 58
MENTAL HEALTH AWARENESS TOUR: A TOOL TO IMPACT A COMMUNITY
Lead Author: Vanessa Torres-Llenza, M.D.
Co-Author(s): Auralyd Padilla, MD,Dimas Tirado-Morales, MD,Hector Colon- Rivera, MD
Lisette Rodriguez-Cabezas, MD

SUMMARY:
Background:
Puerto Rico (PR) is a territory of the United States with commonwealth status. The island has its own system of government although subject to US federal law and regulations. More than 50% of the population has a mental health disorder in Puerto Rico and about 800,000 people suffer a mental health disorder that could be described as moderate or severe. In 2003, 66% of those did not receive any mental health treatment services. Similar to the USA, PR faces a need for more psychiatrists. Migration from PR to the continental USA is therefore imperative to have more psychiatrists. This initiative was designed to raise awareness of these issues.
Objectives:
1. Discuss the role of a Mental Health Awareness Tour as a tool for psychiatrists to reach out to the community.
2. Demonstrate the use of advocacy and media in promoting mental health education, and reduction of stigma about mental illness.
Methods:
Supported by the American Psychiatric Associations'(APA) minority fellowships, five APA resident members' with ties to Puerto Rico traveled to the island to carry out the first "mental health awareness tour". This included seminars at two medical school campuses, middle and high schools in conjunction with local medical students and psychiatry residents to inspire

them to pursue psychiatry as a profession. The team visited a TV news show, a radio station and a local mall to raise awareness about mental illness symptoms. A visit to lawmakers to talk about issues related to the need for improved mental health access and increased training opportunities in PR.
Results:
The community showed an interest and demonstrated a need for mental health outreach. The news broadcast resulted in numerous phone calls to locate services demonstrating that there is a dearth of access to mental health care. The radio show was informative and we were invited back to educate more on the topic. The high school seminars were well attended and students were pleased to have the chance to ask questions about the path to a medical career. The seminars at the medical schools were also well attended and the students expressed interest about doing a psychiatry residency. The visit with legislators promoted mental health and it allowed us to understand the current policies on psychiatric services and medical residencies. The tour helped identify and provide mentorship to middle and high school students who are considering medical education and medical students interested in psychiatry.
Conclusion:
The tour succeeded in raising awareness and generating interest in potential challenges faced by psychiatry residents in Puerto Rico and those training in the US. This mental health tour may serve as model for raising awareness and impacting other communities in the US.Â Next year, we will incorporate outcome measures for each of the activities. Furthering collaborations and advocating change through advancements in government policy will continue to be a priority.

POSTER SESSION 2

P2- 1

PALIPERIDONE PALMITATE ONCE-MONTHLY THERAPY FOR PATIENTS WITH SCHIZOAFFECTIVE DISORDER AND ACTIVE DEPRESSIVE/PSYCHOTIC EPISODES

Lead Author: Dong Jing Fu, M.D., Ph.D.
Co-Author(s): Cynthia A. Bossie, Ibrahim Turkoz, Edward Kim

SUMMARY:
Background: Few controlled studies have examined the pharmacologic management of depressive episodes in patients with schizoaffective disorder (SCA). Injectable paliperidone palmitate once-monthly (PP1M) has been shown to be effective for SCA maintenance treatment. This exploratory analysis examined the effect of PP1M as monotherapy or adjunctive to antidepressants (AD) or mood stabilizers (MS) on active depressive and psychotic episodes in patients with SCA.
Methods: Subjects experiencing an acute exacerbation of psychotic and active mood symptoms were enrolled in this multiphase study (NCT01193153). After screening, subjects were treated with PP1M during an open-label (OL), 13-week, flexible-dose, lead-in phase. Those who met stabilization criteria (Positive and Negative Syndrome Scale [PANSS] score â‰¤70 plus Young Mania Rating Scale [YMRS] score â‰¤12 plus Hamilton Rating Scale for Depression-21 [HAM-D-21] score â‰¤12) continued in a 12-week, fixed-dose, stabilization

phase. Descriptive statistics assessed the proportion of subjects with a clinically relevant reduction in HAM-D-21 score (â‰¥4-point reduction), proportion meeting stabilization criteria, and proportion meeting remission criteria (ie, HAM-D-21 â‰¤7 plus YMRS â‰¤7 plus total PANSS score â‰¤60) at the end of the lead-in period. Safety and tolerability were also assessed. This analysis focused on subjects with a screening episode of depression and psychosis.
Results: Of 667 enrolled subjects, 320 (48%) had a screening episode of depression and psychosis. Of these, 148 (46%) received PP1M monotherapy and 172 (54%) received PP1M adjunctive therapy. At baseline, mean (SD) HAM-D-21, YMRS, and PANSS scores were 24.0 (5.6), 13.2 (6.7), and 89.6 (11.6) in the monotherapy group and 25.5 (5.7), 11.4 (5.6), and 85.8 (12.6) in the adjunctive therapy group, respectively. In the PP1M monotherapy and adjunctive groups, a â‰¥4-point reduction in HAM-D-21 score was observed in 84.4% and 81.8% of subjects, respectively, at the end of the lead-in period. Proportions of subjects in the monotherapy and adjunctive groups who met stabilization criteria were 63.3% and 65.9%, respectively, at the end of the lead-in period. Proportions of subjects in the monotherapy and adjunctive groups who met remission criteria were 13.6% and 12.4%, respectively, at the end of the lead-in period. Most common (â‰¥5% in both groups) adverse events during the 25-week OL treatment in the monotherapy and adjunctive groups, respectively, were injection site pain (11.5%, 8.1%), weight increased (7.4%, 8.7%), akathisia (13.5%, 9.9%), and insomnia (8.8%, 8.7%).
Conclusion: In this OL single-arm study phase, PP1M as monotherapy or adjunctive to AD/MS demonstrated efficacy for controlling depressive, manic, and psychotic symptoms in SCA patients with active episodes of depression and psychosis.
Support: Janssen Scientific Affairs LLC.

P2- 2

AN INTEGRATED PSYCHIATRY/BEHAVIOR ANALYSIS CLINIC- A NOVEL APPROACH TO THE CARE OF INDIVIDUALS WITH AUTISM AND INTELLECTUAL DISABILITIES.

Lead Author: Michael Fueyo, M.D.
Co-Author(s): Sarah Mattern, LCSW, BCBA

SUMMARY:

Individuals with autism(ASD) and intellectual disabilities(ID) have a high prevalence of co-morbid psychiatric disorders and problematic behaviors including aggression and self-injury. Treating these conditions requires attention both to the individual's medical/psychiatric needs as well as to the presence of operant behaviors. This poster will describe a specialty outpatient clinic for individuals with ASD and/or ID where care is delivered jointly by a psychiatrist and a board certified behavior analyst. The functioning of the clinic is described in some detail. A series of patients will be presented with outcomes measured by scores on the Aberrant Behavior Checklist as well as by a measure of pharmacologic treatment. This model may offer a new integrated approach to care with the potential to reduce the reliance on pharmacologic interventions while also reducing problematic behaviors.

P2- 3

SERUM LEVELS OF AGOUTI-RELATED PEPTIDE AND LEPTIN IN PATIENTS WITH SCHIZOPHRENIA ON RISPERIDONE MONOTHERAPY

Lead Author: Yasemin Görgülü, M.D.
Co-Author(s): M. Bülent Sönmez, Rugül Köse Çınar, Naci Parlak, Okan Çalıyurt

SUMMARY:
Introduction: Agouti-related peptide (AgRP) is one of the hypothalamic hormones that works by increasing appetite and decreasing metabolism, thus leading to weight gain. Leptin also play important role in the regulation of body weight, food intake and energy homeostasis, and have been suggested to be important biomarkers of metabolic syndrome.
Hypothesis: The aim of the study was to find out if AgRP and leptin levels in subjects with schizophrenia on risperidone monotherapy is higher compared with healthy controls.
Methods: We determined fasting serum AgRP, leptin, cortisol and cholesterol levels in 9 subjects with schizophrenia on risperidone monotherapy for at least 2 months and 9 healthy, age and sex matched controls. All patients were in remission.
Results: Mean ages are 39.0Â±8.8 years in patient group and 37.78Â±8.2 in healthy subjects. There was no difference for body mass index (29.70Â±6.61 vs. 25.15Â±3.40 kg/m2, p=0.08) and body weight (77.62Â±18.66 vs. 70.55Â±13.88 kg, p=0.38) between patients taking risperidone and control group. Mean risperidone dosage is 7,55Â±3,20 (min:3, max:12) mg/day. Mean risperidone usage period is 20,33Â±19,22 (min:2, max:50) months. AgRP levels of patients were found to be higher than those of healthy controls (11.51Â±4.41 vs. 6.74Â±2.84 ng/mL, p=0.02). There was no difference for leptin levels between patients taking risperidone and control group (6.04Â±5.76 vs. 4.13Â±2.84 ng/mL, p=0.79). There were no significant differences in the serum levels of leptin, cortisol and cholesterol between these two groups.
Conclusions: We conclude that treatment with risperidone in schizophrenia is associated with increased level of AgRP, but not leptin, cortisol or cholesterol.
Discussion: Risperidone-induced body weight gain and hyperphagia could be through regulating AgRP signalling in the hypothalamus. Risperidone significantly elevates mRNA expression of hypothalamic AgRP compared to controls in juvenile rats (Lian et al. 2015). We assume that, changes in hypothalamic expression of AgRP are reflected by blood levels of AgRP. In our knowledge this is the first human study about risperidone and AgRP level and our results are consistent with the Lian et al.'s animal study. Results of some studies show that treatment with olanzapine or clozapine does not affect AgRP levels comparing with healthy control group. (Basoglu et al. 2010; Ehrlich et al. 2012, WysokiÅ„ski et al. 2015). Potvin et al.'s 2015 meta-analysis shows that risperidone produced nonsignificant (small) leptin elevations. Our result for leptin is consistent with this study. Low number of patients, and lacking of the schizophrenic patients without medicine are our study's limitations. However, all of our patients are in remission; so in this way we have tried to overcome the problem by excluding/minimazing the effects of the disease.

P2- 4

CHALLENGES FACED BY CLINICIANS IN THE CARE OF TRANSGENDER PATIENTS

Lead Author: Tanuja Gandhi, M.D.
Co-Author(s): Ajita Mathur, MD, Carolina Retamero, MD, Sachin Mehta, MD

SUMMARY:

Introduction:
Research indicates a high prevalence of discrimination, bullying and harassment of Lesbian Gay Bi-sexual and Transgender (LGBT) populations in various settings including healthcare. We present a case series that highlight the problem of gender-based stigmatization and the associated challenges.
Case1: 23y/o transgender female with history of depression who presented with increasing thoughts of self-harm due to sadness over not being accepted as a boy by her parents.
Case2: 25y/o transgender male with history of anxiety and bullying who presented post suspected suicide attempt reported distress over variable acceptance towards his expressed identity as a female by his family.
Case3: 30y/o transgender male who initiated the process of transition using hormone injections purchased off the street presented for outpatient treatment seeking help to transitioning completely.
Discussion:
In all the cases, the physicians faced unique challenges in providing care for their patients. Results from the National Transgender Discrimination Survey indicate the existence of discrimination in health-care settings with delay in needed health-care because of disrespect and discrimination by providers. But, the lack of specific training and clear policies creates a challenge for both the patient and physicians. For example, there can be disagreements wrt. room assignments, bathroom privileges, visitation policies, hormonal therapy and transition surgery to name a few. Further, state-specific variations in LGBT laws such as relationship recognition and conversion therapy laws by themselves pose unique challenges towards providing equitable care.
Conclusion:
We need clear guidelines or transgender-affirming policies for clinical settings to aid clinicians in providing good care and thus minimize any gender-based discrimination. Further this is possible by using education as a tool to train both physicians and the supporting staff aiming to incorporate transgender-sensitive care in our treatment practices

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P2- 5

OPINIONS REGARDING BENZODIAZEPINE USE AMONG TRAINEES IN PSYCHIATRY

Lead Author: Amir Garakani, M.D.
Co-Author(s): Christine M. Chang, M.D., Nathaniel Mendelsohn, M.D., Kyle A.B. Lapidus, M.D., Ph.D.

SUMMARY:
Background: Benzodiazepines are among the most widely prescribed medications in psychiatry and in general, in spite of warnings about the risk of tolerance, abuse and dependence, withdrawal, and side effects including links to dementia. There has been limited investigation of the opinions of psychiatrists about benzodiazepines, particularly what psychiatry residents are taught about this drug class and how the teaching and practices of their supervisors or peers shapes their opinions about benzodiazepines.
Objective: The purpose of this study was to survey psychiatric trainees in the United States about their didactic and clinical experience with benzodiazepines and investigate how these experiences shape their opinions about this drug class and their likelihood to prescribe benzodiazepines in the future.
Methods: The 14-question survey was distributed to all trainees (residents and fellows) at training programs in the United States through an invitation from their training directors with a link to the online survey.
Results: Of the 466 programs e-mailed, with an estimated 1345 trainees, a total of 97 programs (20.8%) and 424 trainees (31.5%) responded. Most trainees (80.7%) reported having formal didactics on benzodiazepines early in training and most rated their instructors as Above or Well Above Average while the majority rated their own knowledge as Average. Most trainees prescribed benzodiazepines for substance detoxification or agitation and reported rare adverse events. Trainees cited the observation and opinion of supervisors as the primary factors affecting likelihood of future benzodiazepine prescribing. Finally trainees commonly reported some perceived pressure to prescribe benzodiazepines when they did not feel comfortable doing so but trainees were split on whether there is a bias against prescribing at their program or in general.
Conclusion: The survey indicated that most trainees are receiving both didactic and clinical exposure to benzodiazepines and feels adequately trained and exposed and that despite perceived pressure to prescribe would be comfortable prescribing themselves in the future.

P2- 6
EXAMINING LITERACY AMONG PUBLIC URBAN MENTAL HEALTH SERVICE USERS
Lead Author: Suzanne Garverich Ms.
Co-Author(s): Alisa K. Lincoln, PhD, Christopher Prener, MA, Wallis Adams, MA.

SUMMARY:
Background: The relationship between literacy and health has been well documented, with research showing that people with lower literacy skills have worse health outcomes for a variety of chronic conditions, including cancer, diabetes and asthma. However, little is known about the extent to which people using public mental health services are impacted by limited literacy or the ways in which literacy relates to mental health, including access to treatment and recovery for people with serious mental illness (SMI).

Objectives: To assess three literacy skills: reading comprehension, aural literacy and numeracy, among people using urban outpatient mental health services in order to more fully understand the impact of limited literacies among people with SMI.
Methods: Structured interviews were conducted with adults (n=294) at two urban outpatient mental health centers. The interview assessed participants' literacy skills: reading, aural, and numeracy. Reading comprehension and aural literacy were measured by subsets of the Woodcock Johnson III (WCJ III) Test of Achievement, Test 9 and Test 4, respectively. Grade equivalent scores were used. Numeracy was assessed by the Lipkus Numeracy Scale, measured by how many questions out of 11 were correct. Data also included socio-demographic and diagnostic information, client service utilization, and factors potentially related to literacy including: cognitive functioning, stigma, experiences of discrimination, civic engagement, social supports and perceptions of recovery.
Results: The mean grade level for reading comprehension is grade 7.5 (SD= 5.1).The mean grade level for aural literacy is lower, at a grade 4.6 (SD=3.93). The mean number of items correct on the Lipkus is 4.84 (SD=2.76). There is moderate positive correlation amongst the three literacy measures. Reflective of urban public mental health settings the sample is diverse across multiple domains, including race/ethnicity, age, gender and level of education. Finally, correlations among the literacy variables and other study variables including gender, race/ethnicity, age, education and income will be presented.
Implications: The service users at the two urban outpatient mental health centers have extremely low literacy skills across the three domains: reading comprehension, aural literacy, and numeracy. They are significantly lower than the general population. These findings have important implications for how people with SMI experience their illness and the mental health system as well as their ability to successfully manage their illnesses. Reading comprehension, aural literacy and numeracy have been indicated to be critical skills in disease management. They also suggest that mental health providers and policy makers should consider the role of literacy skills and the needs of those seeking mental health services with limited literacy in their work with patients, development of treatments, programs and policies.

P2- 7

CORRELATES OF PATHOLOGICAL HOARDING BEHAVIOR IN OLDER ADULTS

Lead Author: Gregory Gentile, B.A.
Co-Author(s): David M. Roane, M.D., Gillian Wilson, M.A., Alyssa Landers, M.A., Fumitaka Hayashi, Ph.D., McWelling Todman, Ph.D.

SUMMARY:

Introduction: Hoarding Disorder (HD) is now a stand-alone diagnosis in DSM 5. Characterized by difficulty in discarding unneeded possessions and distress or dysfunction due to excessive clutter, HD remains understudied in older adults. Here we present results from an ongoing study of hoarding behavior among community-dwelling older adults. The study is part of an intervention-focused project, administered by the Educational Alliance and Mount Sinai Beth Israel.
Methods: Study participants were identified on the basis of documented evidence of hoarding behavior obtained during home visits. The sample consists of 18 participants (11 females, 7

males), ranging in age from 54 to 85 years (M= 68.81). Participants received formal clinical evaluations to establish a comprehensive psychiatric diagnosis. Participants also received a battery including: The Montreal Cognitive Assessment (MOCA), the Geriatric Depression Scale (GDS), Beck's Anxiety Inventory (BAI), staff and participant reported Clutter Image Rating scales (CIR), the Savings Inventory Revised (SIR), the Boredom Proneness Scale (BPS), the State Boredom Scale (SBS) the Self-control Scale (SCS), the Indecisiveness Scale (IS), the Adult ADHD Self-Report Scale Screener (ASRS), the History of Clutter and Social Isolation Interview (HOCASII), and a demographic questionnaire.
Results: All participants met criteria for Hoarding Disorder. Cognitive performance on the MOCA was relatively intact for this geriatric sample (M=25, SD=4.3). Staff reported CIR scores (M=5, SD=2.1) were slightly higher than participant reported CIR scores (M=4, SD=2.1), with a score of 4 or greater indicating significant clutter. Staff and participant reported CIR scores were highly positively correlated (r=.826) indicating the subjects have a degree of insight. Additionally, subjects demonstrated mild depression based on GDS scores (M=10, SD=7.7) and a low level of self control on a scale of 1-5 (M=2, SD=.4). The current sample also exhibited a degree of self-reported loneliness on a scale of 0-60 (M=40, SD=17.5). The measures of hoarding severity, SIR and CIR, failed to correlate with each other. The participant reported CIR scores positively correlated with scores on the MOCA (r=.675) and the SCS (r=.586). The HOCASII indicated that subjects report an increase in clutter with each decade of life.
Conclusions: Results of a study of older adults with HD suggest that factors previously reported to be associated with hoarding behavior in the general population, such as low levels of self-control, depression, and loneliness, may hold true for older adults. Although the sample is small, there is no evidence that cognitive impairment is a significant predictor of hoarding severity. Instead, the findings have demonstrated that the higher participant reported CIR scores are, the higher scores of self-control and cognitive functioning are. This reveals that individuals with hoarding disorder may exhibit a degree of insight.

P2- 8

"MIRACLE DRUG" BLESSING OR BLIGHT?" A CASE REPORT OF WORSENED DEPRESSION AND SUICIDALITY AFTER INITIATION OF TREATMENT WITH SOFOSBUVIR AND RIBAVIRIN.

Lead Author: Arpita Goswami Banerjee, M.D.
Co-Author(s): Dr. Sachin Mehta, M.D.

SUMMARY:

Introduction:
Hepatitis C virus (HCV) infection affects approximately 3.2 million persons in the USA. In late 2013, The Food and Drug Administration approved the new direct acting antiviral drugs, sofosbuvir to treat chronic HCV infection.
Interferon based treatments are poorly tolerated, and are either ineffective or contraindicated in most patients.
Sofosbuvir , a direct-acting antiviral agent has been found to be safe and well tolerated when administered alone or with ribavirin. It is a major breakthrough in the care of HCV infection to achieve cures, and preventing interferon associated morbidity and mortality.

The authors present the case of a 53-year-old lady with history of choric Hepatitis C and Bipolar 1 disorder with severe exacerbation of depressive symptoms and suicidal ideation six week after initiation of treatment with sofosbuvir and ribavirin.

Case Report:

MC, a 53 year old Caucasian female, with history of Bipolar Disorder Type 1 and Hepatitis C presented with worsening depression and suicidal ideations. She was started on sofosbuvir and ribavirin for treatment of refractory Hepatitis C, three weeks prior to this. However she described her current symptoms as the 'worst depression ever ' with 'suicidal thoughts and plans to overdose on medications '. MC attributed the worsening of her symptoms to the 'new Hepatitis medications'.

She described experiencing nausea, hair loss, increased tearfulness and 'being sucked into a dark hole of depression', three weeks after starting sofosbuvir and ribavirin. MC was stabilized after restarting her psychotropic medications with gradual titration of mood stabilizer, supportive psychotherapy and group therapy.

She was provided psychoeducation regarding treatment compliance, medication adherence and was advised to follow up with her hepatologist.

Discussion:

Our case underscores the fact that treatment with sofosbuvir and ribavirin for Hepatitis C can cause worsening depression and suicidal ideations.

Interferon-based treatment is not suitable for many patients with hepatitis C virus infection because of contraindications such as psychiatric illness (depression and increased suicidal thoughts), and a high burden of adverse events.

Such patient benefit from the efficacy and safety of an interferon-free regimen like a fixed-dose combination of the sofosbuvir and ribavirin.

However clinicians should be cautious while prescribing these agents to patients with pre morbid psychiatric illness to avoid exacerbation of depressive symptoms and risks of suicidality, Robust treatment and monitoring of depression is necessary to limit psychiatric morbidity in HCV treatment.More research needs to be done on initiating non-interferon treatment regimes for patients with Hepatitis C and pre existing bipolar disorder and /or depression.

P2- 9

ICBT VERSUS CBT: INTERNET-ASSISTED COGNITIVE BEHAVIOURAL THERAPY FOR ADULTS COMPARED TO TRADITIONAL CBT IN A CANADIAN HOSPITAL OUTPATIENT SETTING

Lead Author: David Gratzer, M.D.

Co-Author(s): Faiza Khalid-Khan,Shawnna Balasingham,Ettsa Papalazarou.Sarosh Khalid-Khan. Nazanin Alavi

SUMMARY:

Introduction: Cognitive Behavioural Therapy (CBT) is a popular and widely used therapy well supported in the literature. For example, CBT is as effective for mild and moderate depression as antidepressant medications; studies have suggested that combined psychopharmacology and CBT is superior to either modality alone, suggesting a synergistic effect. However, CBT

requires a major investment of time and resources. Thus, in public and private systems, CBT has limited availability and is often subject to waiting times; primary care physicians and psychiatrists may not offer CBT.
Can technology address the lack of CBT? Internet therapies have been developed, including for CBT. Internet-assisted CBT allows patients to receive on-going CBT with easier and quicker access, and at reduced cost. Relatively little work, however, has looked at directly comparing CBT with Internet-assisted CBT in a hospital outpatient setting.
Methods: The Scarborough Hospital Toronto, ON, hospital serving a diverse urban population provides CBT groups for individuals suffering from anxiety and/or depression. In this study, partnering with Queen's University, we give participants the choice between the Internet-assisted CBT and (traditional) group CBT sessions over an 8-week period. All patients are assessed using several scales, including "DASS 21" and "Sociodemographic Questionnaire" before and after the 8-week therapy.
On each online session, patients are provided with general information on a specific topic, an overview of helpful skills, and homework sheets that directly correspond with how a traditional group therapy session is carried out at The Scarborough Hospital. Participants are asked to send their homework sheet back to the therapist on a specific day (via email). The therapist then responds on another specific day, providing them with feedback, the new information sheets, and homework (all via email).
Results: Data is entered into a separate database (in Excel format). We then use ANOVA to compare the 2 groups looking at results of the above scales, assessing the effectiveness of the Internet-assisted CBT compared to the traditional CBT group. In a 12 month period, we will have around 40 patients in each group.
Conclusion: Though well established in terms of efficacy, CBT is often unavailable to people with mood and anxiety disorders. Barriers for traditional CBT include geography and resource availability, but also patient limitations: such as physical health issues (pain), psychiatric issues (anxiety in working in groups), as well as work and family obligations.
Internet-assisted CBT offers people convenient and cost-effective treatment â€" though our study suggests that drop-out rates are problematic. Moving forward, strategies to address drop-out rates are key in successfully utilizing Internet-assisted CBT in a real-world, outpatient setting.

P2- 10

BEHAVIORAL HEALTH TAKES ON EBOLA: A GUIDELINE-BASED FRAMEWORK FOR MENTAL HEALTH INTERVENTIONS IN THE HOSPITAL DURING INFECTIOUS DISEASE EPIDEMICS

Lead Author: Kyle J Gray, M.A., M.D.
Co-Author(s): Patcho Santiago, MD, MPH

SUMMARY:

Background: The Ebola Virus Disease (EVD) epidemic of 2014 was responsible for more deaths than all previous recorded Ebola outbreaks, constituting a highly publicized global public health crisis. The President of the United States ordered the deployment (Operation United Assistance) of nearly 4,000 troops to Liberia to help contain this epidemic. Walter Reed

National Military Medical Center (WRNMMC) was designated a primary receiving hospital for redeployers from Operation United Assistance who may have been exposed to EVD while in country.
Development: In creating a comprehensive EVD Policy and Procedures Manual, psychological first aid (PFA) and risk communication (RC) were two conceptual frameworks that assisted in contingency planning for the hospitalization of a patient with possible or confirmed EVD. Both fields are driven by expert consensus, though currently lacking strong clinical evidence as efficacious constructs. Influential guidelines include Hobfoll's "Five Essential Elements of Immediate and Mid-Term Mass Trauma Intervention" and the WHO's Risk Communication Guidelines written by psychiatrist Peter Sandman and psychologist Judy Lanard. The authors of the behavioral health and pastoral care sections of the hospital's EVD manual used these guidelines to outline its approach to treating a patient with EVD exposure as well as associated behavioral health ramifications to the staff, facility, and community.
Discussion: The BH and Pastoral Care sections of this hospital manual describe a continuum of care from prior to the patient's arrival to weeks following the patient's discharge. These interventions target the patient, his or her social support network, the health care team, the facility at large, and the wider public. The individual, social support network, and healthcare team interventions align with the five trauma intervention principles while the group-level and public health interventions align with the WHO consensus risk communication guidelines. We found that the outlined interventions were compatible and consistent with both sets of guidelines and important commonalities between PFA and RC are described. In addition, applications to broader hospital disaster response are suggested.
Conclusions: Informed by consensus-based guidelines in PFA and RC, a hospital's planning for the comprehensive treatment of patients with possible or confirmed EVD or other high-acuity medical conditions can increase preparedness throughout all phases of such emergency response scenarios.

P2- 11

TESTOSTERONE REPLACEMENT - IN THE MANAGEMENT OF DEPRESSION IN A KLINEFELTER PATIENT.

Lead Author: Sasidhar Gunturu, M.D.
Co-Author(s): Sasidhar Gunturu 1,2, Shah Ketki 1,2, Narayan V, Page Yin, S.Mittadoddi.

S**UMMARY:**
Klinefelter syndrome is the most common chromosomal aberration in men with an estimated incidence of 1:500 to 1:1000, in 80% of the cases the congenital numerical aberration is 47XXY. The 47XXY karyotype results from nondisjunction of the sex chromosomes and may be maternal or paternal in origin. Most cases are detected after birth and are diagnosed during evaluation for infertility or gynecomastia. The major clinical manifestations of Klinefelter syndrome include tall stature, small testes, and infertility (azoospermia) that become noticeable after puberty. Studies show that patients with Klinefelter syndrome are at increased risk for psychiatric disorders, most notably, 68% have been shown to suffer from depression. In addition to psychiatric illness, those with Klinefelter syndrome are at increased risk for autistic spectrum disorders and social problems.

Testosterone has been postulated to improve mood and cognition, but these effects have not been demonstrated convincingly in the literature. The mechanism of a potential antidepressant effect is unclear. There are at least three possibilities which are mutually exclusive. First, hypogonadism itself may lead to depression, and treatment of the endocrinologic condition with testosterone replacement could reverse such a "hypo gonadal" depression. Second, since testosterone is both an androgenic and anabolic steroid it directly affects the energy level. Finally testosterone's CNS effects on monoaminergic transmission could be antidepressant, and perhaps specifically enhance SSRI efficacy.

Here we present a case of a 64 year old immigrant man with Klinefelter syndrome and multiple medical problems, diagnosed of major depressive disorder following a hospitalization for a suicidal attempt. He was initiated on an SSRI and mood stabilizer, his mood lability got better but he continued to feel depressed. He was tried on three different classes of anti-depressants, though not suicidal his symptoms of depression did not improve. He was then started on testosterone replacement therapy by the endocrinologist for his decreased libido, following this event he started to show remission in his depression symptoms. Right now the SSRI has been discontinued and he is being treated only with Androgel and Gabapentin. He has demonstrated Substantial improvement (based on HAM D score) both in his mood and affect.

Conclusion- Patients with Klinefelter syndrome are at increased risk for depression. Inadequately treated depression increases recognized psychosocial morbidity. Testosterone replacement therapy may be effective in treatment of depressive symptoms in some men and it warrants further research.

P2- 12

PSYCHOSOCIAL THERAPEUTIC INTERVENTIONS FOR ATTENTION DEFICIT/ HYPERACTIVITY DISORDER.

Lead Author: Nihit Gupta, M.B.B.S., M.D.
Co-Author(s): Aimee Murray, Psy.D., L.P.

SUMMARY:

Attention Deficit/ Hyperactivity Disorder (ADHD) is a valid and impairing neurodevelopment disorder which continues in adult populations and leads to chronic functional impairment with increased risk of co-morbid depression and anxiety. Although pharmacotherapy provides excellent clinical responses, medications have a high rate of discontinuation leading to relapse of symptoms of impulsivity, hyperactivity and inattention. Multiple psychosocial approaches including Cognitive Behavior Therapy (CBT), Neuro-Feedback, Cognitive Remediation, and Parent Guidance may offer adjunctive strategies to minimize negative outcomes that can occur during periods of discontinuation. This presentation reviews some of the evidence based psychosocial therapeutic intervention for treatment of adolescent and adult ADHD.

P2- 13

PRAZOSIN FOR PSYCHIATRIC DISORDERS IN OLDER ADULTS

Lead Author: Vikas Gupta, M.D., M.P.H.

Co-Author(s): Dwaipayan Chakraborti, MD, Deena J. Tampi, MSN, MBA-HCA, RN, Rajesh R. Tampi, MD, MS

SUMMARY:
Objective-The objective of this review is to identify the effectiveness of prazosin for psychiatric disorders in older adults greater than the age of 65.
Methods- The authors performed a systematic review of 5 major databases: PubMed, MEDLINE, PsychINFO, Embase, and Cochrane Library. Search terms were "randomized controlled trial" and "prazosin." The databases were searched through July 31, 2014. No language limit was set, in order to be as inclusive as possible with the search strategy.
Studies were selected for full-text review if they involved adult patients, were treated with prazosin for psychiatric purpose (not medical reasons such as BPH or HTN), and had a Randomized Controlled Trial (RCT) design. RCTs identifying the role of prazosin for psychiatric disorders in adults, including PTSD and delirium (excluding alcoholism), were summarized. Case reports, case series, database reviews, population-based reviews, systematic reviews, and meta-analysis were also excluded, but the data available from these studies were to be used as a comparison to the data available from this review. Disagreements between the authors regarding the study selection for this review were resolved through consensus.
Results- The search yielded overlapping articles, including 666 in PubMed, 8 in PsychINFO, 705 articles in Embase, and 3 articles in Cochrane Library. After a review of the abstracts, 20 articles were obtained for a full-text review. Of these, 12 articles were excluded as they were case reports, editorials, or reviews. Eight articles met the inclusion criteria. To aid with the evaluation of data, the studies were organized in a reverse chronological manner. The quality of data was evaluated using the criteria developed by the Centre for Evidence Based Medicine (CEBM) for RCT evaluation.
Of the eight articles that met the inclusion criteria, only 1 RCT study pertained to the use of prazosin for psychiatric disorders in older adults greater than the age of 65. We found seven studies of RCT's studying prazosin use for psychiatric disorders that pertained to the age group less than 65.
Conclusion: Current literature does not provide enough evidence for prazosin use for psychiatric disorders in older adults. Our review found only one RCT evaluating prazosin use for psychiatric disorders in older adults(>65 years) which demonstrated improvement in all three primary behavioral outcome measures than those taking placebo ($P<0.05$). The data from the seven RCT trials looking at prazosin use for psychiatric disorders in age group less than 65 is also promising. Future studies would be helpful in evaluating the utility of prazosin in elderly population for psychiatric reasons.

P2- 14

ARE AGGRESSION AND IMPULSIVITY RISK FACTORS FOR SUICIDAL BEHAVIOR IN ADULT PSYCHIATRIC INPATIENTS?

Lead Author: Ahmad Hameed, M.D.
Co-Author(s): Amanda White B.S, Michael Mitchell M.A, Eric Youngstrom PhD, Roger Meyer M.D and Alan Gelenberg M.D.

SUMMARY:
Introduction: Clinicians face a daunting challenge of determining the factors that may increase an individual's risk for suicide. In a general population sample, individuals that had attempted suicide scored higher on measures of aggression and impulsivity. This relationship appears to hold true in the psychiatric inpatient population. Inpatients who had a history of aggression were more likely to have made a suicide attempt and among inpatients diagnosed with major depressive disorder, previous suicide attempters scored higher on impulsivity. However, other investigators found that a history of aggression in inpatients did not differentiate those who attempted or committed suicide from those who did not attempt or commit suicide. In order to clarify this relationship, we examined aggression, impulsivity, and suicidal behavior in a sample of adult psychiatric inpatients.
Methods: Adult psychiatric inpatients (n = 199) participated in a psychometric evaluation study. Past month suicidal behavior (preparatory actions, suicide attempt, interrupted attempt, aborted attempt) was reported on the Columbia-Suicide Severity Rating Scale (C-SSRS) (Posner et al., 2007). Past month aggression (yes/no) and impulsivity (yes/no) were reported on an investigator-designed risk assessment measure (RAM). We performed a series of logistic regression analyses to examine whether aggression and impulsivity were significant predictors of suicidal behavior.
Results: Aggression was not a significant predictor of preparatory acts ($p = 0.92$), interrupted attempt ($p = 0.40$), or actual attempt ($p = 0.31$). However, inpatients who reported aggression were 3.06 times more likely to have aborted an attempt in the past month (Wald = 6.29, $p = 0.01$). Impulsivity was not a significant predictor of preparatory acts ($p = 0.95$) or interrupted attempt ($p = 0.11$). Inpatients who reported impulsivity were 3.13 times more likely to have aborted an attempt (Wald = 4.04, $p = 0.04$) and 3.60 times more likely to have made an actual attempt (Wald = 12.38, $p < 0.01$). Since both aggression and impulsivity were significant predictors of aborted attempt, we ran a logistic regression including both traits as predictors. Aggression remained a significant predictor of aborted attempt (Wald = 3.79, odds ratio = 2.47, $p = 0.05$) but impulsivity was no longer a significant predictor (Wald = 2.02, odds ratio = 2.32, $p = 0.16$).
Discussion: In our sample of adult psychiatric inpatients, recent history of aggression and impulsivity were associated with an increased risk of recent suicidal behavior. Previous studies examined aggression and impulsivity as risk factors for suicide attempt. Our use of a standardized suicide assessment enabled us to examine these traits as risk factors for a range of suicidal behaviors. Future studies should confirm these results by utilizing standardized instruments to assess suicidal behavior, aggression, and impulsivity.

P2- 15
STIFF PERSON SYNDROME OR CATATONIC SCHIZOPHRENIA: A CASE REPORT.
Lead Author: Ahmad Hameed, M.D.
Co-Author(s): Ayesha Ahmad, M.D, Amanda White, B.S, Myra Qureshi, Usman Hameed, M.D.

SUMMARY:
Introduction: Stiff Person Syndrome (SPS) is a rare autoimmune disease of unknown etiology which affects the nervous system. Stiffened, hunched, and abnormal postures are

characteristic of SPS due to fluctuating muscle rigidity. Exposure to stress can lead to production of these symptoms. Glutamic Acid Decarboxylase (GAD) and Electromyography (EMG) are important diagnostic tools.
Case Report: A 53-year-old female who was involuntary admitted to psychiatry inpatient for irrational behavior. She stated that she was following her friends when she got confused and followed another car. The next thing she knew was being questioned by the police. She found this incident to be extremely confusing and frustrating as she had done nothing wrong.
During the intake she stated that she sees a neurologist for SPS and takes clonazepam and gabapentin. She denied any history or symptoms of any psychiatric syndromes. She stated that she was going through a divorce and her ex-husband might be spying on her. On further questioning, we found that recently she was evaluated by a psychiatrist. MSE on admission included a female lying on hospital bed with a sheet over her head. She was cooperative with normal speech. Her thought process was tangential. Her thought content was positive for delusions. Her mood was euthymic but her affect was constricted. She was oriented with poor insight and judgement.
We strongly felt that she was psychotic. The next day she was found lying in her bed with a sheet over her head. She was unresponsive, did not answer any questions and stared at the ceiling. No spasms, falls, or muscle twisting were observed. We continued with and increased her risperidone. The next day, she started talking and left her bed. She stated that the "episode" was due to her SPS and confirmed having such episodes in the past. GAD test was negative. We could not get an EMG. Once her psychotic symptoms were stabilized, she did not have any "SPS episodes". She was continued on risperidone and discharged.
Discussion: Our patient clearly had symptoms of catatonic schizophrenia, including delusions, disorganized speech, disorganized and catatonic behavior. As she was not endorsing hallucinations and her delusions were fixed, she could have easily come across as "stable". Although she was diagnosed and treated for SPS, several factors point towards a diagnosis of catatonic schizophrenia. GAD, a diagnostic test for SPS was negative. In addition, she showed mutism; which can be present in catatonia but is not found during an episode of muscle rigidity due to SPS. The fact that she responded to an antipsychotic also points towards the diagnosis of schizophrenia. As this case illustrates, SPS and catatonic schizophrenia have a similar physical presentation. We should be well aware of the symptoms common to both syndromes. A good history, physical exam, and appropriate tests are the cornerstone of distinguishing these two syndromes and treating them accordingly.

P2- 16
SSRI DISCONTINUATION INDUCED AGITATION
Lead Author: Shariq Haque, M.D.
Co-Author(s): Rashi Aggarwal MD

SUMMARY:
Introduction
Antidepressant discontinuation syndrome is most commonly described with selective serotonin reuptake inhibits (SSRIs). Common symptoms include dizziness, light headedness, drowsiness, poor concentration, nausea and headache. There are some cases describing

psychosis, hypomania, mania, delirium after antidepressant withdrawal in patients with both unipolar and bipolar depression . Here we present a unique case of a patient with bipolar disorder who had increased agitation after sertraline was stopped.

Case report:

Patient is a 50 year old Caucasian male with a past psychiatric history of Bipolar disorder who presented to the hospital with suicidal ideation, flight of ideas, feelings of distractibility and an increase in goal directed behavior. The patient was on sertraline 50mg.

Patient was noted to be grandiose, had pressured speech and was intrusive. After obtaining collateral this appeared to be his second manic episode. The decision was made to augment sertraline with divalproex sodium rather than stopping it as patient had good response to sertraline before for his depression. Subsequently the patient complained of anxiety and that his feet were restless, he attributed this as a chronic problem which started when he was on sertraline therefore the team stopped the sertraline to observe his response. The next day the patient was intrusive, acting odd and introverted, not engaging well with other patients as noted by the covering psychiatrist. On the third day without sertraline the patient lunged towards the window, speech was pressured and he was visibly agitated. He needed to be transferred to an involuntary facility.

Discussion

Traditionally AD are known to induce mania in patients with bipolar disorder. Our case however is unique in that it describes a patient who, while being treated for mania developed paradoxically worsening symptoms after SSRI discontinuation. A pharmaco-dynamic explanation postulated by L.M. Tak et al state that antidepressants cause sensitivity of serotonergic receptors and noradrenergic receptors (in SNRIs) and that discontinuation may cause a rebound effect . Another possibility they postulate is that the sleep disorder associated with withdrawal symptom may elicit (hypo)mania in patients with bipolar disorder.

Conclusion

It is well established in the literature that AD use in patients with bipolar disorder can induce mania in up to 40-60% of cases. This is a challenging predicament for clinicians because many bipolar patient present with depression and are promptly started on an AD. We have a case that describes a patient who was improving markedly with mood stabilization therapy during a manic episode but after discontinuation of the sertraline developed periods of agitation and violent behavior.

P2- 17

HIV, PML, AND CAPACITY: ETHICAL CONCERNS REGARDING A PATIENT'S AUTONOMY AND CONFIDENTIALITY VERSUS THE WELFARE OF OTHERS

Lead Author: Christopher W Harris, D.O.
Co-Author(s): Nicholas Tamoria, MD; Michael Mrizek, MD

SUMMARY:

An HIV patient developed cognitive impairment secondary to progressive multifocal luekoencephalopathy. Psychiatry consultation-liaison service was consulted with the question of whether he has the capacity to choose his non-medical attendant (NMA). The NMA he chose was reported to be a female friend, however the patient has a history of infidelity, a

history of infecting his wife and is suspected of infecting other partners with HIV. One complication in this case is his request to have his HIV status kept confidential. This raises three potential questions: 1) does the NMA chosen have training in exposure-related incidents with HIV, and can we as an institution allow her to be NMA due to possible contraction/exposure to HIV? 2) Given the patient's background, is his intention to have a sexual relationship with this woman? If he does have that intention, is she aware of his HIV status? 3) Keeping in mind the cognitive impairment, how do the rules of confidentiality and duty to warn third parties affect someone with cognitive impairment? Is this an issue of Tarasoff Law?

P2- 18

RESULTS FROM EXPERT CONSENSUS SURVEY: INTERVENTIONS TARGETING REASONS FOR ADHERENCE PROBLEMS IN SERIOUS MENTAL DISEASE

Lead Author: Ainslie Hatch, Ph.D.
Co-Author(s): John Docherty, MD, Daniel Carpenter, PhD, Ruth Ross, MA, Peter J Weiden, MD

SUMMARY:
Introduction: No treatment is effective when it is not taken. Despite many advances in efficacy and safety of long-term maintenance therapies for most major psychiatric diagnoses, non-adherence has remained a vexing and continuous problem. There is no single cause of non-adherence, but rather multiple reasons that can be broadly categorized as intentional (eg, medication beliefs, side effects, partial efficacy, therapeutic alliance, stigma) and unintentional (eg, poor insight, cognitive deficits, substance abuse, logistic, absent daily routines, social support problems).
Objective: To conduct a quantitative expert opinion survey providing guidance on the most appropriate interventions for targeting specific reasons contributing to adherence problems in patients with schizophrenia, bipolar disorder, and major depressive disorder.
Methods: The survey followed the expert consensus methodology previously used by this group [1] to expand and further investigate the results from a previous survey on adherence in serious mental illness. This method provides quantitative and replicable data to inform practice in areas where literature is scant or ambiguous. A panel of 58 experts in psychiatry with an average of ~30 years experience in clinical practice and research completed the survey. The survey contained 23 questions; in this report, we show results from 1 question divided into 11 sections, each describing a different adherence problem. A chi-square test of score distributions was used to determine presence or absence of consensus and confidence intervals of the mean ratings were used to designate first- or second-line categorical ratings.
Results: Expert ratings on the appropriateness of each intervention varied according to the 11 reasons for non-adherence. However, the experts reached consensus on a first-line intervention for 10 of the 11 predefined reasons. For adherence problems related to partial efficacy or side effects, the experts recommended adjusting or changing the oral medication regimen or considering a switch to a long-acting antipsychotic. For adherence problems attributed to attitudinal and relationship factors, psychological and psychoeducation interventions were the most strongly endorsed. For adherence problems attributed to persistent cognitive or negative symptoms, the experts recommended behavioral intervention,

environmental supports and increased medication supervision. Finally, for adherence problems arising from logistic or financial barriers, medication financial assistance programs and targeted social work interventions were recommended.
Conclusions: It is not only important to identify adherence problems but also the reasons for these problems. Once the reasons are identified, the current data provide expert opinion on the most appropriate interventions.
1. Kahn DA et al. Psychopharmacol Bull. 1997;33:631-9.

P2- 19
EFFECTS OF LISDEXAMFETAMINE DIMESYLATE ON THE SHEEHAN DISABILITY SCALE IN ADULTS WITH MODERATE TO SEVERE BINGE EATING DISORDER
Lead Author: Barry K Herman, M.D.
Co-Author(s): Maria Gasior, MD, PhD, Susan L. McElroy, MD, Jana Radewonuk, MSc, Manjiri Pawaskar, PhD, James Hudson, MD, ScD, David V. Sheehan, MD, MBA

SUMMARY:
In 2 phase 3 placebo (PBO)–controlled trials, lisdexamfetamine dimesylate (LDX) reduced binge eating days/week in adults with moderate to severe binge eating disorder (BED). Here, the effects of LDX on Sheehan Disability Scale (SDS; exploratory endpoint) scores from the aforementioned studies are described. Two 12-week, double-blind, PBO-controlled trials randomized (1:1) adults meeting DSM-IV-TR BED criteria (trial 1, N=383; trial 2, N=390) to PBO or LDX (50 or 70 mg). The SDS (assessed at baseline, week 6, and week 12/early termination [ET]) measures impairment in work/school, social life/leisure activity, and family life/home responsibilities on scales ranging from 0–10 (mild, 1–3; moderate, 4–6; marked, 7–9; extreme, 10); total score ranges from 0–30. Days lost from work/school were also assessed. Mixed-effect models for repeated measures assessed treatment differences in SDS total score; unadjusted P values are included for descriptive purposes only because the SDS was not part of the hierarchical testing strategy. In trials 1 and 2, mean ± SD baseline SDS total scores (PBO, 10.81±7.536 and 11.33±7.330; LDX, 10.52±7.212 and 10.88±7.809) decreased by week 12 (least squares [LS] mean ± SEM changes: PBO, –4.96±0.429 and –5.04±0.405; LDX, –7.76±0.421 and –8.74±0.398). The LS mean (95% CI) treatment difference was –2.80 (–3.98, –1.61) in trial 1 and –3.70 (–4.81, –2.58) in trial 2 (both P<0.001). Mean ± SD baseline work/school impairment scores in trials 1 and 2 (PBO, 3.1±2.70 and 3.1±2.53; LDX, 2.9±2.55 and 3.1±2.74) decreased by week 12 (LS mean ± SEM changes: PBO, –1.3±0.14 and –1.3±0.14; LDX, –2.2±0.14 and –2.4±0.14). The LS mean (95% CI) treatment difference was –0.8 (–1.2, –0.4) in trial 1 and –1.1 (–1.5,–0.7) in trial 2. Mean ± SD baseline social life/leisure activity impairment scores in trials 1 and 2 (PBO, 4.2±2.93 and 4.3±3.02; LDX, 4.0±2.91 and 4.1±3.01) decreased by week 12 (LS mean ± SEM changes: PBO, –2.0±0.16 and –1.9±0.16; LDX, –3.0±0.16 and –3.3±0.15). The LS mean (95% CI) treatment difference was –1.0 (–1.4, –0.5) in trial 1 and –1.4 (–1.8, –1.0) in trial 2. Mean ± SD family life/home responsibilities impairment scores in trials 1 and 2 (PBO, 3.5±2.69 and 3.9±2.76; LDX, 3.6±2.66 and 3.6±2.82) decreased by week 12 (LS mean ± SEM changes: PBO, –1.6±0.16 and –1.8±0.14; LDX, –2.6±0.15 and –3.1±0.14). The LS mean (95% CI) treatment difference was –1.0 (–1.4, –0.5) in trial 1 and –1.3 (–1.7, –0.9) in trial 2. The baseline mean ± SD number of days lost from work/school in the last week in trials 1 and 2 (PBO,

0.4±1.08 and 0.5±1.38; LDX, 0.3±0.87 and 0.4±1.03) decreased by week 12/ET (mean ± SD changes: PBO, –0.2±1.06 and –0.3±1.23; LDX, –0.1±1.08 and –0.4±1.11). Adults with moderate to severe BED exhibited mild to moderate functional impairment across all SDS domains at baseline. At week 12, LDX produced numerically larger functional impairment reductions on the SDS and greater reductions in days lost from work/school than PBO.

P2- 20

'WHY DID YOU DROP OUT?' A QUALITATIVE ANALYSIS EXPLORING WHY INDIVIDUALS DROPOUT OF COMPUTER-BASED SELF-HELP PROGRAMS

Lead Author: Eric D.A. Hermes, M.D.
Co-Author(s): Ashley Clayton, MA,Christina Morris, BS,Jeremy Merrel, BS, Michael Rowe, PhD

SUMMARY:
Background. Computer-based self-help interventions (CBIs) are being increasingly implemented by healthcare systems and used by the public. Such programs increase access to evidence-based mental and behavioral health interventions, but suffer from high dropout rates.
Objective. The objective of this study was to explore personal reactions to self-help CBI use among individuals who dropped out of a trial implementing a self-help CBI for insomnia prior to completing the program.
Method. The objective was explored through qualitative analysis of individual semi-structured interviews. Participants were individuals receiving care at a Veterans Health Administration outpatient substance abuse clinic who voluntarily enrolled in a self-help CBI for the treatment of chronic insomnia but subsequently dropped out prior to completing the six-session program. Individuals received regular telephone and as needed face-to-face support from a clinician while enrolled. Of those dropping out, 45% (n=13) agreed to audiotaped interviews that were subsequently analyzed. The technique of thematic analysis was used by four investigators who independently coded interview transcripts. Coding was followed by group discussion to reach consensus on key themes
Results. Three categories of themes emerged involving issues related to (1) barriers to use, (2) facilitators of use, and (3) recommendations for future implementation efforts. Among barriers, emergent themes were related to competing demands, the CBI modality, negative experiences with the program, and personal characteristics. Among facilitators, themes related to the clinician support provided, the CBI modality, and personal characteristics were identified. Among recommendations for future implementation, themes related to adding various forms of personal contact during participation emerged.
Conclusions. This exploration of reactions to a self-help CBI, among individuals who dropped out before program completion, revealed important barriers, facilitators, and recommendations for future implementation. Addressing these themes in future efforts to develop strategies for self-help CBI implementation may maximize program engagement and completion.

P2- 21

NEUROLEPTIC MALIGNANT SYNDROME ASSOCIATED WITH CLOZAPINE WITHDRAWAL: A CASE REPORT

Lead Author: Marla Hidalgo, D.O.
Co-Author(s): Richard H McCarthy, MD, CM, PhD, Amjad Hindi, MD

SUMMARY:

Abrupt clozapine discontinuation is associated with a profound psychotic relapse that exceeds in intensity and severity the treatment refractory psychotic symptoms that originally led to clozapine's use. Moreover, several other conditions may also occur with clozapine discontinuation including delirium, unusually severe anxiety, altered level of consciousness, multiple somatic complaints including nausea, vomiting, diaphoresis, dyskinetic movements, excited catatonia and neuroleptic malignant syndrome, NMS. Given the potential severity of the patients psychotic relapse, the patient may not be able to provide a history that would help the clinician develop a working differential diagnosis. Thus, the short-term management of the patient's acute physical and mental crisis will be unusually difficult. Once stabilized, decisions about future treatment must be made. For highly refractory psychotic patients, the loss of clozapine is not trivial, especially in those that have only responded to this agent. In such cases, patients may never return to their clozapine level of functioning. Finally, it is known that in the two years following clozapine discontinuation mortality significantly increases, largely due to an increase in suicide.

This report discusses a patient with treatment resistant schizophrenia who had an ostensible case of clozapine induced NMS in the year before the present hospitalization. Clozapine had been restarted because the patient had failed multiple medication trials and only responded to clozapine. He again responded well, was discharged and returned to his home. There he had weekly family visits and frequent phone calls to support his adherence. Months later, during a routine family visit, he again presented with the abrupt onset of significant signs of extrapyramidal symptoms that rapidly progressed. He had developed an altered mental status, fever, tachycardia, rigidity, and tremor. Urine drug screen was negative. Laboratory tests revealed an elevated CK and transaminases. However, both clozapine and norclozapine levels were undetectable in spite of the family visits and supervision. He was again restabilized. A thorough medical and psychiatric review of both NMS episodes was undertaken. No risk or precipitating factors were identified other than NMS secondary to covert clozapine discontinuation.

This poster will present information relevant to how this diagnosis was established as well as information about clozapine discontinuation syndromes. Follow up data about this patient will be presented with a discussion of how treatment plans were altered to prevent recurrence. The identification of possible clozapine induced NMS is critical as it is a significant risk of non-adherence by the patient. Moreover, in any clozapine patient presenting with an NMS like syndrome, clozapine discontinuation must be a part of the differential. To exclude it may result in patients being denied further clozapine treatment inappropriately.

P2- 22

DENTAL HEALTH IN MENTAL HEALTH SECTOR- AN ABSOLUTE NEED

Lead Author: Ketan Hirapara, M.B.B.S.

Co-Author(s): Mahreen Raza, MD, Atika Zubera, MD, Najeeb Hussain, MD

SUMMARY:
Background: Neglect of oral health in patients with mental illness is a very serious issue in current practice as dental caries and periodontal diseases are 3.4 times more common in this population. In the extreme cases, edentulousness- loss of all teeth may result. In addition to the consequences of poor oral health as well as pain and loss of function, psychosocial consequences can ensure, such as embarrassment, poor self-image and social isolation. It is very important to break this web of causation by dentists and psychiatrists.
Disregard of oral hygiene, craving for carbohydrate due to reduced serotonin centrally, microbiological changes in saliva and medication induced xerostomia causes increased colonization by pathological bacteria leading to breakdown of the periodontal attachment. All of the above correlates with poor dental health in depression, schizophrenia and bipolar disorders.
Case: Here, we describe a case of 63 year old male suffering from schizophrenia. He has a past psychiatric history of multiple inpatient unit admissions and was on multiple antipsychotic medications including depot injections. On the first day of his current hospitalization at university hospital, his four anterior maxillary incisors fall out while brushing teeth. He was then taken to the emergency dental services and wound closure was performed. After that patient was regularly followed by a dentist. Factors contributed to his dental problem were medication induced xerostomia and poor dental hygiene.
Discussion: Often depressive and schizophrenic patients are reluctant to admit their dental problems because of factors associated with stigma. To overcome these, dentist is advised to display a supportive, nonjudgmental attitude and advise patients that such information will be held confidential. Consideration of oral health as a part of comprehensive assessment of patients by psychiatrists, supply of toothbrushes or denture baths in inpatient units as well as preventive dental education about oral hygiene, regular dental checkups, diet, smoking and brushing and flossing techniques are the most important steps to be taken. Extensive oral examination, fluoride gel application and correction of defects in natural dentitions or prosthetics should be performed at the three month visit after the initial visit.
Conclusion: Dental Health in patients with mental illness is a very serious issue in current practice needing to be addressed. Comprehensive dental care in patients with mental illness should include: Identification of predisposing factors (mental illness, medications, and current dental problems), treatment of predisposing factors, comprehensive diagnostic and therapeutic approach for dental problems involving dentists, psychiatrists, case workers, nurses and appropriate follow up after the initial visit and preventive measures. Provision of free and accessible dental care for people with severe mental illness by policy makers should be considered.

P2- 23
CYP3A4- INTERACTION BETWEEN HIV MEDICATION AND BENZODIAZEPINE CAUSING PROTRACTED BENZODIAZEPINE WITHDRAWAL: A CASE REPORT AND LITERATURE REVIEW

Lead Author: Ketan Hirapara, M.B.B.S.

Co-Author(s): Mahreen Raza, M.D., Najeeb Hussain, M.D.

SUMMARY:
Objective: Individuals diagnosed with a severe mental illness are at significantly enhanced risk for infection with the human immunodeficiency virus (HIV). To better understand elevated seroprevalence in this population, we review the research literature that has investigated HIV-related risk behavior among adults who have a severe and persistent mental illness. This review indicates that 54%â€"74% of adults report that they have been sexually active in the last year with approximately one third reporting two or more partners. Among those who were sexually active, condom use was inconsistent. A significant minority (4%â€"35%) of adults also reported a history of injection drug use. Self-medication with benzodiazepine to relieve panic attack is most common in severe mental illness. Although protracted benzodiazepine withdrawal commonly occurs after the cessation of chronic benzodiazepine use, it is very important to consider that interaction between HIV medications and benzodiazepine can also cause it.
Here we present a case of a patient who exhibits protracted withdrawal symptoms due to alprazolam and efavirenz interaction.
Case Report: A 43 year old African American female patient was admitted with Bipolar disorder, Opiate use disorder, HIV. Patient is on altripla (combination of efavirenz, tenofovir and emtricitabine) since diagnosed with HIV. She was internally preoccupied and was actively hallucinating. She had a positive urine drug screen for methadone, barbiturates, and benzodiazepines. With some improvement of her mental status, patient reported that she was using alprazolam for almost 20years. After stabilization, lorazepam was prescribed for withdrawal and restarted HAART therapy after consultation with the ID. Evidenced by her continual facial tremor/twitching, unstable vitals and continued psychosis, it is suspected that she experienced long term protracted benzodiazepine withdrawal. One possible cause of her protracted withdrawal was an interaction between alprazolam and efavirenz.
Discussion: It is very important to know the interactions between HIV medications and benzodiazepine as it can causes protracted benzodiazepine withdrawal, which is often misdiagnosed as a psychotic disorders. Alprazolam and efavirenz are extensively metabolized in humans, primarily by CYP3A4. Efavirenz has been shown to induce CYP3A4, resulting in induction of alprazolam and its own metabolism leading to benzodiazepine withdrawal symptoms. Non-nucleoside reverse transcriptase inhibitor (nevirapine) also inhibits CYP3A4. Interactions involving HIV protease inhibitors (eg, ritonavir) and alprazolam are complex and time dependent. CYP 3A4 is inhibited by protease inhibitors and is contraindicated in combination with alprazolam, diazepam and clonzepam due to the potential for serious and life-threatening reactions such as prolonged or severe sedation or respiratory depression. Physicians should consider other treatments for anxiety in this population.

P2- 24
DETECTING CHANGE OVER TIME: A COMPARISON OF THE SLUMS EXAM AND THE MMSE IN OLDER ADULTS AT RISK FOR COGNITIVE DECLINE
Lead Author: Molly Howland, B.Sc.
Co-Author(s): Kathleen Smyth, PhD, Curtis Tatsuoka, PhD, and Martha Sajatovic, MD

SUMMARY:
Objective
The Mini-Mental State Examination (MMSE) and the newer Saint Louis University Mental Status (SLUMS) exam are short self-report measures to detect cognitive decline. Studies have found the SLUMS slightly more sensitive, specific, and correlated with neuropsychological measures compared to the MMSE. This study is the first to directly compare the relative stability over time of the MMSE and the SLUMS in elderly individuals at risk for cognitive decline.
Methods
Study participants were recruited from residential and clinical settings in Ohio. Follow-up surveys were administered after one year with a retention rate of 92% (n=281). Using the scoring guidelines for each test set forth by Tariq et al. (2006), we categorized subjects as normal, mild cognitive impairment (MCI), or demented. We then categorized subjects as reverters (into improved cognitive categories), stable, or converters (into worse categories). Other assessments included the following functional measures: Instrumental Activities of Daily Living (IADL), Activities of Daily Living (ADL), Patient Reported Outcomes Measurement Information System (PROMIS), and NeuroQOL. We also used the Geriatric Depression Scale (GDS).
Results
Both MMSE and SLUMS scores correlated with the functional measures IADL ($r=0.27$, $r=0.24$, $p<0.01$) and PROMIS Cognition ($r=0.24$, $r=0.37$, $p<0.01$). SLUMS scores were also inversely associated with GDS depression scores ($r=-0.13$, $p<0.05$). MMSE and SLUMS correlated with each other ($r=0.65$, $p<0.01$) and categorized similar proportions of subjects as normal, MCI, or demented. However, the SLUMS and MMSE frequently placed the same subject into different categories. For example, 60% of the subjects classified as normal on the SLUMS were categorized as MCI or dementia on the MMSE.
Stability status of individuals varied between the two tests. The MMSE scores indicated more converters (28.8% versus 14.9% on the SLUMS). The one-year changes in MMSE raw score correlated with changes in four functional domains as well as age ($p<0.05$), while SLUMS raw score changes did not correlate with any functional measures. Further, scores of MMSE converters from MCI baseline on the NeuroQOL Executive Function test declined compared to stable MCI subjects' NeuroQOL scores ($p=0.031$). Scores of MMSE reverters from dementia baseline on the ADL declined less compared to stable dementia subjects' scores ($p=0.01$).
Lack of prior treatment for mental conditions was nearly significantly associated with reversion on SLUMS ($p=0.054$).
Conclusions
We verified the association of MMSE and SLUMS with functional domains. However, individuals' MMSE and SLUMS categorization status diverged. Our large, longitudinal data set allowed us to compare the tests' stability. The MMSE may be more sensitive to functional changes over a one-year period. However, the SLUMS better correlated with measures of mental health.

P2- 25

TRAINING CURRENT AND FUTURE PSYCHIATRISTS IN COLLABORATIVE MENTAL HEALTH CARE: A SYSTEMATIC REVIEW

Lead Author: Dan Huynh, B.Sc.
Co-Author(s): Abbas Ghavam-Rassoul, Allyson Ion, Paul Benassi, Kathleen Broad, Adriana Carvalhal, Nadiya Sunderji

SUMMARY:
Background: One in five Canadians and one in four Americans experience mental illness each year, and mental illness is the leading cause of years lived with disability globally. The majority of mental health care is delivered in primary care, in part due to challenges accessing specialist care. Integrated and collaborative care models may strengthen mental health service delivery and are a key component of health care reform in Canada, the United States and elsewhere. However, many psychiatrists lack training to practice in collaborative models of care and it is not known how best to prepare current and future psychiatrists to work in these novel services. Therefore, we performed a systematic review of the evidence to guide training of psychiatry residents, fellows, and staff to provide collaborative mental health care.
Methods: We searched peer-reviewed and grey literature using keywords and subject headings for three major themes: psychiatry, medical education, and collaborative care. Two researchers independently undertook abstract screening, full-text screening, critical appraisal and data extraction, with differences resolved by discussion with the research team. We will describe characteristics of educational interventions, curricular goals and objectives, implementation issues (if any), and evaluation approach (e.g. level in the Kirkpatrick evaluation model). Based upon the available data we will statistically and/or thematically analyze the effects of Collaborative Care training and how those effects may relate to the nature of the exposure and activities that trainees undertake, and the choice of practice settings.
Results: We screened 3813 citations (interrater agreement K=0.996) and 81 full-text articles. We identified educational interventions targeting residents, practicing psychiatrists, and subspecialists, and taking place in Canada, the United States, Australia and New Zealand, the United Kingdom and continental Europe. Interventions were didactic and/or clinical-experiential, and varied widely in duration, intensity and setting. Evaluations of these training interventions were qualitative and/or quantitative, with a preponderance of studies focused on learner satisfaction and changes in knowledge and attitudes (i.e. Kirkpatrick levels 1 and 2).
Discussion: The heterogeneity of educational interventions presents a rich diversity to draw upon when designing or improving psychiatric training in collaborative and integrated care. However, when considered in combination with weaker study designs and lower order outcomes, this limits the ability to draw causal inferences regarding the effects of training on clinical, organizational and population-level outcomes. Educators should consider undertaking more rigorous evaluations of future training initiatives to promote greater accountability in medical education and advance the field of integrated care.

P2- 26

AN EMPIRICAL STUDY OF TRAUMA, DISSOCIATION, FANTASY PRONENESS, AND DELIBERATE SELF-HARM IN AN ADULT SAMPLE OF PSYCHIATRIC INPATIENTS.

Lead Author: Luke A Ibach, M.A.

Co-Author(s): Dr. Thomas Bowers, Ph.D.,Amanda White, Ph.D., Ahmad Hameed, M.D.

SUMMARY:
Title: An empirical study of trauma, dissociation, fantasy proneness, and deliberate self-harm in an adult sample of psychiatric inpatients.
Authors: Ibach, L., Bowers, T., White, A., & Hameed, A.
Introduction: Psychiatric inpatients report high rates of traumatic experiences. Many believe these experiences precipitate the development of dissociation and deliberate self-harm. Some authors contend that dissociation mediates the relationship between trauma and self-harm. Others point to fantasy proneness contributing to endorsement of dissociative symptoms independently of trauma. We predicted that pathological dissociators would report significantly more methods and episodes of self-harm than non-pathological dissociators. We also predicted a moderate correlation between dissociation and fantasy proneness.
Method: Adult psychiatric inpatients (n = 41, 75% female) completed the Dissociative Experiences Scale, Creative Experiences Questionnaire, and Deliberate Self-Harm Inventory self-report measures. Empirically-derived cut-off scores differentiated subjects who reported clinically significant symptoms. Trauma history was extracted via chart review.
Results: Independent samples t-tests identified differences in scores of self-harm between groups of high and low dissociators. Pearson's correlation and chi-square tests determined the relationship between all dependent measures. A Binary logistic regression assessed the degree of variance in a criterion variable accounted for by an independent predictor.
All 41 participants were included in our analyses. 82% reported at least one traumatic event (n = 34) and 61% had a significant history of self-harm (n = 25). Analyses revealed a moderate correlation between dissociation and self-harm ($r(39) = .40$, $p = .008$; $r = .438$, $X2$ (1, n = 41) = 7.85, $p = .005$). Dissociation accounted for 30% of the variance in significant self-harmer classification ($R2 = .297$, $p = .009$), correctly identifying 70% of cases. Pathological dissociators ($M = 5.53$, $SD = 3.47$; n = 13) reported significantly more methods of self-harm ($(t(39) = 3.23$, $p = .002$) than non-pathological dissociators ($M = 2.39$, $SD = 2.60$; n = 28). Pathological dissociators ($M = 53.92$, $SD = 41.08$) also reported significantly more total episodes of self-harm ($t(39) = 2.12$, $p = .040$) than non-pathological dissociators ($M = 24.85$, $SD = 40.61$). We found a moderate correlation between dissociation and fantasy proneness ($r(39) = .562$, $p < .001$).
Discussion: Pathological dissociators reported significantly more self-harm than non-pathological dissociators. These findings support the anti-dissociation hypothesis as a plausible explanation for self-harm. Consistent with previous research, fantasy proneness exhibited a significant correlation with dissociation. Self-harming individuals may benefit from expressive therapies that promote distress tolerance through the exploration of mechanisms related to fantasy and dissociation.

P2- 27
A RETROSPECTIVE STUDY COMPARING REHOSPITALIZATION RATES OF PATIENT DISCHARGED ON HALOPERIDOL DECANOATE MONTHLY INJECTION VERSUS ORAL HALOPERIDOL
Lead Author: Bushra Iftikhar, M.B.B.S., M.D.
Co-Author(s): Michael Rose, M.D.; Thomas Pawelzik

SUMMARY:
Depot antipsychotics have shown reduced relapse rates in Schizophrenia patients, especially in patients who fail to adhere to treatment with oral medications or have a poor insight into their mental illness. The objective of this study is to compare Haloperidol Decanoate and oral Haloperidol in terms of rate of rehospitalization in patients discharged from one of the psychiatric inpatient units of Jamaica Hospital Medical Center (JHMC) and then followed either at JHMC's mental health clinic for outpatient care.
We will interrogate electronic medical records to identify patients admitted to one of the two inpatient psychiatric units at JHMC who meet the following inclusion criteria: (1) Adults aged 18-65 years old hospitalized during the time period, January 2012 to December 2013 at Jamaica Hospital inpatient units;(2) Both groups oral vs. injectable form on Haloperidol will be compared as closely as possible for race, marital status, sex, gender, and employment status; (3) Patient administered Haloperidol Decanoate during or at discharge from inpatient unit at JHMC will be compared with patients discharged on oral form of Haloperidol on discharge; (4) Primary diagnosis of Schizophrenia or psychosis NOS at the time of discharge from JHMC Inpatient Psychiatric units.

P2- 28
HIV POSITIVE NEEDLE USERS, GAY AND BISEXUAL MEN
Lead Author: Kellen Imada, B.A.
Co-Author(s): Jon Cisneros, B.A., Micah Keaney, B.A., Lawrie A Ignacio, Psy.D, Michael M Omizo, Ph.D.

SUMMARY:
The purpose of this qualitative study was to explore the experience and perception of living with HIV-AIDS using a phenomenological research model among gay and bisexual men. This qualitative model provides an alternative to statistically oriented quantitative models of conducting research. The main question explored was: What is the experience of being HIV positive for gay and bisexual men? Study participants were solicited from a non-profit agency that provided services to HIV positive and AIDS clients. The age range of participants was 27-46 years with a mean of 37 years. They have been HIV positive from 2 to 14 years with an average of 8 years. Ethnic backgrounds included 2 Asian and 4 Caucasian. Participants consented to be videotaped during an interview that lasted approximately one hour. These semi-structured interviews were listened to and transcribed verbatim. Each interview was then analyzed according to the method used successfully by Kornfeld (1989), Omizo, Omizo, & Honda (1997), Sakato (2000), and Matsu (2001). After analysis, five categories of experienced feelings emerged for HIV positive gay and bisexual men. Analysis also revealed the presence of precipitating factors that evoked those feelings. This study will include implications for clinical psychologists, specifically how counselors can provide more effective counseling services, develop better outreach services, and use more appropriate referral services.

P2- 29
CASE REPORT: CAPGRAS DELUSIONS ETIOLOGY AND TREATMENT

Lead Author: Mehr Iqbal, M.D.
Co-Author(s): Mobeena Naim

SUMMARY:
Capgras delusion is a misidentification syndrome characterized by a patient belief that his or her close relative like parents, siblings, husband, or child is replaced by some other person. This disorder is more common in female than in male 2:1. (Kamil Atta et al, 2006). For many years this Delusional Misidentification Syndrome (DMS) is a challenge to the health professionals, psychiatrist and neurologist due to lack of comprehensive understanding of the condition and effective treatment. Neuroimaging studies and research from different subspecialties for last two decades, point towards the presence of identifiable brain lesions in right frontoperital and adjacent regions.Capgras depends upon its pathology and the location of the lesion in brain. Patients who have Capgras syndrome at young age and associated with paranoid schizophrenia and schizoaffective disorder do not recover from this syndrome. Their symptoms get better but the Capgras delusion remain the same. Capgras delusion associated with organic cause like right frontal parasagittal meningioma was treated with its removal as mentioned in Fenning and associate study. We complied the articles that focus on Capgras delusion and syndrome, causative factors and its treatment. We tried to differentiate different conditions that resemble Capgras delusion and compiled the following literature review with two case study at Bergen Regional medical Center.

P2- 30
NEW ANTIDEPRESSANTS OFFER IMPROVED OUTCOMES OR MERELY CLEVER MARKETING TECHNIQUES OF PHARMACEUTICAL COMPANIES?
Lead Author: Mehr Iqbal, M.D.
Co-Author(s): Mubeena Naeem MBBS

SUMMARY:
Major Depression Disorder (MDD) is the most common mental illness, with significant morbidity and mortality. It is characterized by anhedonia, abnormalities of appetite, sleep, energy, concentration, and feelings of sadness, hopelessness and worthlessness which interfere with daily activities of life. It has genetic predisposition and can occur at any age and in both genders, though more commonly in females. As most approved treatments for MDD only offer modest efficacy, there is a great need for improved therapies. Recently approved oral antidepressants include Brintellix (vortioxetine), Viibryid (vilazodone), and isocarboxazid (MAOI) (isocarboxazid). Silenor is a re-branded form of an old antidepressant (doxepin) that was recently approved for the treatment of insomnia, which occurs frequently in MDD. This review summarizes the available evidence of these four medications. Viibryd (vilazodone) is marketed as the first dual-acting combined selective serotonin reuptake inhibitor (SSRI)/5-HT1A receptor agonist antidepressant newly approved for treatment of MDD, but it has a high cost ($200/month) and there is no data suggesting improved efficacy compared to existing antidepressants. Silenor is a re-branded, lower-dose form of an old drug (doxepin) that is available for insomnia at a much cheaper rate at a comparable dose. isocarboxazid (MAOI) (isocarboxazid) is not a new drug. It is an MAO inhibitor that was re-branded in the 2000s and is

not available in generic form. It is not a drug of first choice for depression because of risk of serious adverse effects, such as serotonin syndrome and hypertensive crisis. Brintellix (vortioxetine) is serotonin reuptake inhibitor. Though several randomized clinical trials have shown efficacy compared to placebo, data suggests that it is actually inferior to existing therapies such as venlafaxine or duloxetine.
In summary, it is hard to justify that the "new" antidepressants are more effective than existing therapies. Given their high cost and the lack of data demonstrating any benefit compared to existing medications of similar classes, clinicians should consider other therapies before prescribing these newly approved medications.

P2- 31

DIAGNOSTIC CONTROVERSY IN A CASE OF ATYPICAL NEUROLEPTIC MALIGNANT SYNDROME

Lead Author: Muhammad Navaid Iqbal, M.B.B.S., M.D.
Co-Author(s): Jeisel Lombay MS, Prathila Nair MD, Asghar Hossain MD

SUMMARY:
Neuroleptic malignant syndrome (NMS) is a potentially life threatening condition that is associated with the use of neuroleptic agents and is characterized by a clinical syndrome of mental status change, muscle rigidity, hyperthermia, and autonomic dysfunction. NMS is not specific to any neuropsychiatric diagnosis and may occur in individuals without any diagnosable mental disorders who receive dopamine antagonists. We report on a case in the setting of in-patient care of a female on neuroleptic therapy who had an unorthodox presentation of NMS. The patient described presented with diaphoresis, tachycardia and unstable vitals, which comprise with the autonomic instability, but lacked the hyperthermia, altered muscle status, muscle rigidity and the concomitant elevation of serum creatine kinase (CK) that are pivotal for making an accurate diagnosis of NMS. Established diagnostic criteria must be scrutinized in order to recognize its limitations and achieve a new level of understanding in cases of NMS.

P2- 32

THERAPEUTIC MODALITIES FOR ALCOHOL USE DISORDER: LITERATURE REVIEW

Lead Author: Zahid Islam, M.D.
Co-Author(s): Srinivasa Gorle, M.D., Faisal A. Islam, M.D., Asghar Hossain, M.D.

SUMMARY:
Introduction
Alcohol use disorder is a common disorder in the United States. No therapeutic interventions can effectively solve this problem, but treatment consists of psychological intervention, pharmacological intervention or both. Available pharmacological intervention has shown mixed result.
Objective

Our goal is to evaluate the effectiveness of existing treatment modalities for alcohol use disorders. We examined pharmacological treatments from the perspective of evidence-based medicine. The role of the medications in the treatment process was highlighted.
Methods
A literature search via PubMed and Google scholar has been conducted on the available treatment modalities for addressing alcohol dependence
Discussion
A number of randomized controlled trials (RCTs) have been performed to establish the effectiveness of pharmacological agents for the treatment of alcohol dependence. FDA approved Naltrexone and Acamprosate have shown mixed results in clinical trial, but Naltrexone is effective in alcohol dependence as it decrease the length and frequency of drinking. Another FDA approved medication Disulfiram has showed ineffective for increasing abstinence in a recent multi center RTC. Baclofen, an antispasmodic drug, has proven to be remarkably effective in relapse prevention. However, despite generous benefits as a maintenance medication for alcohol dependence, dosing concerns have led to Baclofen being relegated as a second-line drug. Relapse preventive strategies may also include the use of Gabapentin; RCTs have suggested that Gabapentin administration may lead to a relative reduction in cravings. Moreover, Gabapentin seems to possess a reasonably safe profile. Varenicline is another drug that appears to be effective for underlying cravings; it is generally targeted for individuals that have an inclination for moderate and/or heavy alcohol consumption. However, it has no bearing on abstinence rates. A preliminary study concerning the drug Benfotiamine has demonstrated a significant decrease in alcohol consumption, especially amongst female alcoholics. Furthermore, the authors of the study encouraged the use of Benfotiamine as an adjunctive medication for thiamine deficiency due to its inherent composition. Another randomized controlled trial aimed to establish an efficacy with respect to placebo for the drug, Nalmefene. Despite relatively high dropout rates for Nalmefine subjects, the authors concluded that the drug has potential for individuals with a history of long-term alcohol abuse. In addition to psychiatric drugs, Cognitive Behavioral Therapy (CBT) may be instrumental in exerting an influential effect on the patient's well-being as well as ongoing comorbidities.
Conclusion
Interventions for alcohol dependence via the implementation of psychotherapy and psychopharmacological agents (e.g. Natrexone, Disulfiram, Acamprosate, Nalmefine) are necessary for the maintenance of an optimal clinical outcome.

P2- 33
UNEXPLAINED LEUKOCYTOSIS IN AN ELDERLY FEMALE PATIENT ON MULTIPLE PSYCHOTROPICS
Lead Author: Mandar Jadhav, B.S.
Co-Author(s): Eddie C. Beal, MD

SUMMARY:
A 72 year-old female patient with a history of bipolar I disorder was admitted to the inpatient medical unit for cross-titration off of ziprasidone for worsening tardive dyskinesia (TD) onto

lithium and lamotrigine. The patient tolerated the medication change, her TD improved and she was discharged home within five days. She was readmitted a week later with signs of lithium toxicity, possibly secondary to dehydration. With adequate fluid replenishment, the patient's lithium level decreased rapidly and she showed improvement in mental status initially during the next three days. However, on the day of planned discharge, the patient had an outbreak of a diffuse erythematous maculopapular rash, high fever and leukocytosis. Despite discontinuation of the lamotrigine and introduction of vancomycin with no identified source of infection, over the next two days the patient's leukocytosis continued to worsen, and she also developed acute renal failure. She was moved to the ICU and all her other medication except levothyroxine were stopped, and she continued to receive IV fluids. Renal workup was negative. Over the next three days with only supportive care, the patient's renal function and leukocytosis improved, her rash resolved, and her sensorium was clear enough to appreciate her mood symptoms again. At discharge to sub-acute rehab two days later, she had been started on quetiapine for her mood symptoms, with no recurrence of the rash or leukocytosis. No obvious cause for the rash could be identified after review of the literature that would appropriately explain this patient's clinical course.

P2- 34

A CASE OF BREAKTHROUGH PSYCHOTIC EPISODE IN AN ADOLESCENT FEMALE CHRONICALLY ABUSING DEXTROMETHORPHAN WHEN TREATED WITH RISPERIDONE AND BENZTROPINE

Lead Author: Mandar Jadhav, B.S.
Co-Author(s): Gerardo F. Ferrer, MD, Daljinder Singh, MD, Juan D. Oms, MD

SUMMARY:
Evidence suggests that inflammatory pathways involving cytokines are the basis of the pathophysiology of psychosis. Therefore, agents with anti-inflammatory effects may interact with psychotropic medication that is typically used to treat psychosis in ways that are not fully understood thus far. In the following case report we describe one such interaction between these drugs. An adolescent female patient who had been chronically using dextromethorphan was admitted to our inpatient psychiatric unit for catatonic behavior. On admission she was initially given a dose of 3 mg of risperidone. She was then put on 1 mg of risperidone daily when she seemed to have significant improvement in mental state. The following day, when she showed signs of EPS, 2 mg of benztropine daily was added on as well. However, with this decrease dose of risperidone and the benztropine added on, the patient had a florid psychotic episode. Hence, the risperidone dose was increased to 2 mg and the benztropine was discontinued on the subsequent day. The patient rapidly became less delusional and more communicative. Without any further changes to her medication regimen, the patient continued to improve. Risperidone is a weak CYP2D6 inhibitor, but it can decrease the metabolization of dextromethorphan significantly. Dextromethorphan has been shown to increase BDNF levels at dopaminergic neurons. Benztropine increases the availability of dopamine by blocking its reuptake as well. Therefore we hypothetize that introducing benztropine in a patient chronically using dextromethorphan may have increased dopamine levels to the point that they surpassed the dopamine antagonist effect of the reduced dose of

risperidone. Thus the patient had a breakthrough psychotic episode. Other clinicians may take heed when treating a catatonic patient similarly abusing dextromethorphan with risperidone and benztropine in future.

P2- 35

CULTURALLY COMPETENT PSYCHIATRY FOR REFUGEES: A PILOT PROGRAM OF A STANDARDIZED MODEL

Lead Author: Suni N. Jani, M.D., M.P.H.
Co-Author(s): An Hong Dinh, D.O., Sophia Banu, M.D., Ye Beverly Du, M.D., M.P.H.
Asim Shah, M.D.

SUMMARY:
Background: Refugees experience significant trauma through displacement but even after acceptance by a host country, they do not receive treatment for persisting symptoms of mental illness due to stigma, barriers to care, and acculturation difficulties. A validated and standardized psychiatric assessment and treatment model is needed to improve cultural competency of psychiatrists working with refugees to ensure quality care.
Aims/Objectives:
i. Creating a standardized practice model for the treatment of refugee patients
ii. Training psychiatrists to use the DSM 5 Cultural Formulation Interview (CFI) and culturagram for diagnosis and treatment of refugee populations
iii.Evaluating treatment progress in the culturagram through World Health Organization Disability Assessment Schedule 2.0 (WHO DAS 2.0) and Harvard Trauma Questionnaire (HTQ) scores
Proposition and Discussion:Baylor College of Medicine psychiatrists use the CFI at The Clinic for International Trauma Survivors to diagnose a refugee in their cultural context and then map a treatment plan with the culturagram, a validated tool designed to plan interventions. This refugee treatment model's progress is evaluated by their WHO DAS 2.0 and HTQ score to validate the improvement in health reflected by psychosocial parameters in the culturagram.
Implications:
i. Utilizing the CFI and the culturagram in conjunction may improve diagnostic accuracy, therapeutic alliance, and organized treatment planning
ii. This pilot model can be a replicated by psychiatrists in a variety of settings.
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P2- 36

METABOLIC AND DISTAL CARDIOVASCULAR/CEREBROVASCULAR EFFECTS OF SECOND GENERATION ANTIPSYCHOTICS

Lead Author: Russell T Joffe, M.D.
Co-Author(s): Christoph Correl, Lisa Rosen, Timothy Sullivan, Russell Joffe

SUMMARY:
This is a study of the metabolic and distal cardiovascular/cerebrovascular consequences of second-generation antipsychotics (SGAs) compared to antidepressants (ADs) in non-elderly adults ages 18-65 years, using data from Thompson Reuters MarketScan® Research Databases 2006â€"2010, a commercial U.S. claims database. Interventions included clinicians' choice treatment with SGAs (allowing any comedications) versus antidepressants (not allowing SGAs). The primary outcomes of interest were time to inpatient or outpatient claims for the following diagnoses within one year of SGA or AD discontinuation: hypertension, ischemic and hypertensive heart disease, cerebrovascular disease, diabetes mellitus, hyperlipidemia, and obesity. Secondary outcomes included the same endpoints at last follow-up time point, i.e., not censoring observations at 365 days after SGA or AD discontinuation. Cox regression models adjusted for age, sex, and number of medical comorbidities were run. Among 284,234 individuals (age= 44.46Â±10.74 years, total median follow-up=540 (first/third quartile=360/900) days), those within one year of exposure to SGAs vs ADs showed a higher risk of essential hypertension (adjusted hazard ratio (AHR)=1.16, 95% confidence interval (CI)=1.12-1.21, p<0.0001), diabetes (AHR=1.43, CI=1.33-1.53, p<0.0001), hypertensive heart disease (AHR=1.34, CI=1.10-1.63, p<0.05), stroke (AHR=1.46, CI=1.22-1.75, p<0.0001), coronary artery disease (AHR=1.17, CI=1.05-1.30, p<0.01) and hyperlipidemia (AHR=1.15, CI=1.07-1.17, p<0.0001). Unrestricted follow-up results were consistent with within 1-6 year post-exposure results. Increased risk for stroke with SGAs has previously only been demonstrated in elderly patients, usually with dementia. This study documents, for the first time, a significant increased risk for stroke, transient ischemic attack, myocardial infarction and coronary artery disease in a non-elderly adult sample with SGA use. We also confirm a significant risk for adverse metabolic outcomes. These findings raise concerns about the longer-term safety of SGAs, given their widespread and chronic use.

P2- 37

GENDER DIFFERENCES IN THE VIRTUAL BEHAVIOR IN SOCIAL NETWORKS

Lead Author: Vesna Joksimovic, M.D.
Co-Author(s): Veselinka Milović , Dragica Minić , Spasoje Vujanović , Jelena Pejović

SUMMARY:
Introduction:
Social networks have become a global phenomenon and attracted extensive population from all around the world in different ages, cultures, education levels, etc. They become integral parts of daily life and representing a virtual space for communication and development of social relations attract more and more users. Focus of the research is to see if there are any differences in using social networks between the gender.
Objective :

The subject of this research is to find differences in behavior on social networks between men and women.
Methods:
The sample included 81 males (39.5% of total respondents) and 124 females (60.5% of total respondents). All off them were examined:
-Socio-demographic characteristics questionnaire
-Evaluation scale of virtual behavior in social networks
Results and Conclusion:
By using an instrument to determine virtual behavior in social networks, we got an insight into the different aspects of internet usage. The analysis shows that there are major gender differences in certain aspects of behavior on social networks. Men and women are different when it comes to socialization via social networks (t=3,371; p<0,01)in the way that men have higher score on this subscale. Also, statisticaly significant differences were found in terms of self expression for sexual stimulation, this time in favour of men subjects (t=4,844; p<0,05).
References:
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P2- 38

ENGAGING THIRD- AND FOURTH-YEAR MEDICAL STUDENTS AS STANDARDIZED PATIENTS TO TEACH THE PSYCHIATRIC INTERVIEW: TEACHING, LEARNING, AND SELF REFLECTION

Lead Author: Katherine Jong, B.A.
Co-Author(s): Joseph Mouallem JD, Robin K. Ovitsh MD, Jeffrey Feola MD

SUMMARY:

Background:
The use of standardized patients is an increasingly common modality in the teaching of medical students. Most professional standardized patients are patient actors, and do not have a background in mental health or the nuances of the psychiatric interview. Third and fourth year students are not experts, but are able to utilize skills they have acquired during their core Psychiatry Clerkship to portray a psychiatric patient, give feedback to the student interviewing them, and engage in self-reflection about the experience. Using students as standardized patients not only minimizes the cost of hiring additional actors but also allows the student SPs to be involved in the education of pre-clinical students.
Methodology:
Students in the SUNY Downstate Medical Center 3rd- and 4th-year classes were recruited to participate in a standardized patient (SP) exercise for a 2nd-year student teaching session. Ten students participated in the exercise for a total of 16 different small group sessions. The case scenario was of a depressed law student who attempted suicide. The patient also had a history of having been sexually abused by the grandfather at a young age. Prior to acting as SPs, the students met with the faculty who had designed the case to review learning objectives and

conduct a dress rehearsal of the case for the whole group. Student SPs and faculty discussed important elements of the performance such as affect as well as the type of feedback a sample interviewer would receive. On the day of the exercise, 3rd- and 4th-year students attended 2nd-year teaching sessions to be interviewed. They then provided feedback, and afterwards joined the group discussion about the psychiatric case and interview. Following the activity, the SPs met together to discuss their experiences.
Conclusions:
Using students as standardized patients can help students grow as educators while also deepening their understanding of the psychiatric interview. The student SP session also provides a safe space for preclinical students to become comfortable asking and discussing sensitive areas of the patient history.
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P2- 39
PERIPHERAL MARKERS OF STRESS IN BIPOLAR DISORDER
Lead Author: Rugül Köse Çınar
Co-Author(s): Yasemin Görgülü , Bülent Sönmez, Evnur Kahyaci Kiliç

SUMMARY:
Introduction
Stress-activated glucocorticoid receptors (GR) are the triggering factor of a cascade of molecular events in bipolar disorder. Possibly inflammatory cytokines like tumour necrosis factor-Î± (TNF-Î±) affects GR and GR induces changes in the expressions of heat shock protein-70 (HSP70), brain derived neurotrophic factor (BDNF) and tissue plasminogen activator (tPA). Complexity of this molecular process is evaluated in bipolar patients.
Hypotheses
Models trying to explain the neuroprogressive nature are based on the hypothesis that the disease is an accelareted aging (acceleration of the cellular/biological aging) disease. Our aim is to test the compatibility of Bipolar I Disorder to accelarated aging model by testing the main steps of this model at the same time. Peripheral levels of stress markers do not reflect the

brain levels. Due to manic episode symptomatology BDNF levels can be expected to increase more than the euthymic state.
Methods
BDNF, GR, tPA, HSP70 and TNF-Î± mRNA expressions were examined in peripheral mononuclear cells (PBMCs) of 20 medication-naÃ¯ve or medication-free manic patients, 20 euthymic patients and 20 healthy controls. mRNA expressions were measured using real-time PCR.
Results
Compared to controls all markers showed elevated expressions in mania and again all markers except BDNF showed elevated expressions in euthymia. Between groups BDNF ($p < 0.005$) and GR ($p < 0.000$) expressions were statistically significant.
Conclusions
Our study suggests that the BDNF mRNA expression is elevated in PBMCs of patients with mania. Such an increase in BDNF mRNA might be associated with a compensatory mechanism to a BDNF decline in the brains of manic patients.

P2- 40

BEHAVIORAL HEALTH CARE FOR PEOPLE ENTERING JAIL: TREND ANALYSIS

Lead Author: Christina D Kang-Yi, Ph.D.
Co-Author(s): Amy Blank Wilson, PhD, LSW, Arthur C Evans Jr, PhD, Trevor R Hadley PhD

SUMMARY:
Study Purpose: This study aimed to (1) identify trend of behavioral health service use among people who enter jail, (2) calculate associated behavioral health care expenditures and (3) address implications for policy and service delivery.
Method: Cross-sectional trend analysis was conducted using the Philadelphia County jail data, the Philadelphia County Medicaid behavioral health claims and the Philadelphia County Behavioral Health Special Initiative claims. Study Sample included 31,975, 29,121 and 30,748 individuals who entered the Philadelphia County jail in 2008, 2010 and 2012, respectively. Descriptive analysis was performed to analyze demographic characteristics, length of jail stay, jail reentry, behavioral health service use, and associated behavioral health care expenditures.
Results: Every year, about 20% of individuals (1 out of every 5 people) entering jail in the Philadelphia County received behavioral health services through the county behavioral health system. The trend of demographic characteristics, behavioral health diagnoses, behavioral health service use, and behavioral health care expenditures remained steady except the proportion of people with schizophrenia entering jail. The proportion of individuals with schizophrenia entering jail decreased over time. Behavioral health service use and associated expenditures were the highest for those with substance use disorders and those with co-occurring substance use disorders.
Implications: The study finding on decreasing trend of people with schizophrenia entering jail may indicate the positive impact of behavioral health system intervention for this group. The steady trend of one fifth of jail population using county behavioral health services shows importance of population-based approach to effectively prevent jail recidivism among those

with behavioral health disorders. Innovative partnership between county jail and behavioral health systems is critical.

P2- 41

IMPLICATION OF PHQ1 & PHQ9 SCREENING FOR DEPRESSION AND SUICIDALITY IN MEDICALLY & SURGICALLY ILL PATIENTS TREATED IN A COMMUNITY TEACHING HOSPITAL

Lead Author: Dheeraj Kaplish, M.B.B.S., M.D.

SUMMARY:

OBJECTIVE

Depression and suicidality often go unrecognized, undiagnosed and untreated in hospital practice. The JCAHO has published sentinel alerts regarding suicide risk for patients in emergency & medical/surgical hospital settings. Depression also makes the outcome of treatment for CAD, Diabetes, CHF and other medical conditions worse. It is incumbent upon health care providers to develop effective real-world screening processes for depression and suicidality in both primary care and Inpatient settings. This retrospective study will report on the findings of a real-world quality improvement project in community teaching hospital to screen patients for depression and suicidality using a PHQ1 & PHQ9 process who are admitted for medical and surgical conditions.

METHODS:

This study was approved by the IRB. It was initially implemented as a Quality improvement project but later formalized in 2007. 1470 of 19917 individuals admitted to the Medical, Surgical, Observation, OBGYN floors between 11/2007 and 12/2009 had answered "yes" to "During the past month have you been bothered by feeling down, depressed or hopeless?" question. Social workers performed PHQ9 assessment for the "yes" responders. All available 491 PHQ9 forms were analyzed in an excel spreadsheet. For the purpose of this study a score <10 on PHQ9 constituted mild depression, 10-14 were moderately depressed, 15-19 were moderately to severe depression & 20-27 were considered severely depressed.

STATISTICS:

Subjects were grouped in 3 populations: age<40, age40-69 & age>69. Admissions to Medical, Surgical (includes OBGYN) and Observation services were compared. Analysis consisted of descriptive statistics, analysis of variance and Chi Square using Minitab16.

RESULTS:

We found 42.36% of individuals had at least a moderate degree of depression and 30.14% of subjects had some level of suicidality. Medicine service admissions had higher average PHQ9 scores in the age group 69(P=0.00019), and in the age group of 40-69 compared with age>69(P=0.00003). In Surgical admissions, average PHQ9 scores were again higher in the age group 69(P=0.0425). No statistical significance was found on Observation service comparison.

CONCLUSION:

Our Pilot study finds evidence of clinical depression during Medical and Surgical admissions. The PHQ1 screening method is a simple & effective tool currently established at Berkshire Medical Center. Younger patients are found to have higher PHQ9 scores on average when compared to the older population especially in medical admissions. This finding is consistent

with surgical admissions, particularly when age69. Observation service admissions do not show this difference. This may be due to short duration of admission and less severe comorbidity.

P2- 42

SCREENING FOR OBSTRUCTIVE SLEEP APNEA IN ADULT PSYCHIATRY CLINIC

Lead Author: Manpreet Kaur, M.D.
Co-Author(s): Katie Lewis, PhD; Sonika Raj, MS-III; Victoria Balkoski, MD; Anna Paley, MD; Jennifer Durham-Fowler, PhD

SUMMARY:

Objective: There is a high co-morbidity between obstructive sleep apnea (OSA) and mood disorders. The rate of undiagnosed OSA is very high in the general population. Many of the symptoms of OSA are hard to differentiate from symptoms of mood disorders, such as daytime tiredness. The purpose of this exploratory study was to discover whether patients with symptoms suggestive of undiagnosed OSA are being identified and referred to a sleep clinic from the Outpatient Psychiatry Clinic at Albany Medical Center. Additionally, we were interested in evaluating the frequency of individuals at intermediate- to high-risk for OSA who were being prescribed sedatives, as this is typically cautioned because sedative medications may be inadvertently prescribed to patients with undiagnosed OSA and may worsen daytime sleepiness, and may increase the risk of road accidents in patients with undiagnosed severe OSA. This study sought to evaluate whether patients with symptoms of OSA are being identified and referred to a sleep clinic and whether the medication they are being prescribed by their outpatient mental health providers meets recommended guidelines for care.

Method: One hundred and thirty eight patients attending the Outpatient Psychiatric Clinic were screened for symptoms and risk factors for OSA. Participant STOP-BANG scores were used to classify those at high risk for OSA. Electronic medical records were reviewed for information regarding currently prescribed medications at the clinic.

Results: One hundred and fifteen patients had complete data for the STOP-BANG questionnaire. Within this group, 29 patients (25%) were found to be at "high risk" and 32 patients (28%) were found to be at "intermediate risk" for OSA. Of the patients who were at intermediate- to high-risk, 30 patients (50%) were reportedly referred to a sleep clinic; however, only one of these patients was referred by their provider at the outpatient psychiatry clinic. Nearly half (44%) of the patients in the intermediate- to high-risk group were being prescribed sedatives by their outpatient provider.

Conclusions: Screening for OSA can be done very easily; however, the rate of referral to a sleep clinic for further evaluation of OSA in our sample was very poor, with the majority of patients who met elevated risk criteria for OSA having no recommended follow-up with a specialist. Prescribing sedatives to patients who are at intermediate or high risk for OSA without a full evaluation is not recommended; alarmingly, our study showed that nearly half of the patients with elevated risk for OSA were being prescribed sedatives by their outpatient provider. Our study highlights the importance of raising provider awareness of OSA within psychiatric populations, and educating clinicians on appropriate referral sources for evaluation.

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EMOTIONAL ATTACHMENT AND SATISFACTION WITH RELATIONSHIPS AMONG GAY MEN

Lead Author: Micah T Keaney, B.A.
Co-Author(s): Jon Cisneros, B.A., Kellen Imada, B.A., Lawrie A. Ignacio, Psy.D., Michael M. Omizo, Ph.D.

SUMMARY:
The purpose of this study was to investigate the adult attachment styles and relationships satisfaction among gay men. The main question this research project asked was: Is there a relationship between adult attachment-related anxiety and attachment-related avoidance and relationship satisfaction among gay men? A secondary question was: What is the relationship between attachment- related anxiety and attachment- related avoidance with regard to relationship satisfaction among gay men? Males aged eighteen and above who self-identified as gays were selected to participate in this study. There was not any restriction placed on geographical location or ethnicity, either. Participants were from a suburb of a large western city. The Relationship Assessment Scale (RAS) - Relationship satisfaction functioned as the dependent variable (DV) in this study. The Experiences in Close Relationships Revised (ECR-R) - In the current study, attachment classification was based upon the individual's self-reported degrees of anxiety and avoidance and was measured using the Experiences in Close Relationships-Revised instrument (ECR-ÂR) (Fraley, Waller & Brennan, 2000). Participants were invited to take part in a research study on romantic relationships among gay men and recruited from a suburb of a large western city. 89 participants were recruited from agencies and social events. Results revealed significant relationships between adult attachment and relationship satisfaction.

P2- 44

META-ANALYSIS OF THE EFFICACY OF TAILORED BEHAVIOR INTERVENTIONS FOR SMOKING CESSATION IN THE HIV POSITIVE POPULATION AS COMPARED TO THE STANDARD CARE

Lead Author: Asheena Keith, M.D.

SUMMARY:
Abstract
Context: Smoking is responsible for increased morbidity and mortality in persons living with HIV/AIDS, which raises a serious public health concern.
Objective: To assess the efficacy of behavior interventions for smoking cessation in the HIV-positive population as compared to the standard care.
Data Sources: PubMed (1980 to 12/2014) and Cochrane (1980 to 12/2014) were searched in December 2014 for randomized controlled trials that were published in English. Search terms included HIV, AIDS, immune compromised, smokers, behavioral intervention, individual therapy, group therapy, motivation interviewing, and telephone counseling.
Study Selection: Eligibility criteria were randomized controlled trials with behavior compared to standard care in increasing abstinence in the HIV population. Two authors independently

reviewed all titles and abstracts for eligibility criteria. 281 trials were found, 271 were excluded. 10 full text articles were obtained and reviewed, and 7 met eligibility criteria. The inter-rater agreement between the two evaluators was 0.94.
Data Extraction: Two authors independently extracted data from the seven trials and compared for accuracy. The primary outcome for all studies was expired carbon monoxide 7-day point-prevalence. Expired carbon monoxide rates indicating abstinence ranged from 7 parts per million (ppm) to 10ppm. Adequate sequence generation and freedom from incomplete or selective outcome reporting was used to asses study quality.
Results: 1520 subjects from 7 studies yielded a statistically significant effect of behavior interventions in improving abstinence in HIV infected smokers with a large effect size RR 1.69 (95% CI 1.28, 2.23). Aggregate outcome data from the 7 studies showed low to moderate risk of bias. There was no publication bias and the heterogeneity was insignificant.
Conclusions: Tailored behavior interventions (telephone counseling, individual counseling, group therapy and web-based treatment programs) are effective tobacco treatment strategies for persons living with HIV.

P2- 45

PERCEIVED SELF-DIRECTED TREATMENT AND RIGHT AMOUNT OF FAMILY INVOLVEMENT ARE ASSOCIATED WITH INCREASED PATIENT SATISFACTION IN PSYCHIATRIC INPATIENTS

Lead Author: Cheryl A. Kennedy, M.D.
Co-Author(s): Ketan Hirapara, M.B.B.S., Shazia Naqvi, M.B.B.S., Samina Mirza, M.D., Jagadeesh Batana, M.D., Humza Haque, B.S., Donald Ciccone, PhD

SUMMARY:
Background: Inpatient psychiatric services present many challenges to patients and providers alike. Service providers look for ways to enhance the treatment experience. The Joint Commission ranks 'patient satisfaction' as a key quality indicator. We assessed inpatients for factors that might be associated with higher levels of satisfaction. Our inner city academic medical center hospital has 34 inpatient psychiatric beds and accepts both voluntary and involuntary patients (most are involuntary: 52%). The majority is male (55.5%) and African American (68%). Others are mostly white (18%) and Latino (15%) with an average length of stay of 10 days. The most common diagnoses are schizophrenia, schizoaffective disorder, and bipolar illness. Many of our patients have comorbid substance use disorders along with co-occurring medical conditions such as diabetes, HIV/AIDS, and hepatitis. Of the third that had positive urine toxicology screens, 31% were positive for multiple drugs of abuse. At issue in the present study was whether patients with higher levels of perceived self-involvement in directing their own care had higher levels of satisfaction. We also addressed the related issue of whether perceived family involvement was associated with patient satisfaction.
Methods: With Institutional Review Board approval and participant consent we administered a patient satisfaction survey to 400 patients who were just about to be discharged. The survey included items about perceived personal involvement in treatment decisions as well as perceived involvement of family members in the treatment planning process. A patient satisfaction scale elicited perceived satisfaction ratings along a 10-point scale ranging from 1,

denoting little or no satisfaction with treatment, to 10, denoting a high level of satisfaction. A Chi-Square test was used to determine whether there was a statistically reliable association between satisfaction ratings and perceived involvement in treatment planning.
Results: Patients who reported 'always' being involved as much as they wanted in treatment decisions (49.75%) reported significantly higher levels of satisfaction compared to those with lower levels of involvement (p<0.001). Similarly, patients whose families were involved in treatment 'just the right amount' (49%) were also significantly more satisfied with care (p<0.001).
Discussion: Patient autonomy may play an important role in determining whether mentally ill patients are satisfied with their inpatient psychiatric treatment. This may be especially applicable to the chronic and persistently mentally ill. These results highlight the importance of fostering self-involvement in treatment decision-making as well as the potential role of family involvement in enhancing satisfaction with psychiatric care. Further analysis will examine other factors that may be associated with patient satisfaction.

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CAN CO-OCCURRING SUBSTANCE USE DISORDER WITH PSYCHIATRIC DIAGNOSIS INCREASE LENGTH OF STAY?
Lead Author: Cheryl A. Kennedy, M.D.
Co-Author(s): Ketan HIrapara, MBBS, Yazan Kadcoy, BS, Ghulam Khan, MBBS.

SUMMARY:
Background: The United States spends $113 billion annually on mental health treatment (~5.6 % of national health-care spending). Disability payments and lost earnings bring the total annual cost of serious mental illness to over $300 billion. Even so, some 60 % of adults in need receive no mental health services. Along with psychotic disorders and mood disorders, substance use disorders (SUD), withdrawal syndromes and substance induced mood and psychotic syndromes are prominent in current hospital practice. On psychiatric units, co-occurring disorders may increase cost. There is some evidence that co-occurring disorders can affect length of stay (LOS), that, of course does increase cost. We recruited participants from an urban academic center inpatient sample to determine if co-occurring SUDs affect LOS.
Methods: With Institutional Review Board approval and participant consent we administered a patient satisfaction survey to 475 in-patients on day of discharge over the past three years. We also collect LOS information, substance use history, urine toxicology report, admission and discharge diagnoses. Overall patient satisfaction (previously reported), LOS and positive urine toxicology were compared among three groups: Schizophrenia and related disorders, Mood Disorders, and Bipolar Disorder.
Results: The overall mean LOS was 10Â±9 days. Schizophrenic patients had significantly longer LOS (11.1Â±8.8 days) as compared to patients diagnosed with mood disorders (7.6Â±6 days, p<0.001). Also, bipolar disorder patients stayed longer (11.4Â±11.7 days) as compared to mood disorder (p=0.008) patients. Eight substances are tested in urine toxicology screen: Opiates, Cocaine, Amphetamine, Methadone, Heroin, PCP, Benzodiazepines, Barbiturates and blood alcohol levels are assayed. In our sample, 36% tested positive for at least one of the substances.

Schizophrenic subjects used on average, significantly less number of substances (1.3Â±0.7) as compared to patients with mood disorders (1.6Â±0.8, p=0.03). There was no significance difference found between bipolar disorder (1.39Â±0.5) and the two remaining diagnosis groups with regard to number of substances used. However, substance use, either singly or multiply was not significantly associated with either increased LOS or patient satisfaction. Participants were highly satisfied overall.
Discussion: Preliminary analysis did not find an adverse effect on LOS among our psychiatric in-patients with SUDs. Our unit has several Addiction Psychiatrists. We use motivational interviewing, other psycho-education and counseling around substance use; initiate Medication Assisted Treatment or alcohol withdrawal management if indicated. It may suggest that, although extra-training for Psychiatrists may be costly, it may be cost-effective in the long run for populations with substantial rates of co-occurring disorders. Further research is warranted to see if focused & specialized short-term treatment can be effective.

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ONCE-MONTHLY PALIPERIDONE PALMITATE COMPARED WITH ORAL CONVENTIONAL OR ORAL ATYPICAL ANTIPSYCHOTIC TREATMENT IN PATIENTS WITH SCHIZOPHRENIA

Lead Author: Edward Kim, M.B.A., M.D.
Co-Author(s): H. Lynn Starr, Cynthia A. Bossie, Lian Mao, Larry Alphs

SUMMARY:

Background: Relative benefits of long-acting injectable atypical antipsychotics vs oral antipsychotics (OAs) remain a subject of debate. This exploratory subgroup analysis of the Paliperidone palmitate Research In Demonstrating Effectiveness (PRIDE; NCT01157351) study compared outcomes following administration of paliperidone palmitate once-monthly (PP1M) vs conventional OAs or atypical OAs.
Methods: PRIDE was a 15-month prospective, randomized, open-label, event-monitoring boardâ€"blinded study designed to reflect real-world schizophrenia, as defined by patients, treatments, and outcomes. 444 subjects with schizophrenia and history of incarceration were randomly assigned to PP1M or to 1 of 7 commonly prescribed OAs (up to 6 could be deselected for each subject if deemed unacceptable by patient or clinician). Primary endpoint: time to first treatment failure (TF), defined as arrest/incarceration, psychiatric hospitalization, suicide, discontinuation due to inadequate efficacy or safety/tolerability, treatment supplementation due to inadequate efficacy, or increase in psychiatric services to prevent psychiatric hospitalization. Kaplan-Meier analysis estimated event-free probabilities. This analysis reported randomization-based comparisons of PP1M vs conventional OAs (haloperidol, perphenazine), PP1M vs atypical OAs (olanzapine, aripiprazole, quetiapine, risperidone, and paliperidone), and PP1M vs paliperidone and risperidone (different delivery of same/similar molecule).
Results: Compared with PP1M, risk for first TF was 34% higher with conventional OAs (HR, 1.34; 95% CI, 0.80-2.25), 41% higher with atypical OAs (HR, 1.41; 95% CI, 1.06-1.88), and 39% higher with paliperidone/risperidone (HR, 1.39; 95% CI, 0.97-1.99). Mean (SD) daily dose (mg) of prescribed OAs were 8.2 (5.33), 16.5 (8.81), 13.3 (6.44), 15.3 (5.89), 339.9 (180.35), 3.6 (1.61), and 6.6 (2.44) for haloperidol, perphenazine, olanzapine, aripiprazole, quetiapine, risperidone,

and paliperidone, respectively. Mean (SD) monthly PP1M dose was 181.3 (34.19) mg. Incidences of extrapyramidal symptomâ€"related adverse events (AEs) were 45.7%, 13.7%, and 10.6% in the conventional, atypical, and paliperidone/risperidone groups vs 23.9% in the PP1M group, respectively. Incidences of prolactin-related AEs were 5.7%, 3.8%, and 3.5% in the conventional, atypical, and paliperidone/risperidone groups vs 23.5% in the PP1M group. Incidences of â‰¥7% weight increase were 11.4%, 14.9%, and 16.0% in the conventional, atypical, and paliperidone/risperidone groups vs 32.4% in the PP1M group. Deselection of specific OAs and low compliance with OAs may have biased the safety results, masking tolerability issues associated with any 1 OA.
Conclusions: These exploratory analyses suggest a lower risk of TF but higher rate of some AEs following treatment with PP1M compared to treatment with conventional OAs, atypical OAs, and paliperidone/risperidone. Additional studies are needed to confirm findings.

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DISCORDANT IDENTIFICATION OF SYMPTOMS AND DIAGNOSIS OF DELIRIUM

Lead Author: Eun Ha Kim, M.D.
Co-Author(s): Victoria Balkoski, MD, Khalid Elnagar, MD, Mark Lukowitsky, Ph.D.

SUMMARY:
Introduction: Delirium is a common psychiatric disorder in the acute adult inpatient setting. Its prevalence is estimated to be approximately 10 to 30 percent of all medically ill patients who are hospitalized. Delirium has a relatively poor prognosis, including increased morbidity and mortality, longer hospital stays and increasing healthcare costs. Delirium phenomenology is complex and presents with a broad spectrum of cognitive dysfunction. The initial diagnostic impression of delirium by the primary treating physician, when made, is highly accurate, but the detection rate is low. Our study aims to examine the discordant identification of symptoms and diagnosis of delirium by the primary care team and the psychiatric consulting physicians.
Method: This is a retrospective chart review study from January 1, 2012 to December 31, 2013. We reviewed 239 charts of patients who were diagnosed with delirium by a psychiatrist on the psychiatry consultation service where the initial consult was placed for a problem other than delirium, confusion, or altered mental status. Data was collected on 16 delirium symptoms based on DSM-IV. Our study examined the delirium symptoms detected or missed by the primary treating physician as documented in daily progress notes within 3 days prior to psychiatric consultation, and delirium symptoms detected by the consulting psychiatrist. Data was coded for differences in detection of individual symptoms of delirium between the primary team and the psychiatric team for each patient.
Conclusion: In our study, we found 37.3% of delirium cases were correctly identified by the primary treating physician, which is consistent with other studies. The most frequently non-psychiatrist identified symptoms were emotional disturbance, agitation, reduced of awareness and disorientation. In our study, disturbance of attention was the least frequently identified by primary treating physician and had the least level of agreement. Neurological abnormality was the symptom most frequently agreed upon. This may be because non psychiatric physicians are relatively well trained in neurological examination. Our results indicate that improved education for primary care and other specialties regarding specific or more subtle signs and

symptoms of delirium and/or use of a standardized delirium checklist would lead to earlier detection which may result in improved clinical outcomes in addition to reduced lengths of stay and hospitalization costs.

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THE AVAILABILITY AND EFFECTIVENESS OF RESIDENTIAL TREATMENT FOR PERSISTENT MENTAL ILLNESS

Lead Author: Michael Knable, D.O.
Co-Author(s): Caroline Cantrell, LCSW; Aaron Vander Meer, MSW; Eric Levine, EdD

SUMMARY:
Using a variety of search methodologies we attempted to estimate the number of beds in residential treatment centers providing 24-hour supervision for adults with persistent mental illness in the United States. We estimated that there were approximately 4.75 beds per 100,000 population in the United States, a number that is significantly below that found in some Western European countries. There were approximately 42 private programs specifically designed for the rehabilitation of young adults with persistent mental illness and the characteristics of these programs are briefly reviewed. When residential beds were combined with the number of state psychiatric hospital beds and psychiatric beds in private or general hospitals, the total number of beds providing 24-hour supervision for adults with mental disorders was estimated to be 34.8/100,000. This number appears to be significantly lower than current estimates of the need for these services. Clinical experience at our own residential treatment center will also be reviewed.

P2- 50

PSYBERGUIDE: A WEBSITE TO HELP CONSUMERS EVALUATE COMPUTER AND DEVICE ASSISTED THERAPIES FOR MENTAL ILLNESS

Lead Author: Michael Knable, D.O.
Co-Author(s): Jason Moehringer, PsyD; Victoria Pickering, Ed.D.; Alice Saperstein, Ph.D.

SUMMARY:
PsyberGuide (www.psyberguide.org) is a project of the One Mind Institute and the International Mental Health research organization. The site was launched in 2013 and seeks to objectively describe and evaluate computer and device assisted therapies for mental illness. While the vast majority of these products are not studied in randomized controlled trials, or evaluated by regulatory agencies, data provided by qualified experts and consumers can be gathered to help make informed decisions prior to purchase. The PsyberGuide site currently contains: detailed description of available products, annotated scientific bibliography pertaining to certain products, an internal rating scale for quality and efficacy of each product list, in-depth expert review of certain products, and expert consensus ratings of certain products. We plan to add additional information including: direct consumer ratings, provider ratings, and a qualified provider database. The methodologies used in the site development will be discussed.

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USING GIS SOFTWARE TO ADDRESS THE TREATMENT-DIAGNOSIS GAP IN PSYCHIATRIC MORBIDITY

Lead Author: Arad Kodesh, M.D., M.H.A.

SUMMARY:

Back ground

The State of Israel stands on the brink of one of the substantial reforms in the health national system , since the National Health Act legislation that will transfer the responsibility of the mental health treatment services from the Ministry of health to HMOs starting effective July 2015.The population suffering from severe psychiatric diagnosis (SMI): schizophrenia, schizoaffective disorder and bipolar disorder, is a unique group with special health-care requirements. The objective of this work is to examine the utility of GIS in assisting public health care in psychiatric disorders

Methods

SMI Register was developed in Meuhedet Health Services, launched unified algorithm based on the online information from the digital medical records and the pharmacy system which allows tracking drug purchases. Recently we integrated the use of these registers and the Geographic Information System (GIS).The GIS is a computer system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data..

The integration of these and other data sources can clarify the prevalence of SMI in any geographic area and the existence of all relevant medical services in those areas. We describe the analysis of information on dispersal of patients suffering from schizophrenia and bipolar disorder, and the distribution of service providers (psychiatrists, psychologists and psychotherapists), according to population sectors (Orthodox Jewish and Arab population) and SES (Socioeconomic status).

Main findings

Meuhedet Healthcare Services, a 1.1 million-member health maintenance organization (HMO) operating in Israel, has recently constructed a computerized registry of SMI patients. The Registrar identified 12,334 (1.1%) HMO's members who are diagnosed with schizophrenia or bipolar disorder. The prevalence of SMI in men and women are 6.9 per 1,000 and 9.2 per 1,000 respectively). The average age at onset of schizophrenia among males and females were 37.2 and 42.2 respectively.

The Center district leads the prevalence rates of SMI: 11.3 per 1000 men and 9.7 per 1000 women and the Jerusalem district has the lowest prevalence rate: 7.7 per 1000 men and 5.0 per 1000 women. ($p < 0.005$).

The psychiatric morbidity rate among the Arab population in Jerusalem is 0.74% and among the Jewish population in Jerusalem is 0.61%. The distribution of mental health services in the East Jerusalem is lacking, compared with their Jewish counterparts. Ashdod represents a low and medium SES city with a mixed Jewish population. There psychiatric morbidity rates were higher in low socioeconomic level areas.

Conclusions

It seems that the integration between the SMI registry and the GIS is a promising tool for risk identification, public health decision makers and reducing the treatment-diagnosis disparities/gap.

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LOSS OF CONCORDANCE OF ADULT WHITE MATTER FRACTIONAL ANISOTROPY IN NONHUMAN PRIMATES: EFFECTS OF EARLY LIFE STRESS

Lead Author: Venu Kolavennu, B.S., M.D.
Co-Author(s): Jeremy Coplan, MD

SUMMARY:
White matter integrity is of critical relevance to neurodevelopmental disorders including anxiety and mood disorders. Alterations in myelination may relate to the age of onset of a multitude of psychiatric disorders. Diffusion tensor imaging (DTI) determines the integrity of white matter tracts by assessing fractional anisotropy (FA), a measure of directional diffusion of water molecules. Early life stress induces persistent volumetric deficits of the white matter of the corpus callosum in both humans and nonhuman primates. We hypothesized that infants exposed to early life stress, induced by varying the difficulty of maternal foraging [(variable foraging demand (VFD)], in comparison to non-exposed control subjects (Non-VFD), would exhibit persistent impairments in concordance of white matter integrity. Using a 3T-MRI, DTI was performed on 21 adult male Bonnet macaques, 12 of whom had been raised under VFD conditions and nine of whom had been raised under normative conditions (Non-VFD). Primary regions of interest included the following: the right and left anterior limbs of the internal capsule, both posterior limbs of the internal capsule, anterior and posterior regions of the corpus callosum and right and left occipital white matter regions. Concordant relationships for FA between anterior internal capsule and corpus callosum were evident in Non-VFD-reared subjects, but absent in VFD-reared subjects, whereas posterior FA concordance was evident in VFD-reared and not Non-VFD-reared subjects. Emotional disruption of normative dyadic attachment produced long-term loss of anterior capsular-callosal FA concordance in VFD-reared subjects as compared to controls, suggesting disturbance of a common neurotrophic influence. By contrast, early life stress appeared to create an aberrant posterior capsular-callosal concordance. Loss of frontal concordance and development of posterior concordance is consistent with observations in symptomatic mood disorders.

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RESOLUTION OF SLEEP DISTURBANCE PRECEDES RESOLUTION IN OTHER SYMPTOM DOMAINS DURING NATURALISTIC TREATMENT OF MANIA

Lead Author: Siva Sundeep Koppolu, M.B.B.S.
Co-Author(s): Thomas Salvanti, Zimri Yaseen MD, Igor Galynker MD, PhD.

SUMMARY:
Objective: Bipolar disorder is distinguished by manic episodes -- sustained periods of decreased sleep, elevated mood, and, variably, psychosis. We sought to examine how symptoms of insomnia, mania, and psychosis resolve in a naturalistic treatment setting. In

particular we hypothesized that sleep disturbance would be dissociable from manic and psychotic symptoms.
Methods: A retrospective chart review study 100 charts of patients with admitting diagnosis of bipolar disorder, mixed or manic episode in the absence of substance use disorder as a primary diagnosis were reviewed. CARS-M mania and psychosis ratings and sleep hours were determined for a total of 8 observations. Medications and demographic variables were also recorded. Times to symptom minimum in each domain were compared via paired t-tests, and symptom domain trajectories were explored using repeated measures ANOVA. The impact of medication use on symptom trajectories and of early symptom levels on symptoms at discharge were examined using repeated measures ANOVA and regression models.
Results: Manic and psychotic symptom resolution followed linear trajectories over the time of hospitalization, while sleep improvement was non-linear. Sleep initial slow response followed by a rapid improvement to peak, which preceded peak improvement in manic and psychotic symptoms ($p<0.0005$). Severity of each symptom domain at beginning of hospitalization was the only significant predictor of that domain after 2 weeks of treatment in regression analyses controlling for initial symptom severity in other domains. Patterns of medication use did not significantly affect symptom trajectories, but first generation antipsychotic and benzodiazepine use were associated with greater over-all severity starting from day of admission.
Conclusions: In acute mania, improvement in sleep disturbance with treatment is dissociable from improvement in symptoms of mania and psychosis. Reduction of manic and psychotic symptoms with continuing insomnia warrants continuing treatment for acute mania, as does sleep restoration with continuing symptoms of mania and psychosis.

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A MODEL WELLNESS INTERVENTION AIMED AT REDUCING CARDIOMETABOLIC SYNDROME RISK ASSOCIATED WITH PSYCHOTROPIC MEDICATIONS

Lead Author: Raymond J Kotwicki, M.D., M.P.H.
Co-Author(s): Philip D. Harvey, PhD

SUMMARY:

Background: Individuals with mental illnesses face particular risk for developing heart, pulmonary, and energy problems, collectively called cardiometabolic syndrome. High Body Mass Index (BMI), hypercholesterolemia, hypertriglyceridemia, hypertension, and hyperglycemia are the components of this syndrome. Two classes of medications used to treat individuals with schizophrenia, bipolar disorder, and depression â€" atypical antipsychotics and mood stabilizers â€" are known to exacerbate the problem, as are a number of the correlates of severe mental illness including a sedentary lifestyle and social isolation.
Methods: Eleven patients being treated with atypical antipsychotics and or mood stabilizers were enrolled in a structured wellness program at Skyland Trail, a private psychiatric rehabilitation facility. The patients were given access to a personal trainer for weight control and to promote lean muscle mass. A low-carbohydrate, high-lean-protein meal plan provided six meals daily. Psycho-education about the link between physical and mental health, including a tobacco cessation component and nutritional education were provided.

Meditation and relaxation classes, including yoga, were offered. Regular monitoring of physiologic indices was conducted. Medication treatment of insulin resistance and/or hyperglycemia was provided as indicated.
Results: For the 11 patients who completed the program to date, there were several changes in their physical functioning. Body mass index (BMI) manifested a statistically significant decrease of three points for 7 of the 11 clients, p<.008. Further, when compared to clients enrolled in healthy challenge, other clients at the rehabilitation facility manifested a statistically significant 2=point increase in their BMI during the course of treatment. The participants also manifested a decrease in their total cholesterol during treatment (mean =22 points), p=.07. Finally of the 11 cases, 5 had more than one day where they walked more than 10,000 steps, 7 had 2 or more days with more than 8,000 steps, and 9 clients did not have a day without 6,000 or more steps, thus showing that the intervention is associated with excellent levels of physical activity.
Implications: The healthy challenge intervention leads to decreased BMI and high levels of physical activity. This BMI decrease is more substantial when considering the fact that the typical client manifested a treatment related weight gain of 2 BMI points, reflecting a net loss of 5 BMI points. This is clearly a substantial change. Activity levels were high for most patients and cholesterol levels manifested a marginally significant decrease for the sample as a whole, with the decrease being over 20 points on average. These findings suggest that a healthy living intervention is feasible in the context of a day treatment for

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DEVELOPMENT AND INITIAL VALIDATION OF AN ABBREVIATED ASSESSMENT OF CLIENT ENGAGEMENT IN OUTPATIENT MENTAL HEALTH SERVICES
Lead Author: Raymond J Kotwicki, M.D., M.P.H.
Co-Author(s): Philip D. Harvey, PhD

SUMMARY:
Background: Significant numbers of individuals with severe mental illnesses are difficult to engage in treatment services, presenting challenges for care. Some evidence suggests that individuals with severe mental illness diagnoses must be continually engaged in treatment to achieve positive outcomes. However, the exact role of engagement in community mental health care has yet to be fully elucidated. The challenges includes include formulating and measuring reliable indicators of client engagement over time and predicting mental health outcomes, including its relationship to different treatment interventions and the overall outcomes of treatment.
Methods: A modified version of the Milestones of Recovery Scale was developed to assess the relationship between engagement and discharge outcomes and the influence of an incentive-based program for client engagement. This scale was evaluated for interrater reliability in a sample of 233 cases and then was administered to 423 clients over a 24-month study period. In an effort to determine whether provision of incentives lead to increases in client engagement, a cut off for client eligibility for financial aid was evaluated and the course of engagement was related to receipt of this incentive and successful completion of treatment.

Results: The interrater reliability data were ordinally distributed, and an intra-class correlation (ICC) was calculated. The ICC was 0.76, p<.001, 95% C.I. (.688, .813). Absolute agreement was 85%, with only 2 (0.5%) cases receiving ratings that differed by 2 points between the raters and the other 14.5% had disagreements of 1 point. Of the sample of 423, 78% received an initial financial incentive during treatment (were initially engaged), and 93.3% of that subsample sustained this level of engagement over their entire course of treatment. Of the 22% of cases not receiving an initial incentive, only 5.4% improved in their engagement to levels required for the incentive. Longitudinal multilevel-model analysis demonstrated that individuals who maintained or increased their level of engagement over time were more likely to complete treatment in accordance with planned treatment goals. The incentives did not lead to increased engagement in initially poorly engaged patients.
Implications: It is unclear whether an external reward like financial aid could contribute to sustained or increased engagement because there were no randomized control groups for comparison. Future investigations should compare external rewards differing on various dimensions to see if such patterns persist. Additional predictors, such as attendance to scheduled sessions, attitudes towards treatment, and current satisfaction of care could be included with engagement level to provide a more complete picture of factors leading to positive and non-positive discharges.

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EVALUATION OF SENTENCE COMPREHENSION IN DEMENTIA AND MCI AND THE RELATIONSHIP BETWEEN LANGUAGE DEFICIT, SEVERITY OF COGNITIVE DECLINE AND BPSD

Lead Author: Maria Kralova MD PhD, M.D., Ph.D.
Co-Author(s): Beata Meszaros Hideghety M.D., Jana Markova PhD., Zsolt Csefalvay PhD.

SUMMARY:

INTRODUCTION: More comprehensive language testing (sentence comprehension tests) shows a strong relationship between overall severity of cognitive decline and language deficit, substantial impairment we see even in patients with mild dementia. As more severe is cognitive decline, as more frequent are also BPSD in general, but some of them can be present also in milder dementia conditions.
AIM: To detect the language deficits in sentence comprehension in patients with MCI and dementia and to determine the relationship between them and the severity of cognitive decline and independently between them and BPSD.
METHOD: In the sample of 50 cognitively declined patients (MCI and dementia, majority of them with AlzheimerÂ´s disease) of Department of psychiatry of University Hospital in Bratislava, Slovakia we evaluated severity of cognitive impairment by means of MoCA instrument, language deficit with our own sentence comprehension test, designed for Slovak speaking individuals and BPSD by means of NPI-Q.

RESULTS: The average performance in the sentence comprehension test was 90% of normal in the group of MCI patients, 74% in mild, 69% in moderate and only 22% in the group of severe dementias. We found also strong correlation between the overall severity of BPSD (total NPI-Q

score presence of symptoms) and the performance in the sentence comprehension test. Language impairment was associated with the presence of delusions, aberrant motor behavior, depression and apathy even when severity of dementia was controlled for.

CONCLUSION: At earlier stages of cognitive disorders/dementias the language specific test should be used to discover comprehension deficits, because at the simple level of word the language skills are preserved. BPSD are also associated with language deficits even when the severity of dementia is controlled for. Identification of these communication disturbances can help to detect cognitive decline earlier and to start preserving treatment in time.

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LABETALOL INDUCED VISUAL HALLUCINATIONS AND CROSS-SENSITIVITY WITH METOPROLOL

Lead Author: Reena Kumar, M.D.
Co-Author(s): Jigar Chotalia, MD,MPH; Ragavan, Mahadevan, MD.

SUMMARY:

Case summary:
We present a case of 60 year old white male with past medical history of hypertension and cataract, and with no past psychiatric history who was admitted for CHF exacerbation. During hospitalization, he complained of vivid visual hallucinations of "beach outside his window" "12 feet tall man" "ghost walking" "someone spinning in air," after he was started on metoprolol for controlling his blood pressure. He also had a past history of taking labetalol after which he started having visual hallucinations. He took it for 2 months and once it was stopped, his hallucinations resolved. During current hospitalization, his visual hallucinations subsided after stopping metoprolol.
Conclusion:
We report an uncommon but bothersome adverse reaction of a commonly used class of medication for various diseases. One interesting fact in our patient was that he had cross-sensitivity to metoprolol, which belongs to same group as labetalol. It was very overwhelming for him to live with those hallucinations despite his blood pressure being controlled with labetalol. Beta-blocker induced hallucinations are under- recognized and under-reported. As clinicians we must be cautious of this rare but troubling side effect in patients receiving beta blockers.

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OBESITY AND MENTAL HEALTH

Lead Author: Gurprit Lamba, M.B.B.S., M.D.
Co-Author(s): Ryan Page, BA, James M. Ellison, MD,MPH

SUMMARY:

Introduction
Obesity management has been shown to promote patient well-being and to enhance the therapeutic alliance in mental health care systems, but the evidence base affirming these

benefits is limited. Few studies address clinical decision-making and available interventions for managing obesity in psychiatric treatment populations.
The purpose of this study is to review available data on obesity and mental health.
Methods
A literature search was conducted in PubMed using MeSH terms 'Obesity, over weight', 'Obesity and mental health', 'Obesity therapy', 'Psychosis and obesity', 'Obesity and psychiatry', 'Obesity and depression', 'Obesity and anxiety', 'Obesity and bipolar', 'Obesity and cognition,. Articles from the references cited were also reviewed. These were critically analyzed to review the condition of obesity and care of psychiatric patients.
Results
Our review of the literature indicates the need for more studies of obesity's effects on psychiatric patients. A number of small physiological human studies found supporting evidence for obesity management in psychiatric patients. Both pharmacologic and non pharmacologic factors contribute to obesity. Better understanding of mechanisms involved in the development of obesity and further investigation of early and effective treatment interventions will reduce weight gain or facilitate weight loss.
Conclusions
Although additional studies are needed, we argue that healthcare providers should be made aware of the potential therapeutic value of managing obesity within a holistic approach to the health care of psychiatric patients.

P2- 59

CHILDHOOD ADVERSITIES ARE ASSOCIATED WITH NEGATIVE MENTAL HEALTH OUTCOMES IN OLDER HOMELESS ADULTS IN OAKLAND, CA: RESULTS FROM THE HOPE HOME STUDY

Lead Author: Chuan Mei Lee, M.A., M.D.
Co-Author(s): David Guzman, MSPH, Claudia Ponath, MA, Lina Tieu, MPH, Christina Mangurian, MD, Margot Kushel, MD

SUMMARY:

Objective: This study examined the association between 7 childhood adversities with current depression, prior suicide attempt, and prior psychiatric hospitalization among a community-based sample of homeless adults, aged 50 and older.
Methods: The study enrolled 350 homeless adults, aged 50 and older, in Oakland, CA using a population-based sampling method. Study staff conducted in-person interviews which queried childhood adversities including child maltreatment (physical neglect, verbal abuse, physical abuse, and sexual abuse), parental loss (parental death and parental incarceration), and out of home experiences (child welfare system placement). Logistic regression models were used to determine associations between childhood adversities and psychiatric outcomes of current depressive symptoms (CES-Dâ‰¥22), prior suicide attempt, and prior psychiatric hospitalization.
Results: Overall, 72.0% (N=252) of participants retrospectively reported at least 1 form of childhood adversity. Participants with increased exposure to childhood adversities (4 or more) were more likely to report current depressive symptoms (AOR=5.9, 95% CI 2.2-15.3), prior

suicide attempt (AOR=53.6, 95% CI 10.5-277.2), and prior psychiatric hospitalization (AOR=6.6, 95% CI 2.5-17.4) after controlling for age, sex, race, and education level in preliminary logistic regression models.
Conclusions: Childhood adversities are potent risk factors for adult mental health outcomes. Even among this vulnerable, older homeless population, information about childhood adversities should be collected to inform psychiatric evaluations.

P2- 60

THE EFFECT OF GROUP THERAPY ON DEPRESSION, ANXIETY, AND ANGER IN KOREAN PATIENTS WITH CORONARY HEART DISEASE : A RANDOMIZED CONTROLLED TRIAL

Lead Author: Sang Yeol Lee, M.D., Ph.D.
Co-Author(s): Hye-Jin Lee2, Ph.D., Sung Yong Park3, M.D., Ph.D.

SUMMARY:
Objective : The purpose of this study was to investigate the effects of group therapy on depression, anxiety, and anger in Korean patients with coronary heart diseases.
Methods : The subjects of the study were 135 outpatients with coronary heart diseases who regularly visited and received cardiovascular medication at the cardiovascular center in a university hospital. Among the 135 patients, 92 patients were selected according to high scores of depression, anxiety and anger, and then 45 patients were randomly selected and allocated into the experimental and control group. The final subjects were 37 patients excluding 8 patients who retracted their consent and lost follow up during the study. The experimental group received group therapy twice a week over a period of 3 months and cardiovascular medication, while the control group had continued only cardiovascular medication(no action). To examine the effect of group therapy, the scores of Beck Depression Inventory (BDI), State-Trait Anxiety inventory (STAI), and State-Trait Anger Expression Inventory (STAXI) were used. To figure out the effects of group therapy, mixed ANOVA using 2x2 repeated measurement design were used to compare any significant differences between experimental and control group.
Results : 1) There was no significant statistic difference in depression, sate-trait anxiety, anger and anger expression between experimental and control group before group therapy. 2) Depression were significantly reduced in experimental group compared to control group. 3) Trait anxiety were reduced in experimental group compared to control group, but not state of anxiety. 4) Trait and state of anger were reduced in experimental group compare to the control group. 5) In anger expression, anger-control was increased in experimental group compare to control group. Anger -out and anger-in were reduced in experimental group compare to control group.
Conclusion : The group therapy was significantly reduce depression, anxiety, and anger in patients with coronary heart disease. In particular, anger-in and anger-out were reduced the most, and anger control was increased after group therapy. It would be possible to apply group therapy usefully as a psychosocial intervention program in cardiac rehabilitation center for Korean patients with coronary heart disease.

POSTER SESSION 3

P3- 1
DRUG INFORMATION SYSTEMS FOR THE PREVENTION OF DRUG MISUSE, DIVERGENCE AND SUICIDE: A FOCUS GROUP STUDY
Lead Author: Christine Leong, Pharm.D.
Co-Author(s): Jitender Sareen, MD, Murray W. Enns, MD, James Bolton, MD, Silvia Alessi-Severini, PhD

SUMMARY:
Problem: Misuse, divergence, and intentional overdose with the use of pharmaceuticals continue to be an important and prevalent problem in developed countries worldwide. Drug information systems provide pharmacists access to dispensing information, which may be used to limit the risk of providing inappropriate quantities of medications available for potential misuse. However, challenges of this system from the perspective of the pharmacist are not known. This study aims to identify and understand the barriers associated with the utilization of drug information systems in preventing drug misuse, divergence, and intentional overdose in community pharmacy practice.
Procedure: A pilot focus group based on grounded theory was conducted. Five community pharmacists were selected using non-probabilistic purposeful and convenience sampling. A series of situational scenarios and open-ended questions regarding the factors and challenges associated with the restriction of medications to high-risk patients were presented to the group by a research facilitator. Line-by-line coding of the focus group transcripts using ATLAS.tiÂ® was carried out, moving iteratively between the data to identify common themes. This study was approved by the institution's Human Research Ethics Board.
Results: The analysis of the focus group resulted in the identification of three themes related to the use of drug information systems and the challenges of identifying and intervening on patients at risk of medication misuse, divergence, and overdose: (1) Patient Level Barriers (deciphering signs of misuse); (2) Pharmacist Level Barriers (quality of education, neighborhood of practice, years of practice experience); (3) System Level Barriers (prescriber availability, targeted pharmacies at risk).
Conclusions: A large proportion of community pharmacists in Manitoba expressed a need for improved systems for managing patients who may be at risk for medication misuse, divergence, and intentional overdose. Findings from this study will provide valuable information for the development of effective and feasible strategies for limiting the means of medication misuse; which have important implications from a health policy perspective.

P3-2
SUB-CLINICAL HYPERTHYROIDISM OR ORGANIC PSYCHOSIS?
Lead Author: William Levitt, M.D.
Co-Author(s): Nitina Babu, MD

SUMMARY:

We present the case of a 17 year old Hispanic female who was admitted to the emergency department for intractable nausea and vomiting for 6 days. The patient developed altered mental status and psychosis and was transferred to a psychiatric pediatric unit. The patient exhibited a strange course of altered mental status with abnormal thyroid laboratory values. Her psychosis improved over time with both psychiatric treatment and the stabilization of her thyroid.

Given the acute onset of her condition with no precipitating drug use or family history of psychosis, an endocrine process began to be suspected with a possible autoimmune etiology. The patient was evaluated for smooth muscle antibodies, CIQ, double stranded DNA, rheumatoid factor and TFTs, of significance were the patient's thyroid function tests. Her TSH level was 0.13 UIU/ML with reference range(0.34-4.82 UIU/ML) and Free T_4 was 1.30 NG/ML with reference range (.59-1.61 NG/ML). This unexpected finding of subclinical hyperthyroidism led us to believe that the source of the patients acute psychosis may have been due to her increased levels of thyroid hormone. In the case of this patient, while a primary psychotic disorder was strongly considered due to the abrupt and unusual onset of psychotic symptoms, the patient exhibitied a number of atypical features such as recent unintentional weight loss and unprovoked gastrointestinal symptoms. The patient was found to have thyroid abnormalities and exhibited a picture of subclinical hyperthyrodisim with low serum thyroid-stimulating hormone (TSH) levels, with normal free thyroxine (T_4) and total or free triiodothyronine (T_3) levels . Over time, the T_4 levels began to normalize. Five days after initial draw, the TSH measured 0.25 and T_4 level 0.63. Although the patient was initially very isolative, she slowly became brighter, sleeping, eating and socializing well reporting resolution of her auditory hallucinations. Patients thyroid function tests were again drawn 7 days later with results showing TSH levels normalizing to 0.77 and T_4 levels dropping to .54. Patients levels before discharge showed TSH levels of .7 and a normal T_4 level of .76.
Unfortunately, there is little known about the relationship between hyperthyroidism and psychosis and even less known about the correlation with psychosis in children. Further complicating this is that the research on sub-clinical hyperthyroidism and psychosis (especially in children) is almost non-existent. Psychosis associated with hyperthyroidism in children is uncommon and often literature does not mention psychosis as a presenting feature of increased thyroid hormone. This led us to a debate as to whether the patient in question had a primary psychiatric disorder versus psychotic symptoms brought upon secondarily by her thyroid abnormalities. As such, we conducted research into the the presentation of subclinical hyperthyroidism and psychosis and it's mechanism.

P3- 3
STRUMPELL-LORRAIN SYNDROME AND PSYCHOSIS
Lead Author: Lambert Lewis, M.S.
Co-Author(s): Adekola Alao MD, MRCPsych, FAPM and Stephen Lebduska, MD

SUMMARY:
Introduction:

Hereditary Spastic Paraplegia (HSP) otherwise known as familiar spastic paraplegia or Strumpell-Lorrain Syndrome include a group of clinical disorders that involve neurodegenerative disease of the brain. There have been reports that this condition may be associated with ataxia, seizures, cognitive impairment, dementia, amyotrophy, extrapyramidal disturbance, and peripheral neuropathy; however, reports with comorbid psychosis are rare. In this report, we will describe a 75 year old man with HSP who developed psychotic symptoms that became worse with severity of his UTI.

Case Report:

The patient is a 75-year-old man with HSP and a PMH of neurogenic bladder and urinary calculi. He was admitted with auditory and visual hallucinations as well as delusions within the context of severe sepsis secondary to pyelonephritis. He was treated with piperacillin/tazobactam and vancomycin and underwent nephrostomy tube placement. Investigations including CBC, CMP, B12, folate, thiamine, TSH, blood cultures, UA/UC, and head CT revealed anemia as well as elevated ESR, CRP, and WBC.

Psychiatry was consulted. The patient was initially given prn risperidone 0.5 mg with no significant improvement. He was later treated with lurasidone 20 mg po daily. Both were discontinued due to limited success. These were substituted with aripiprazole 2 mg po bid. His psychosis improved and he continued to experience cognitive impairment but gradually returned to his pre-hospitalization baseline.

Discussion:

SLS describes a set of inherited neurodegenerative disorders with a major feature of severe, slowly progressive lower extremity spasticity and weakness due primarily to distal degeneration of long motor and sensory axons. SLS is classified by mode of inheritance, gene locus, and whether the syndrome is uncomplicated (involving only lower extremity impairment with or without urinary urgency and/or decreased vibratory sensation in the toes) or complicated (involving additional symptoms). SLS typically presents between the second and fourth decade of life but can occur from early childhood to the ninth decade. SLS is primarily a clinical diagnosis supported by laboratory, neuroimaging and neurophysiological studies used to exclude alternative diagnosis and to classify the type of SLS. SLS has been linked to psychiatric illness including mood disorders, cognitive impairment, and mental retardation. Studies have described the presence of psychosis associated with SLS. While these reports are scarce, the presentation and course discussed are similar to that of this patient.

Conclusion:

The late onset psychosis could be a novel feature of SLS linked psychosis not previously described and another aspect of SLS that psychiatrists and other healthcare practitoners need to be aware of when evaluating apparent cases of psychosis in elderly with SLS.

P3- 4

MALIGNANT CATATONIA FOLLOWING BARIATRIC SURGERY: CASE REPORT AND LITERATURE REVIEW

Lead Author: Subani Maheshwari, M.D.
Co-Author(s): Ajita Mathur, MD

SUMMARY:

Background: Malignant catatonia is a life threatening behavioral syndrome commonly associated with underlying psychiatric and/or general medical condition. There is limited literature on catatonia following bariatric surgery. We present the case of a 59 year old female with depression who reported worsening psychosis following bariatric surgery and was catatonic on psychiatric evaluation. She responded to intravenous lorazepam. She was discharged to outpatient after medical stabilization.
Learning Objectives
Importance of prompt recognition and treatment of malignant catatonia.
Methods: We describe a patient whose treatment required multidisciplinary approach. Literature search was conducted using the keywords; catatonia, altered mental status and bariatric surgery.
Results: The patient's mental status improved with a test dose of intravenous lorazepam and continued treatment. She was also counseled about aripiprazole that was started for its weight neutral and non-sedating properties. After medical stabilization she was transferred to inpatient psychiatric service for further management of her underlying behavioral issues. The patient was eventually discharged with outpatient psychiatric and bariatric surgery clinic follow-up. Our patient had been non-compliant on her home medications: fluoxetine and risperidone
Discussion: The patient was noncompliant with her medication prior to admission and other differential were ruled out based on evaluation and lab work up. Improved mental status and vital signs with intravenous lorazepam supported the diagnosis of malignant catatonia.
Conclusion: Prompt diagnosis and effective treatment is crucial to prevent morbidity and death from malignant catatonia. Wernicke's encephalpathy is a differential that must be ruled out in altered mental status in the setting of post bariatric surgery. Supportive measures and high dose benzodiazepine remains the mainstay of treatment.
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P3- 5
IMPACT OF HURRICANE SANDY ON A POPULATION OF HIGH UTILIZERS OF PSYCHIATRIC EMERGENCY SERVICES
Lead Author: Katherine Maloy, M.D.

SUMMARY:
Hurricane Sandy struck the New York City area on October 29, 2012, and led to the closure of four major hospitals, including Bellevue Hospital Center, which operated greater than 300 inpatient psychiatric beds as well as a Comprehensive Psychiatric Emergency Program (CPEP), which evaluates and treats over 12,000 patients per year. Despite the services that Bellevue offers, there exists a population of patients who utilize psychiatric emergency services frequently in lieu of engaging in outpatient services. Studies of high-utilizers of ER and

psychiatric ER services have varied in their findings and recommendations. This study aimed to first characterize this population of high utilizers, in terms of demographics, diagnosis, housing status, presence of substance use disorders and legal complications. Patients identified as high-utilizers in the year prior to the storm who returned after the hospital re-opened were then interviewed to determine where they obtained services and to examine their experience of the hospital closure and the storm itself. Medicaid records for these patients were also examined to determine where they obtained services before and after hospital closure, and to examine overall service utilization patterns. Overall, patients experienced the disruption in city services as distressing, and maintained their pattern of high-utilization by transferring care to other hospital ER settings. The population of patients were overwhelmingly homeless, with comorbid SPMI diagnosis, as well as substance use disorders, and legal complications.

P3- 6

COMORBIDITY OF OBSTRUCTIVE SLEEP APNEA IN TREATMENT RESISTANT MOOD DISORDER AND POSTTRAUMATIC STRESS DISORDER: ASSOCIATION THAT'S IGNORED.

Lead Author: Pankaj Manocha, M.D.
Co-Author(s): Sree Latha Krishna Jadapalle, MD; Huzaifa Seidu, MD

SUMMARY:

Educational Objective: To appreciate the comorbidity of obstructive sleep apnea (OSA) in patients with mood disorder and post traumatic stress disorder (PTSD) and to emphasize the importance of conducting appropriate diagnostic studies and following the standard treatment guidelines.

Abstract: Symptomatic OSA afflicts an estimated 4% of men and 2% women aged 30 to 70 years in United States. Common symptoms include daytime sleepiness, fatigue, irritability, disturbed sleep, memory problems, and diminished quality of life. Prevalence and association of OSA in psychiatric disorders such as mood disorder and PTSD is well established in published literature. In one of the study published in 2005, point prevalence of OSA diagnoses was significantly more common in subjects with PTSD (3% vs 1%) and bipolar disorders (BPD) (3% vs 1%). In one study, 55% of an interepisode BPD patient met diagnostic criteria for insomnia, 70-91% of patients with PTSD have difficulty falling or staying asleep. A meta-analysis found sleep disturbance to be the most common prodrome of mania and the sixth most common prodrome of depression.

However, until now patients are still being treated predominantly for their mood or PTSD symptoms for several months with multiple medications ineffectively, and not suspected to be evaluated by neurophysiological tests such as sleep study to rule out OSA. The aim of these case reports is to emphasize the importance of recognition of obstructive sleep apnea symptoms in patients presenting with treatment refractory mood disorder and/or PTSD symptoms. We report two of such cases, one with history of BPD who had chronic complaint of insomnia resulting in multiple relapses of mood symptoms in spite of being on therapeutic dosages of an SSRI and atypical antipsychotic as an adjunct. Evaluation for OSA and subsequent treatment for OSA resolved the insomnia resulting in remission of mood

symptoms. The second case with diagnoses of BPD and PTSD was treated with multiple medications for insomnia including sedative hypnotics. Patient's insomnia was a major trigger for his manic episodes requiring hospitalizations, even after being on therapeutic dosage of antidepressants and atypical antipsychotics as mood stabilizer. Further examination revealed high probability for OSA and the need for further diagnostic studies like sleep study. Both of these cases described here had underlined OSA symptoms, which were left undiagnosed and untreated for several years. These cases also illustrate the importance of recognition of underlying OSA symptoms in patients presenting with treatment resistance for mood disorder and PTSD and implementation of diagnostic sleep study to come up with the appropriate treatment plan.

P3- 7

SLEEP DISTURBANCES AND PTSD SYMPTOM SEVERITY ASSOCIATIONS IN A U.S. ACTIVE DUTY MILITARY INPATIENT POPULATION

Lead Author: Joseph Mansfield, B.Sc.
Co-Author(s): Sara Chapman, B.Sc. ,Kelly Lonergan, R.N., Rebecca Burson, D.O.

SUMMARY:
Introduction: Poor sleep quality and Posttraumatic stress disorder (PTSD) have been shown to be positively associated. However, such findings extend mostly to the outpatient population; the inpatient psychiatric population has largely been understudied. This study investigated the relationship between PTSD and sleep disturbances in a sample of military members presenting for inpatient psychiatric hospitalization.
Methods: A de-identified database with demographic and psychometric information from psychiatric inpatients was used to investigate a relationship between the PTSD Checklist-Civilian (PCL-C) and the DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure question 14 for report of problems with sleep. The subjects were adults aged 18 to 50, active duty U.S. military members. Inclusion criteria for the database required admission to the San Antonio Military Medical Center inpatient psychiatric ward and an ability to fill out screening psychometrics.
Results: Psychometric and demographic data of 309 patients over a span of 9 months revealed a mean PCL-C score of 39.56. The prevalence of sleep disturbances was 72.17%. Participants with higher PCL-C scores demonstrated a statistically greater prevalence of sleep symptoms ($p < 0.05$).
Conclusion: PTSD symptoms are positively associated with sleep disturbances in an inpatient psychiatric active duty population. Findings suggest a need to better understand the interaction between sleep disturbances and PTSD to elucidate potential shared biological underpinnings.

P3- 8

CONTAINING PSYCHOSIS: THE UNREALIZED BENEFITS OF ART THERAPY ON AN INPATIENT PSYCHIATRIC UNIT

Lead Author: Janette K Maron, M.A.
Co-Author(s): Adrienne Figueiredo, L-CAT, ATR,Lila Aboueid, D.O. ,Amjad Hindi, M.D.

SUMMARY:
Art Therapy is an beneficial treatment for people suffering from acute psychiatric illness within an inpatient unit. One of the main reasons that Art Therapy is so efficacious is that it provides a holding environment in which containment of psychiatric symptoms, especially psychosis, may be achieved. Another reason for this is the Art Therapist themselves, who are trained psychotherapy clinicians, and are therefore able to not only support and maintain that containment but also provide interventions within the art-making process. We present a case study of a 24 year old man diagnosed with Schizophrenia who was treated by two Art Therapists during an admission to a short-term inpatient psychiatric unit. Looking through the lens of his artistic process and the art itself, the progression of his illness and the interventions used by the Art Therapists will be explored here. We will also present how Art Therapists work with the clinical treatment team as a whole to augment the team's understanding of patients' diagnoses and the expression of their symptoms, and provide a sometimes new and unique framework for their treatment.

P3- 9
THERAPEUTIC METAPHORS: BUILDING BRIDGES WITH PATIENTS
Lead Author: Daniel May, D.O., M.S.

SUMMARY:
The etymology of the word "metaphor" comes from the Greek word meaning "to transfer (1)." Metaphors offer patients and clinicians an efficient way "to transfer" complex and abstract ideas, even during a brief encounter. Despite variations in patient and provider life experiences, metaphors may function as an organizing principle shared by the patient and the clinician. Metaphors may offer a common linguistic ground upon which a treatment plan can be constructed and may illuminate new paths to wellness. However, the failure to recognize a metaphor can result in fractures in the therapeutic alliance, potentially compromising the treatment plan.
The ability of a patient to appreciate abstraction and metaphor is a fundamental component of the mental status exam and may alert clinicians to a variety of pathologies (2,3,4). The skilled use of metaphors and symbols, as exemplified by Carl Jung and Milton Erickson, has long been incorporated in a diverse range of treatment approaches. Metaphors have been appropriated to various empirically validated therapies, including cognitive behavioral therapy (5) and acceptance and commitment therapy (6). Attempts have also been made at establishing a form of "metaphor therapy" (7). Growing research has been investigating the neural processing of metaphors through functional brain imaging as well (8).
This poster will attempt to highlight the vibrant diagnostic and therapeutic potentials of applying metaphors to clinical practice.

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P3- 10

L-METHYLFOLATE, FOLINIC ACID, AND FOLIC ACID AND REPORTED IMPROVEMENTS IN FATIGUE IN DEPRESSED PSYCHIATRIC OUTPATIENTS WITH MTHFR-VARIANT GENOTYPES

Lead Author: Arnold Mech, M.D.

SUMMARY:
In an effort to assess the degree to which fatigue and resultant emotional dysregulation might be improved, a prescriptive supplement with 15 mgs. of L-methyl folic acid, in addition to folinic acid and citrated folic acid was added in an open-label fashion to the treatment regimen of 60 depressed adult outpatients. These outpatients were selected in a neuropsychiatry clinic for testing positive for one or two C677T allele MTHFR single nucleotide substitutions. Patients took the prescription supplement in an open label manner for 4-weeks. CGI-Improvement was assessed at 4 weeks. Pre- and post-treatment levels of fatigue were obtained per standard clinic protocol using the Fatigue Assessment Scale (FAS) [4] and levels of emotional dysregulation (difficulties in frustration tolerance and impulse control) with the Mech Emotional Dysregulation Inventory (MEDI). [5]
In this study, 44 or 73.3% were "much improved" on the CGI-I and reported that their fatigue was significantly improved on the Fatigue Assessment inventories completed by patients pre- and post-treatment with the prescription methylated B vitamin administration. Those patients reported improvements in sleep quality with a 22% reduction in fatigue based on Fatigue Assessment Scale pre-treatment responses and a 41% reduction in related emotional dysregulation (i.e., impaired frustration tolerance and impulse control) on the Mech Emotional Dysregulation Inventory. (MEDI) [5].

P3- 11

HOMOCYSTEINE REDUCTION WITH L-METHYLFOLATE, FOLINIC ACID, AND FOLIC ACID IN DEPRESSED PSYCHIATRIC OUTPATIENTS WITH MTHFR-VARIANT GENOTYPES

Lead Author: Arnold Mech, M.D.

SUMMARY:
Objective: This study was designed to evaluate the safety and efficacy of prescription L-methylfolate, folinic acid, and folic acid as monotherapy in adults with major depressive disorder (MDD), and further test the hypothesis that reduced (metabolized) B vitamins will lower homocysteine (HCY), a known risk factor for depression and numerous other neuropsychiatric illnesses.
Method: 330 adult patients meeting the Diagnostic and Statistical Manual V criteria for MDD were randomized to receive either prescription L-methylfolate, folinic acid, and folic acid including micronutrients (RBVS) designed to lower HCY in the CNS or placebo. This trial used a specific prescription containing leucovorin, folic acid, levomefolate magnesium, ferrous cysteine glycinate, 1,2-docosahexanoyl-sn-glycero-3-phosphoserine calcium, 1,2-icosapentoyl-sn-glycero-3-phosphoserine calcium, phosphatidyl serine, pyridoxal 5-phosphate, flavin adenine dinucleotide, nadh, cobamamide, cocarboxylase, magnesium ascorbate, zinc ascorbate, magnesium l-threonate, betaine, citric acid monohydrate and sodium citrate capsule, delayed release pellets (RBVS). Plasma HCY levels were drawn at baseline and at 8 weeks for all subjects. Subjects were screened for potential side effects and adverse events at 8 weeks.

Results: Of the 330 adult patients meeting the Diagnostic and Statistical Manual V criteria for MDD randomized to receive either RBVS designed to lower HCY in the CNS or placebo, 159 of 170 Enlyte patients completed the study and 123 Placebo patients completed the 8-week study. Of the 159 patient completers who received RBVS, 131 (82.6%) showed a reduction in plasma homocysteine (2.7 mcmol/L reduction from a baseline of 9.6 to 7.2mcmol/L) while 28 (17.4%) showed no change. The 123 patients who received placebo showed a small elevation (+0.4mcmol/L from 9.6 to 10.0 mcmol/L). Plasma HCY levels were drawn at baseline and at 8 weeks for all subjects. Subjects were screened for potential side effects and adverse events at all encounters.
Conclusion: RBVS, a combination of reduced B vitamins and micronutrients FDA approved for the reduction of HCY in the CNS, when used in the treatment of MDD, significantly separated from placebo by week 8 of treatment on all rating scales. Patients receiving placebo experienced, on average, a slight, non-significant increase in HCY levels. These results confirm that the PBVS reduces HCY levels in depressed patients. Further studies are needed to correlate these reductions in HCY with improvements in mood.

P3- 12
A NEW ONSET OF CANNIBALISTIC IMPULSES IN A POST-STROKE PATIENT: A CASE REPORT
Lead Author: John W Miller, M.D.
Co-Author(s): Andrea Bulbena-Cabre, M.D., Normal R. Dunn, M.D., Richard Gersh, M.D., Ronnie G. Swift, M.D.

SUMMARY:
Introduction:

Cannibalism has been described since early history as part of ancient rituals, in periods of war & famine and, most recently, in criminal acts. Although extremely rare, cannibalism has also been reported in schizophrenic patients.
Case Report:
We present a case of new onset cannibalistic impulse in a 54 year old male following a cerebrovascular accident in the caudate nucleus and internal capsule. This patient consistently expresses the wish to bite and eat facial body parts of different family members. A full neurological and psychiatric work-up was performed to rule out any other organic etiology of the patient's disinhibited thought content. The patient's cannibalistic impulses were never present prior to this stroke.
Conclusion:
Our case highlights the importance of neurology and psychiatry working together toward a common goal.

P3- 13

DIFFERENCES IN THE VIRTUAL BEHAVIOR IN SOCIAL NETWORKS GROUPS OF RESPONDENTS WITH REGARD TO THE TIME SPENT AT THE COMPUTER

Lead Author: Veselinaka Milovic, D.Sc.
Co-Author(s) :Dragica Minić , Vesna Svorcan Joksimović , Spasoje Vujanović , Jelena Pejović ,

SUMMARY
Introduction:
The mental health services discovered Internet Addiction (IA) and Pathological Internet Use (PIU). Individuals spend more time in solitary seclusion, spend less time with real people in their lives, and are often viewed as socially awkward. Arguments may result due to the volume of time spent on-line. This finding is substantiated by numerous anecdotal accounts of people becoming captivated on online interactivity.
Objective:
The subject of this research was to find the difference in behavior on social networks in the relation to the time spent on computer.
Methods :
The sample included 81 males (39.5% of total respondents) and 124 females (60.5% of total respondents). All off them were examined:
- Socio-demographic characteristics questionnaire
- Evaluation scale of virtual behavior in social networks
- Questionnaire about the time spent on social networks
Results and Conclusion:
Based on results, the evaluation of virtual behavior on social networks, we concluded that there are statistically significant differences between subjects who spend a different amount of time at the computer in terms of dependence on social networks ($F=7,738$; $p<0,01$) also in terms of socialization by social networks ($F=3,831$; $p<0,05$). To identify between which groups there are statistically significant difference, we carried out one more test. This test have helped us to determine the exact time that people spend on the computer or what is the limit that could be placed between the normal (optimal use) and addiction. Within the measurement on

addiction to the social networks, it can be seen that the addiction is more pronounced on subjects who spend three hours on the computer (p<0,05), as well as with those who spend four or more hours using the computer, in comparison to those subjects who spend one hour on the computer (p<0,01). Also, there are major differences between groups of those who spend two hours and those who spend four or more hours on the computer (p<0,01). The subjects who spend four or more hours using the computer are statistically more different than all other three other groups regarding the addiction to the social networks (p<0,01).

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P3- 14

JOB LOSS EFFECTS ON MENTAL HEALTH

Lead Author: Dragica Minic, M.D.

Co-Author(s): Veselinka Milović, Vesna Svorcan Joksimović , Aleksandar Joksimović , Nađa Milović , Spasoje Vujanović ;

SUMMARY:

Introduction:

The focuses on the research into the job loss effects on mental health. Job loss is understood as a critical event, and Gerald Caplan`s crisis theory is used as a context of the work. Supposed elements of the construct "mental health" were depression, anxiety, self-efficacy and optimism.

Objective:

The objective of this study refers to the research of the course / psychidinamics of crisis with high-sressful life event- job loss.

Methods:

Sample was 83 males and 117 females, who lost their job in different periods. All of them were examined:

- Socio-demographic characteristics questionnaire
- Material status and financial pressure scale
- Specially created questionnaire for the social support assessment
- Proactive coping scale â€" for examination of coping strategies
- The general self-efficacy scale (GSE)
- Life orientation test (LOT)
- General Health Questionnaire (GHQ28)
- Minnesota Multiphasic Personality Inventory (MMPI-201)

Results and Conclusion:

Applying these instruments job loss is proved to bring problems to mental health. The most significant results show that people who lost their job suffer from deep depression, somatization, social dysfunction and anxiety-insomnia.

P3- 15

JOB LOSS EFFECTS ON MENTAL HEALTH

Lead Author: Dragica Minic, M.D.

Co-Author(s): Veselinka Milović, Vesna Svorcan Joksimović , Aleksandar Joksimović , Nađa Milović , Spasoje Vujanović ;

SUMMARY:

Introduction:

The focuses on the research into the job loss effects on mental health. Job loss is understood as a critical event, and Gerald Caplan`s crisis theory is used as a context of the work. Supposed elements of the construct "mental health" were depression, anxiety, self-efficacy and optimism.

Objective:

The objective of this study refers to the research of the course / psychidinamics of crisis with high-sressful life event- job loss.

Methods:

Sample was 83 males and 117 females, who lost their job in different periods. All of them were examined:

-Socio-demographic characteristics questionnaire

-Material status and financial pressure scale

-Specially created questionnaire for the social support assessment

-Proactive coping scale â€" for examination of coping strategies

-The general self-efficacy scale (GSE)

-Life orientation test (LOT)

-General Health Questionnaire (GHQ28)

-Minnesota Multiphasic Personality Inventory (MMPI-201)

Results and Conclusion:

Applying these instruments job loss is proved to bring problems to mental health. The most significant results show that people who lost their job suffer from deep depression, somatization, social dysfunction and anxiety-insomnia.

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SOURCES OF CAREGIVER STRESS IN AFRICAN AMERICANS CARING FOR OLDER RELATIVES

Lead Author: Shajiuddin F Mohammed, M.D., M.P.H.
Co-Author(s): Christine Unson, MPH, PhD

SUMMARY:

Purpose: This study identified sources of stress among African-American caregivers.

Method: A convenience sample of caregivers (N=110) who provided at least five hours per week of unpaid care to a relative 55 years or older were recruited from community settings in metropolitan areas of the Northeastern United States. They completed a self-administered questionnaire concerning caregiver burden.

Results: 65.1% of primary caregivers provided an average of 36.8 (SD=46.5) hours. per week of care. The average age of these caregivers was 42.5 (SD=15.3) years. 81.8% were females, and 41.8% were employed full-time. The average age of the care recipient was 75.1 (SD=9.7) years with moderate functional status (ADL: 4.37 (SD=2.2) and IADL: 4.1 (SD=3.1)), and 51.8% lived with the caregiver. The average scores showed low caregiver burden/stress (Zarit Caregiver Burden Scale (ZCBI), M=22, SD=13.6); positive perceptions of caregiving (Positive Aspects of Caregiving (PAC): 4.1 (SD=0.7); moderate religiosity: 4.78 (SD=1.55); and moderate family disagreements: 2.28 (SD= 1.13). High scores on CES-D scale (Î²= .36**), lower scores on PAC (Î²= -.21**) more family disagreements (Î²=.37**), and higher religiosity (Î²= .27**) were significant (p<.05) predictors of ZCBI in regression analysis. They accounted for 50% of the variance in the ZCBI (AdjR2.50**).IADLs, ADLs, weekly hours of care, and living with the caregiver were not significant predictors.

Conclusion: African American caregivers tend to experience low to moderate caregiving burden. Family disagreements and depression contribute to caregiver stress. Hence, there is a need to develop interventions to lower caregiver burden among African Americans.

P3- 17

SMITH-MAGENIS SYNDROME: A CASE REPORT AND LITERATURE REVIEW OF A TYPICAL BEHAVIORAL PRESENTATION AND TREATMENT OF AN ATYPICAL DEVELOPMENTAL DISORDER

Lead Author: Alison Moritz, B.A., B.S.
Co-Author(s): Michael DiGiacomo MD

SUMMARY:

Smith-Magenis syndrome is a rare developmental disorder that can be difficult to diagnose as it exists at the intersection of medicine and psychiatry. Frequently observed symptoms include facial dysmorphia, circadian rhythm dysregulation, self-harm, aggression, speech delay, and insensitivity to pain and temperature. The current case focuses on a 6-year-old Chinese male, of unknown parentage, adopted at age 4 by a Caucasian American family. At age 4 he was diagnosed with Smith-Magenis syndrome by FISH after exhibiting physically aggressive tantrums, intellectual disability, sleep disturbances, and cardiac, visual, and dental problems. Of utmost distress to his family were his daily aggressive tantrums. Treatment was initiated with melatonin, and scheduled daily naps. Following treatment, his sleep pattern improved

and his aggressive tantrums reduced in frequency. This history, presentation and treatment process explores the interactions between genes, environment, and behavior. It is intended to raise awareness of a complex genetic disorder and a potential explanation of a biological cause of psychiatrically important behaviors.

P3- 18

PICK-UP GAMES: A CASE OF CHRONIC AN AT A PUBLIC PSYCHIATRY ACUTE FACILITY

Lead Author: Aris Mosley, M.D.
Co-Author(s): Esad Boskailo, M.D., Gilbert M. Ramos, M.A.

SUMMARY:

INTRO
Anorexia Nervosa (AN) is the restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. A disturbance in the way in which an individual's body weight or shape is experienced, AN is characterized by an intense fear of gaining weight or becoming fat. As a disease, eating disorders (ED) as a whole have a higher mortality rate than any other mental illness. Nonetheless, only 35% of those treated for their ED receive such treatment at a facility which specializes in its treatment.
CASE PRESENTATION
An 18 year-old female presented to our acute psychiatric facility for court-ordered treatment, with a working diagnosis of Anorexia Nervosa, Restricting Type, Extreme. With an onset at age 11, she had 20 prior hospitalizations. These hospitalizations included children's hospitals, eating disorder facilities, residential treatment programs, and mental health facilities. Upon admission, her BMI of 13.6 was so severe that she required tube feeds. The patient exhibited intentional restricting behavior and interference with treatment, specifically by not eating or drinking by mouth and attempting to remove the feeding tube. Ultimately wrist restraints and "mittens" were required to prevent her from pulling out the feeding tube. She managed to pull out her feeding tube four times in five days. Three of those times she was in restraints. The patient had a marked determination to avoid weight gain; she was adept at maneuvers to accomplish this goal. An individualized behavior plan was developed based on a multidisciplinary team meeting with the facility's psychologist and direct treatment staff. This was intended to address her interference with treatment interventions and to make staff's response to her more consistent. The plan contained specific interventions intended for the patient's problematic behaviors. These included drinking shower water or stuffing her clothing with items before weigh-ins to add weight, or vigorously swinging her legs to burn calories. The plan also specified specific placement of her feeding tube to minimize her ability to manipulate the tube. The plan was reviewed and updated daily for staff hand-off to match her behaviors. After 74 days the patient was discharged at a BMI of 16.4 to a facility specializing in eating disorder treatment.
DISCUSSION
A patient with AN presenting to a facility not specialized in EDs represents a challenge, which must be quickly addressed through clinical experience, meticulous observations, and balancing the little research guidance available on effective interventions for behaviors utilized to

circumvent the therapeutic process. A working "playbook" of sorts needs to be created for clinicians that encounter and treat patients with severe eating disorders. Particular interventions can be categorized into those addressing feeding tubes, showering, exercise, and weigh-ins.

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ROLE OF IMPAIRED SEROTONIN NEUROTRANSMISSION FOLLOWING EARLY LIFE STRESS: BEHAVIORAL AND HPA AXIS CORRELATES.

Lead Author: Fatima Motiwala, M.B.B.S.
Co-Author(s): Fatima Motiwala , Sasha L. Fulton ,Benjamin Metrikin , Anna Rozenboym , Jean Tang Tarique D. Perera , Yung-yu Huang, Eric L.P. Smith , Leonard A Rosenblum , J. John Mann, Jeremy D. Coplan

SUMMARY:

Background: Early Life Stress (ELS) during childhood can lead to the escalated risk of developing psychiatric disorders such as mood disorders later in life. The serotonergic system has been recognized to play a vital role in the pathophysiology and treatment of mood disorders. In a non-human primate model of ELS, we showed elevated levels of 5-hydroxyindoleactic acid (5-HIAA) (the primary metabolite of serotonin) in cisternal CSF. Suppression of serotonin neurotransmission by excessive peri-raphe serotonin via activation of 5-HT1A somatodendritic autoreceptors was hypothesized. We aim to extend the association of ELS and serotonergic system impairment via its effects on behavior and HPA axis reactivity.

Methods: 20 (11 males) socially-housed bonnet macaques were studied of which 11 (4 males) were subjected to variable foraging demand (VFD) model of ELS, where maternal availability of food alternates between low and high foraging demand, with persistent bio-behavioral alterations noted in the offspring. VFD and controls did not differ by age or sex. Behavioral plasticity was assessed through response to a human intruder whereas for acute stress exposure, subjects were caged for 90 minutes in an unfamiliar context after which blood were sampled for plasma cortisol. CSF 5-HIAA was sampled separately at baseline.

Results: Reduction in gregariousness upon exposure to the human intruder (previously demonstrated to represent the normative response) correlated inversely with CSF 5-HIAA. HPA axis hyper-reactivity correlated positively with CSF 5-HIAA. Baseline subordinate responses, usually associated with low serotonin neurotransmission, were associated with high CSF 5-HIAA.

Conclusion: We extend the hypothesis that relative elevations of cisternal CSF 5-HIAA following early life stress induces a putatively low serotonin output state to terminal fields through excessive 5-HT1A autoreceptor activation. Here we demonstrate that elevations of CSF 5-HIAA are associated with reduced behavioral plasticity or hyporesponsiveness in response to a human intruder stressor. Moreover, elevations of CSF 5-HIAA are associated with HPA axis hyperreactivity in response to an acute confinement stressor suggesting reduced serotonin restraint of the HPA axis. Moreover elevated CSF 5-HIAA is associated with subordinate behavior usually associated with low serotonin tone. These data extend prior observations of an inverse relationship between CSF 5-HIAA and both hippocampal volume and internal capsule anterior limb white matter integrity.

P3- 20

ASSOCIATION OF ANESTHESIA WITH ALZHEIMER'S DISEASE.

Lead Author: Fatima Motiwala, M.B.B.S.
Co-Author(s): Vivek Shah, Dinesh Sangroula

SUMMARY:

Background: Several studies have suggested that "Anesthesia" might be one of the modifiable risk factors associated with the increased risk of Alzheimer's disease (AD).

Patients with AD have also shown to be vulnerable to the adverse events related to the use of anesthetics such as Postoperative cognitive dysfunction (POCD) and delirium

Several studies have been conducted to observe the association of POCD with AD.

Several animal based studies and in vitro studies have shown the strong association between the use of anesthesia and the pathological changes of AD. On the contrary, human based studies failed to show the consistent results.

Methods: We have used "PubMed" and "Google Scholar" as our search engines and cited research articles from 2011- 2014. A total of 6 research articles are cited consisting of two animal based studies, one in vitro study, two literature review articles, and one cohort study. The keywords used were "Anesthesia", "Dementia", "Alzheimer's dementia" and "Postoperative Cognitive Dysfunction".

Discussion:

Studies have shown that volatile anesthesia enhances the amyloid-beta oligomerization and tau phosphorylation. This leads to reduced synaptic plasticity and formation of neurofibrillary tangles.

Numerous animal based studies have shown the negative effects of Isoflurane on cognition by augmenting the phosphyorylation of tau protein in hippocampus. Isoflurane has shown to induce neuronal loss by increasing the activated form of caspase 3 in hippocampus. It has also shown to cause neuronal injury in hippocampus through mediating inflammatory process.

One in vitro study suggests that Midazolam inhibits amyloid B protein fibrillogenesis through several direct and indirect mechanisms, which argues against the strong association of anesthetics use and the development or a faster decline of cognition.

Similarly a cohort study consisting of a long term follow- up of postoperative patients for 11 years failed to show the association of POCD with dementia.

Conclusion: Several animal based studies have suggested a strong association of anesthesia and its adverse effects like POCD with the pathology of AD but we have found inconsistent results in human based studies. This issue has been of a great concern to people undergoing surgery especially among the elderly population who are at increased risk of developing AD. To clearly observe the effects of anesthesia on AD, it is imperative to conduct further well designed studies. A well designed study should comprise of a large sample size with the inclusion of a control group; it should also include the pre-operative evaluation of cognition, long term follow-up and the study should be able to clearly differentiate between the effects of different anesthetic agents on cognition.

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REDUCTION OF MEDICAL HOSPITALIZATIONS IN VETERANS WITH SCHIZOPHRENIA USING HOME TELEHEALTH

Lead Author: John Kasckow, M.D.
Co-Author(s): Lauren Fox, John Kasckow

SUMMARY:
Telehealth interventions have been shown to enhance the care of patients diagnosed with schizophrenia. We conducted a sub-analysis of a randomized controlled trial using telehealth to reduce post-hospital suicide risk in patients with schizophrenia or schizoaffective disorder. We hypothesized that the addition of telehealth to Intensive Case Monitoring (ICM) would further reduce hospital admissions and emergency room (ER) visits during the study intervention and the 90 days post-treatment. Participants (N=51) were veterans with schizophrenia or schizoaffective disorder admitted for psychiatric care in response to suicidal behavior. Participants were randomized to six months of ICM alone (control condition, n=26) or ICM augmented with telehealth monitoring (telehealth condition, n=25). Telehealth participants responded to daily electronic queries about depression, suicidality and medication adherence on a home based device. Six participants (5 telehealth, 1 control) were excluded from analyses because they never began treatment following randomization.
There were no significant differences between telehealth (n=20) and control groups (n=25) on demographic characteristics or baseline psychiatric assessments. Group comparisons for the entire study (i.e., six months of intervention plus 90 days post-treatment) revealed that participants in the telehealth group were significantly less likely than those in the control group to have at least one medical hospitalization (5.0% vs. 32.0%, $p<.05$). The telehealth group had fewer total medical hospitalizations as compared to the control group (2 vs. 15, respectively) with the telehealth group demonstrating a significantly lower average number of medical admissions (0.10 Â± 0.45 vs. 0.60 Â± 1.19, $p<.05$). The telehealth group also had fewer total days of medical hospitalization than the control group (14 vs. 64 days, respectively) with a significantly lower mean number of days of medical hospitalization (0.70 Â± 3.13 vs. 2.56 Â± 6.11, $p<.05$). No significant differences were found between groups on a) the likelihood of having at least one psychiatric hospitalization, b) the mean number of psychiatric hospitalizations or c) the mean number of days hospitalized for psychiatric treatment. The telehealth and control groups did not differ on the mean number of ER visits or proportion who had at least one ER visit. These finding provide preliminary evidence that augmentation of ICM with daily telehealth monitoring to evaluate depressive symptomatology, suicidality and medication adherence is related to decreased number and length of medical hospitalizations in veterans with schizophrenia and schizoaffective disorder. Notably, the addition of telehealth did not lead to a corresponding decrease in psychiatric hospital admissions or ER visits. The views do not reflect the views of the Dept of Veterans Affairs or that of the US government.

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OBSESSIVE COMPULSIVE DISORDER? OR IS IT PSYCHOSIS? OR BOTH?

Lead Author: Fatima Motiwala, M.B.B.S.
Co-Author(s): Arashinder Dhaliwal, MD.
Jeffrey Hamblin, MD.

SUMMARY:
Background:
Patient suffering from Obsessive Compulsive Disorder can exhibit psychotic features especially delusions during the course of the disease. These delusions represent reactive, affective or paranoid psychosis as they do not meet the criteria of Schizophrenia1.
Poor insight in Obsessive Compulsive Disorder has shown to be associated with poor response to the medications, more severe illness and high comorbidity rate2. Major Depressive Disorder (MDD) was found to be the most frequent comorbid condition with OCD in adolescent3.
Obsessive Compulsive Psychosis is the term given to describe an OCD which exists with the poor insight1.
Case Report:
Patient is a 15 year old male with two prior psychiatric hospitalization and past psychiatric history of Major Depressive Disorder (MDD), Obsessive compulsive behaviors, anxiety, disorganized thoughts, adjustment disorder and poor ADLs, was admitted due to significant weight loss, inability to eat on his own and inability to ambulate.
He reported of intrusive thoughts which stops him from eating and ambulating. He reported intrusive thoughts of being called gay.
His past history is significant for motor and vocal tics, enuresis, encopresis, learning disabilities, epilepsy and being oppositional to family. He showed cognitive decline in hospital.
Discussion:
Patient had persistent intrusive thoughts of inability to perform daily activities. Patient has compulsions including taking multiple attempts at setting his foot right while walking, pulling up his hand while feeding self. These obsessions and compulsions were present almost all the time he was awake 4. Patient had symptoms suggestive of psychosis which at times were distinct from OCD. This patient presented with OCD (with poor insight) at an early age, had extensive symptoms with increased severity, refractory to treatment and with multiple comorbid conditions2.
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BRINGING PSYCHIATRIC CARE TO A STUDENT-RUN FREE MEDICAL CLINIC: LESSONS AND CHALLENGES FROM THE FIRST TWO YEARS

Lead Author: Joseph P Mouallem, J.D.
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SUMMARY:

Since 2007, Brooklyn Free Clinic (BFC) has provided free health care to Brooklyn's uninsured. In sheer numbers, BFC is SUNY Downstate students' principal venue for hands-on clinical exposure prior to starting third-year clerkships. That exposure has traditionally been medicine-focused, with students practicing their history-taking, clinical exam, and basic procedural skills under the guidance of an attending physician. Prior to this pilot program, students interested in psychiatry had scarce opportunity in their pre-clinical years to meet psychiatric patients or to participate in therapy sessions with them.

BFC Psychiatry began in July 2013, pairing clinic patients who ask for or are referred to psychiatry with a Downstate/Kings County psychiatry resident/student team, for long-term therapy. Students commit to all future sessions with their assigned resident and patient. Patients continue to receive their primary care and all medication management from the medical volunteer team. If more significant psychotropic intervention than that usually done by attending internists is warranted, or if a patient has urgent psychiatric needs, referral to Downstate or Kings County resident clinics, or even Kings County CPEP, is made.

This poster presents the establishment and continuing refinement of the psychiatry program, as well as reflections on future directions. Some challenging subjects encountered -- such as uniformity and comprehensiveness in assessing patient need, recruitment of resident volunteers, and adapting the student role when many patients are referred out-of-clinic -- have been met with new ideas and plans, such as having an on-site attending psychiatrist to extend the scope of psychiatry residents' patient encounters, incorporating a teaching component to the resident role, and/or establishing formal training of student volunteers in depression/anxiety screening during medical visits. This poster also discusses various measures of patient outcome and quality of care.

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P3- 24

USE OF RTMS TO TREAT INSOMNIA DISORDER: AN OVERVIEW

Lead Author: Deepti Kaul Mughal, M.B.B.S., M.D., M.S.

SUMMARY:

rTMs is a novel office based procedure, approved by FDA for the treatment of treatment-resistant depression in 2008. Over past two decades efforts have been made to develop therapeutic potential of rTMS for wide variety of neuropsychiatric disorders like schizophrenia, PTSD, OCD, ASD, ADHD, sleep wake disorders, stroke Rehabilitation, parkinson's Disease, amyotrophic lateral sclerosis (ALS), tinnitus, chronic pain, migraine and epilepsy. Insomnia disorder is a common problem worldwide and it seems that most of psychopharmacological and psychotherapeutic modalities have not proven to provide the satisfactory relief of

symptoms. There is need to develop treatment of insomnia that is easy to administer, safe and well tolerated by patients. TMS and other neurophysiological studies have shown presence of a diffuse cortical hyper-arousal in patients with chronic insomnia. TMS may be able to play a role in diagnosing insomnia, and possibly prove to be a treatment for insomnia, perhaps through reducing excitability. rTMS is a non-invasive treatment that utilizes repetitive pulses of an MRI-strength magnetic field from a coil placed over the scalp to stimulate brain tissue beneath, inducing currents that influence cortical excitability by either stimulating or inhibiting the brain activity and modulate behavior. High frequency TMS (>1 Hz) has been shown to be activating whereas low frequency TMS (<1Hz) has been shown to be inhibitory in neurophysiological and clinical studies. rTMS treatment in Insomnia Disorder is appealing , as it avoids the use of polypharmacy and tolerance that develops by the use of hypnotic and sedative medications. The available evidence shows that potential benefit of this treatment modality is that it is relatively free of systemic side effects, safe and well tolerated by patients. Various rTMS studies for sleep disorders alone or associated with other neuropsychiatric disorders have utilized various stimulation
parameters including various frequencies and motor threshold intensities, which makes interpretation of data, somewhat difficult. rTMS may become one of the effective tools for patients with insomnia who either have failed the other therapeutic modalities of treatment or have contraindications for them including patients who are pregnant, breast feeding or elderly population who have can tolerate the sedative hypnotics. Existing data indicates the improvement in sleep via low frequency and high frequency stimulation of cortical regions. Further research is needed to have clear-cut protocols for frequency and site of application of rTMS with established safety profile of the rTMS in insomnia. The use of TMS directed to improve sleep quality and quantity needs further studies.The goal of this review is to translate the knowledge learned from different clinical studies of insomnia to the clinical treatment of insomnia using TMS as the primary modality in future.

P3- 25

MUSICAL EMOTION PERCEPTION IN REMITTED DEPRESSIVES

Lead Author: Courtney Mulligan, B.A., M.A.
Co-Author(s): Dr. Helen Prior, Dr. Hamid Alhaj

SUMMARY:

The present study investigated the emotional perception of musical stimuli in individuals with a history of Major Depressive Disorder (MDD). MDD is associated with a perceptual bias toward negative emotions in both interpersonal (e.g. facial, vocal) and impersonal (musical) stimuli, and has additionally been demonstrated in high-risk individuals, including remitted depressives. This study aimed to examine the affect bias in musical stimuli within the novel population of previously depressed individuals, as a means of understanding whether this form of impaired emotion processing is a potential vulnerability toward developing depression. It was anticipated that this research might in turn aid in preventive measures for at-risk individuals.
Musical stimuli were used to test whether emotion perception of music was impaired in recovered depressed individuals compared to healthy individuals. It was hypothesized that

remitted depressives would display an affect bias similar to that of depressed individuals. The questionnaire consisted of 30 excerpts, with supplemental inventories evaluating depressive symptoms and musical background.
Results discovered a reduction in the depressed group's recognition accuracy, as anticipated. However, surprisingly the remitted depressed group displayed greater accuracy in recognizing emotion in the excerpts than both the depressed and non-depressed groups. These findings suggest increased affect recognition to musical stimuli in the remitted depressives, potentially reflecting the development of more resilient perception as part of the recovery process.

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EARLY NEUROIMAGING FOR ATYPICAL PSYCHIATRIC SYMPTOMS: A CASE PRESENTATION
Lead Author: Sahil Munjal, M.D.
Co-Author(s): Silky Singh,Ruth Shim,Sean Allan,Ami Baxi

SUMMARY:
Brain tumors can present with psychiatric and limited neurological symptoms, emphasizing the need for neuroimaging studies at initial presentation of atypical psychiatric symptoms. We present the case of a 59 year-old male with new onset depression, acute changes in mental status and eventual neurological findings. Brain imaging showed a mass in the frontal lobe, later confirmed as glioblastoma multiforme. He underwent surgical treatment and radiation therapy. This case elucidates the importance of early neuroimaging as part of a routine workup for atypical psychiatric symptoms including late age of onset, no prior psychiatric history, acute behavioral changes, and/or refractoriness to treatment.

P3- 27
PERCEPTIONS OF COERCION AND PROCEDURAL JUSTICE IN PSYCHIATRIC PATIENTS TREATED UNDER COMMUNITY TREATMENT ORDERS (CTOS)
Lead Author: Arash Nakhost, Ph.D.
Co-Author(s): Camille Arkell, MPH, Frank Sirotich, Ph.D., Sandy Simpson, MBChB, BMedSci, Maria Boada, BSW, Arash Nakhost, M.D., Ph.D.

SUMMARY:
Introduction: The coercive elements of Community Treatment Orders (CTOs) have raised ethical questions in community mental health treatment, where both formal and informal pressures are applied to encourage adherence to treatment among psychiatric outpatients. Exploring and understanding patient perceptions of these various forms of leverage can lead to more patient-centered outpatient care and application of CTOs.
Objective: This study aims to assess the perception of coercion and procedural justice in psychiatric patients that have been treated under CTOs. In addition, the impact on patient relationships with their treatment team was examined, as well as the application of other external leverages in their care.
Methods: A one-time survey was administered to patients being treated under a CTO, and a control group of voluntary psychiatric outpatients in Toronto, Canada. A series of demographic

questions and validated scales were used to assess patient characteristics and experiences. Perceptions of coercion and procedural justice were measured using an adapted outpatient version of the MacArthur Admission Experience Survey (MAES).
Results: Our preliminary findings show that the majority of patients interviewed were diagnosed with a psychotic disorder, were receiving Intensive Case Management services, and were regularly taking medications. Patients in the CTO group were more likely to have a Substitute Decision Maker for treatment decisions and less likely to believe they have a mental illness. Greater perceived coercion was found in the CTO group. Patients being treated under a CTO were more likely to report being persuaded, threatened, or forced into treatment. Perceptions of procedural justice were lower in the CTO group, where respondents were more likely to feel they had been deceived, and to report that they had little or no voice in their treatment decisions. Many participants reported multiple additional community leverages applied to them, including financial management and family pressure to continue with their treatment, however the CTO group reported more leverages outside of their CTO.
Discussion: Study findings suggest that CTOs affect patients' perceptions of coercion and procedural justice in their mental health treatment. Patient perceptions of coercion may be mitigated or exacerbated by contextual factors, including relationships with treatment providers and the application of multiple leverages.

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THE EFFECTS OF PREJUDICE ON THE SOCIAL DISTANCE TOWARD MENTAL ILLNESS

Lead Author: Yoon-young Nam, M.D., Ph.D.

SUMMARY:
Objectives : The purpose of this study was to investigate the influence on prejudice and socio-demographic factors on social distance toward mental illness.
Methods : To assess the influence of prejudice and socio-demographic factor on social distance toward mental illness, we carried out a telephone survey in South Korea with nationally representative people who are 15 years old or over in 2014(n=810). To measure the difference among socio-demographic factor's effect on social distance, we conducted T-test, ANOVA. To compared the effect on socio-demographic factor and prejudice, we analyzed only socio-demographic factor effect on social distance(model 1), and after then analyzed prejudice(model 2) with hierarchical regression analysis.
Results : 1. The components of Social distance were Caretaker, Coworker, Neighborhood, Residence, the result of the mean showed the most negative distance in Caretaker. 2. Model 1 accounted for 5.9% of the variance of social distances($p<.001$), Model 2 accounted for 23.7% of the variance of social distances($p<.001$), â–³R2 of 17.7%($p<.001$). It means that prejudice had greater impact on social distance. Male(B= -1.032) represented more social distance than female. Higher education level(B= -.125) have been found positively on social distance. Besides, social distance toward mental illness decreased when prejudice was decreased.
Conclusions : Social distance of public toward mental illnesses is important to find ways to improve mental health. Prejudice which is basically a cognitive and affective response, leads to social discrimination, the behavioural reaction. To reduce social distance toward mental

health, efforts to decrease prejudice about mental illness as well as efforts to educate mental illness are important.

P3- 29

AN ATOMOXETINE ABERRATION- A CASE REPORT OF ADULT ONSET SUBSTANCE INDUCED PSYCHOSIS

Lead Author: Insiya Nasrulla, M.B.B.S.
Co-Author(s): Joseph Squitieri, Maria Bodic, and Theresa Jacob

SUMMARY:

Abstract
Introduction. The FDA has approved atomoxetine in 2002 for the treatment of Attention Deficit/ Hyperactivity Disorder (ADHD). It is a selective inhibitor of the presynaptic norepinephrine transporter with minimal affinity for other receptors or transporters. Most common side effects in adult trials include constipation, dry mouth, nausea, decreased appetite, dizziness, erectile dysfunction, and urinary hesitation. Emergence of psychotic symptoms in patients without a prior history is a very rare side effect. We present a case of a 52-year-old woman with a past psychiatric history of posttraumatic stress disorder (PTSD) and major depressive disorder (MDD) in full remission with no previous episodes of psychosis, who was recently started on Atomoxetine. She presented with paranoid delusions, disorganized behavior and auditory hallucinations. No symptoms of depression, mania or anxiety were elicited. She improved promptly upon discontinuation of atomoxetine and a course of risperidone. Other differential diagnoses including MDD with psychotic features, other substance induced psychosis or psychosis due to a medical condition were considered and ruled out. Methods. A literature review using PubMed, Google scholar and Embase databases was performed using the keywords: "Atomoxetine", "psychosis" and "adult". Publications reporting on adverse events were selected for review. The package insert information for this drug, including the clinical trials data available leading to the FDA approval, was also consulted. Results. The search revealed a total of 12 relevant articles describing treatment with atomoxetine in adults. Only two of them mentioned new onset psychosis among the reported adverse events but there were no details regarding the frequency, severity or treatment in those patients. All other articles concluded atomoxetine was fairly well tolerated in adults and there were no major adverse events leading to the discontinuation of treatment. As per the package insert, in a pooled analysis of multiple short-term, placebo-controlled studies, psychosis occurred in about 0.2% of cases (4 patients with reactions out of 1939 exposed to atomoxetine for several weeks at usual doses, compared to 0 out of 1056 placebo-treated patients), however these studies included only children and adolescents. Conclusion. To the best of our knowledge, psychosis has been very rare in conjunction with atomoxetine treatment in adults. There is a large body of data regarding the emergence of psychosis in children and adolescents, but this has not been found to be as common in adults. However, due to the debilitating nature of this symptom it would be an important adverse effect to consider prior to beginning therapy with this medication, especially in populations at risk for developing psychosis.

P3- 30

LENGTH OF STAY OF ACUTE INPATIENT PSYCHIATRIC HOSPITALIZATION AND ITS IMPACT ON RATES OF READMISSION AND UTILIZATION OF EMERGENCY PSYCHIATRIC SERVICES

Lead Author: Tina Thu-Ha Nguyen, M.D.
Co-Author(s): Boris Mekinulov, M.D., Lisa J. Cohen, Ph.D.

SUMMARY:
Objective: This study examines the impact of length of stay on readmissions for acute inpatient psychiatric hospitalization and utilization of emergency psychiatric services at one hospital in NYC. We hypothesize that decreasing length of stay (LOS) would increase readmission rates and CPEP (Comprehensive Psychiatric Emergency Program) visits.
Methods: A retrospective chart review of psych admissions from one hospital reviewed 419 index admissions over a 3mo period, examining 9 variables, including demographics (age, gender), LOS (short 1-7d, medium 8-14d, long 15-30d, extended>30d), diagnosis, substance abuse, homelessness, suicidality, unit, and attending, and their predictive value for readmission and CPEP visits over 30d, 6mo, and 1yr after discharge.
Results: Multivariate logistic regression analyses were performed for each outcome variable (readmission and CPEP visits at 30d, 6mo, and 1yr after discharge) for a total of 6 analyses. Readmission after 1yr was related to LOS, substance abuse, and psychotic illness. Importantly, LOS showed an inverse relationship for readmission rates, with patients who had extended, long, and medium LOS more likely to be readmitted than those with short LOS (AOR's=7.2,3.6,2.0). Substance abuse and psychotic illness also increased readmission within 1yr (AOR's=2.0,2.4). Readmission within 6mo was related to homelessness, psychotic illness, and for one inpatient unit containing mostly psychotic patients. Readmission within 30d was only related to homelessness. Results for CPEP visits at 1yr mirror those for readmission rates with significance for LOS, substance abuse, psychotic illness, and also for homelessness. Patients with extended and long LOS were more likely to be seen in the CPEP within 1yr following discharge from index admission (AOR's=3.5,1.9). Homelessness and psychotic disorder were both related to CPEP visits within 6mo and 30d. Suicidality was not significant in any of the analyses. A Sobel test showed psychotic illness to mediate the effect of LOS on readmission at 1yr.
Discussion: Patients with longer LOS were more likely to be readmitted or use CPEP services than those with shorter LOS. Psychotic illness, substance abuse, and homelessness were also important factors determining readmission and CPEP visits. These results contradict our initial hypothesis and suggest that patients who are more likely to be readmitted or use CPEP services are more clinically ill with psychotic disorders, requiring longer inpatient care. Surprisingly, suicidality was not related to readmission or CPEP visits. Therefore, decreasing LOS based on clinical criteria does not appear to negatively affect readmission rates or CPEP visits. This can lessen the financial burden of inpatient treatment on our healthcare system and reduce risk of nosocomial infections or other negative outcomes linked to hospitalizations. However, there remains a subgroup of highly ill psychotic patients who appear to require extended care.

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ELECTROCONVULSIVE THERAPY: A REVIEW OF INDICATIONS, TREATMENT CONSIDERATIONS AND APPLICATION IN CONTEMPORARY PSYCHIATRIC PRACTICE

Lead Author: Furqan Nusair, M.B.B.S.

SUMMARY:

Electroconvulsive therapy (ECT) remains a contentious therapeutic option due to a number of factors including misconceptions of the therapy in the patient population, lack of knowledge of its indications and utility, economic, geographic and legal barriers. This paper aims to present an overview of the history, mechanisms, indications, evidence and clinical issues related to ECT in contemporary practice. PubMed and MEDLINE databases were searched for original studies, documents, guidelines, and systemic reviews. ECT was found to be indicated for depression but can also be used effectively in the management of other psychiatric and some neurological conditions. ECT is safe and efficacious. Barriers exist to its more widespread use but with greater dissemination of evidence-based information, ECT may play a larger role in psychiatric practice. Further research examining the barriers to its wider application is needed if ECT is to become a more utilized treatment.

P3- 32

TRANSFORMATION OF HEALTHCARE IN NEW YORK STATE: INTEGRATED COMMUNITY BASED CARE FOR MEDICAID RECIPIENTS

Lead Author: Grace O'Shaughnessy, M.S.S.W.
Co-Author(s): Neil Pessin, PhD, David Lindy, MD

SUMMARY:

Comprehensive and integrated care for patients with complex needs has been difficult to deliver but some are close to building this future. Since the Affordable Care Act in 2012 the Medicaid Redesign Team in New York State (NYS) has approved multiple programs to achieve the "triple aim" to increase access to healthcare, improve the quality of services and decrease cost. Throughout the State efforts to improve coordinated care are well underway and have demonstrated early success. CMS approved the reinvestment of an $8 billion dollar savings (achieved through these initiatives) to develop an integrated delivery health system for NYS Medicaid recipients through the Delivery System Reform Incentive Payment (DSRIP) program in April 2014. DSRIP provides a unique and unprecedented opportunity to build innovative models of care, integrating health and behavioral health, and to reform the delivery system by building an infrastructure that will reduce hospitalizations and avoidable E.R use and divert the care to community based providers. DSRIP projects will build upon early successes and deliver broader, more in-depth care to areas that have demonstrated critical health needs. Metrics will be used to evaluate both the success of building the integrated care delivery system and to evaluate patient and population health outcomes, with an emphasis on E.R reduction and hospitalization.

This presentation will outline the project plans and present the metrics and process measures developed to evaluate success. We will discuss the outcomes of the community needs assessment that was utilized to inform the project plans, implementation challenges, and

highlight lessons learned. We will further examine how service delivery innovations can utilize community based care models to reduce cost and influence patient outcomes.

P3- 33

FORENSIC ISSUES IN NURSING HOMES: THE UNEXPLORED POPULATION OF THE CRIMINAL ELDERLY RESIDING IN LONG-TERM CARE FACILITIES

Lead Author: Bhinna P Park, M.A., M.D.

SUMMARY:

This poster presentation will explore challenges related to the care of elderly individuals with criminal backgrounds residing in care facilities. The elderly (defined as 65 and above) are the fastest-growing age group of our population, with an increasing number being admitted into nursing homes, often with concomitant psychiatric and somatic issues. Recent estimates place the number of nursing home beds as high as 1.7 million; it is unclear how many of these residents are among the 65 million Americans with criminal histories. Limited literature has focused on sexual offenders, given stricter measures regarding required documentation. For example, a 2006 study showed in 8 states found 700 registered sex offenders residing in care facilities, as well as 204 who had committed non-sexual crimes. This number may be grossly underestimated, considering about 40 million Americans are over 65, and 65 million have criminal histories. Further confounding the issue are states differing in their legislation informing facilities of their residents' potential criminal backgrounds. Recent cases in the media highlight incidents of care facility residents committing crimes against each other or against staff. Challenges with this population include meeting the special needs of these residents, appropriately training caregivers, ensuring safety of other residents and staff, and addressing concerns of families and communities. With this poster presentation, we will use several recent cases to address these challenges with the audience. With such discussion and increased awareness, it is our hope that caregivers will be better educated and be able to provide improved and specialized care for this unique group of patients.

P3- 34

RISK FACTOR FOR DEPRESSION AMONG OLDER ADULTS IN KOREA: THE ROLE OF CHRONIC ILLNESS, SUBJECTIVE HEALTH STATUS, AND COGNITIVE IMPAIRMENT

Lead Author: Jong-Il Park, M.D.

Co-Author(s): Jong-Il Park MD, Min-Cheol Park, Jong-Chul Yang MD, PhD, Tae Won Park MD, PhD, Sang-Keun Chung MD, PhD,

SUMMARY:

Objectives: The objective of this cross-sectional study was to investigate the relationship of chronic illness, subjective health status, and cognitive impairment with depression in elderly individuals.

Method: This study used the dataset of the Survey of Living Conditions and Welfare Needs of Korean Older Persons, which was conducted by the Korea Institute for Health and Social Affairs (KIHASA) in 2011. Participants (n=10,674) were randomly selected from a pool of

individuals aged 65 years and over. Multivariate logistic regression was used to investigate predictors of depression in terms of their sociodemographic and health-related characteristics.
Results: Our results revealed that chronic illness, subjective health status, and cognitive impairment were significant predictors of depression. In particular, subjective health status showed the highest OR (OR for bad subjective health status=4.290, p<0.001), followed by chronic illness (OR for 3 or more chronic illnesses=1.403, p<0.01) and cognitive impairment (OR=1.347, p<0.001) in the final model. Interestingly, the significant association between chronic illness and depression was attenuated (OR for 3 or more chronic illnesses=1.403, p=0.01), or even disappeared (OR for 2 chronic illnesses=1.138, p=0.274; OR for one chronic illnesses=0.999, p=0.996) after adjustment for subjective health status in the final model, which might be attributable to the close relationship among the variables studied: chronic illness, subjective health status, and depression.
Conclusions: Development and implementation of prevention strategies, including management of chronic illness, individual's perception of health status, and cognitive impairment could possibly reduce the impact of depression.

P3- 35

GENDER DIFFERENCE OF PERCEIVED STRESS, COPING, SOCIAL SUPPORT, ANGER ALEXITHYMIA AND DEPRESSION IN THE KOREAN ADOLESCENT WITH INHALANT ABUSE

Lead Author: Min Cheol Park, M.D., Ph.D.
Co-Author(s): Hye-Jin Lee, Ph.D., Sang-Yeol Lee, M.D., Ph.D.

SUMMARY:
Objective: The aim of this study was to investigate the difference of gender in terms of perceived stress, dysfunctional attitude, self-efficacy, social support, coping style, alexithymia and anger in the Korean adolescent with inhalant abuse and the difference of gender regarding which factors predict the depression of adolescent with inhalant abuse.
Methods: In the 3 juvenile correctional facilities, 123 male and 53 female adolescent with inhalant abuse were sampled, and the all adolescent were administered semi-structured interview schedule and scales for the perceived stress, dysfunctional attitude, self-efficacy, social support, coping style, alexithymia, anger and Beck Depression Inventory(BDI). The data were analyzed by t-test and multiple regression analysis.
Results: There was no significant difference in the ages and education level. There were significant difference in perceived stress, self-efficacy, avoidant coping, anger control between male and female adolescent with inhalant abuse, but there was no significant difference in dysfunctional attitude, social support, BDI, alexithymia, cognitive and behavioral coping, state and trait of anger, anger expression and inhibition between them. The score of BDI were 18.7+8.7 male and 21.2+8.4 female. In multiple regression model, anger inhibition, perceived stress, dysfunctional attitude, and cognitive coping accounting for 37.7% of the depression in male; only alexithymia, and anger inhibition accounting for 19.9% of the depression in female.
Conclusion: The finding suggest that there are gender differences in factors that can mediate stress, and in factors regarding predict the depression between male and female adolescent with inhalant abuse.

P3- 36

MENTAL HEALTH SERVICE UTILIZATION ACCORDING TO THE ICD-10 DIAGNOSIS IN SOUTH KOREA

Lead Author: Subin Park, M.D., Ph.D.

Co-Author(s): Yoon-Young Nam, Jin-Yong Jun, Dakyung Min, Hee Young Lim, Da Young Lee, Kyoo Seob Ha

SUMMARY:

Objectives: We examined the utilization of inpatient psychiatric care according to the ICD-10 diagnosis in South Korea.

Methods: We analyzed the Health Insurance Review & Assessment Service data on patients admitted for psychiatric care in 2013 in South Korea. Information on the ICD-10 diagnosis and type of hospital was obtained. We performed a multinomial logistic regression analysis with the ICD-10 diagnosis as a dependent variable and type of hospital as an independent variable.

Results: Compared with local psychiatric clinics, patients with mood disorder (OR=0.24), alcohol use disorder (OR=0.48), neurotic disorder (OR=0.05), dementia and organic mental disorder (OR=0.20) and developmental disorder (OR=0.86) were less likely to be hospitalized in national psychiatric hospitals than patients with SPR and other psychotic disorders. Compared with local psychiatric clinics, patients with mood disorder (OR=1.26), neurotic disorder (OR=1.77), and dementia and organic mental disorder (OR=2.40) were more likely to be hospitalized in general hospitals than patients with SPR and other psychotic disorders. Compared with local psychiatric clinics, patients with mood disorder (OR=0.38) and neurotic disorder (OR=0.27) were less likely, and patients with alcohol use disorder (OR=1.72), dementia and organic mental disorder (OR=1.17) and developmental disorder (OR=1.23) were more likely to be hospitalized in private psychiatric hospitals than patients with SPR and other psychotic disorder.

Conclusion: There are significant differences in type of hospital used for inpatient psychiatric care according to the psychiatric diagnosis in South Korea. These characteristics of inpatient psychiatric care utilization should be considered in the development and implementation of mental health policies for Korean psychiatric patients.

P3- 37

PRIMARY CARE PROVIDER ATTITUDES TOWARDS MAJOR DEPRESSION TREATMENT AT BOSTON HEALTHCARE FOR THE HOMELESS PROGRAM

Lead Author: Nikhil A. Patel, M.S.

Co-Author(s): , Elizabeth Elman , Sanju Forgione, Monica Bharel, Jessie Gaeta

SUMMARY:

BACKGROUND: 20 to 25% of the homeless population in the US suffers from severe mental illness. Mental illness is among the leading cause of homelessness for single adults, as well as families. Most people who will be diagnosed and treated for mental health issues will receive care in the primary care setting. While offering treatment for depression after screening can improve outcomes, USPSTF recommends against screening unless there are staff-assisted

care supports in place to assure accurate diagnosis, effective treatment, and follow-up. Improving identification and treatment of depression in primary care is unlikely to change without better integration of mental health services. This study seeks to evaluate primary care provider (PCP) attitudes towards depression screening and treatment in preparation for mental health integration.
DESIGN/METHODS: A survey instrument was administered at the Boston Healthcare for the Homeless Program (BHCHP) to PCPs to understand beliefs, attitudes, and behaviors in treating patients suffering from depression. The responses were on a grounded Likert scale and no demographic information was collected from the respondents. The study was deemed exempt from the IRB at Harvard University.
RESULTS: Of 26 providers completing the survey, 15 were physicians and 11 were mid-level providers (NPs/PAs). When asked how much time they spent discussing mental health concerns of their patients, 65 %of respondents stated that they spent a great deal with patients suffering from depression. Moreover, 65% of providers strongly disagreed with the statement that, "Depression is an overemphasized problem", and 70% of providers strongly agreed with the statement that "Depression is a frequent problem." Most providers (81% and 89%, respectively) agreed or strongly agreed that medication and counselling therapy are effective treatment modalities. When asked what they would do for patients who screened positive for depression, 96% of respondents stated that they would "refer directly to a mental health specialist," and 59% would "call a consulting psychiatrist. " Finally, only 50% of providers agreed with the statement "I find great satisfaction in treating depression" and 57% of providers stated that they felt constrained by the time pressures in treating depressed patients.
CONCLUSIONS: PCPs at BHCHP seem to spend a great deal of their time dealing with mental health concerns particularly centering around depression. They recognize the importance of depression as a health problem, as well as the effectiveness of the treatment modalities for it. However, when confronted with a patient with major depressive disorder, there is a strong likelihood for providers to refer them to mental health specialists. These data are important in planning for mental health integration programs, as it requires buy-in and input from a key stakeholder â€" the PCPs themselves.

P3- 38
SUICIDE ATTEMPT OF AN ADULT PATIENT WITH CORICIDIN: A CASE REPORT
Lead Author: Ronak Patel, M.D.
Co-Author(s): Onaiza Anees M.D., Andrew Schwartz MSIII, Luisa S. Gonzalez M.D.

SUMMARY:
Coricidin is an over the counter antihistamine and decongestant which contains as an active ingredient dextromethorphan and chlorpheniramine maleate. Literature review indicates that it is commonly used in large quantities in the adolescent population to produce altered states of consciousness, euphoria, hallucinations and dissociative effects, such as out of body experiences similar to phencyclidine (PCP). Coricidin intoxication can lead to severe medical and psychiatric complications. These complications can include tachycardia, hypertension,

mydriasis, diaphoresis, hyperthermia, liver failure, somnolence, confusion, agitation, hyperexcitability, psychosis, depression and suicidality.
Here we describe the case of a 23 year old man who was suffering from undiagnosed depression for over a year after feeling abandoned by his twin brother, was unemployed, and had recently broken up with his partner. He attempted suicide by taking 32 tablets of Coricidin which he had been using to get "high" months prior to the incident. This case aims to bring awareness to practicing clinicians about the growing abuse of over the counter medications in both adolescents and adults, potentially leading to death.

P3- 39
LOXAPINE AND CYPROHEPTADINE COMBINED LIMITS CLOZAPINE REBOUND PSYCHOSIS AND MAY ALSO PREDICT CLOZAPINE RESPONSE
Lead Author: Shama Patel
Co-Author(s): Richard H McCarthy, MD,CM,PhD

SUMMARY:
Clozapine, the only FDA approved antipsychotic use in treatment refractory schizophrenia and suicidality, has consistently been shown to be more effective than any other antipsychotic medication. However, clozapine induced agranulocytosis limits clozapine's use and when it occurs, clozapine must be stopped and cannot be restarted. This results not only in the loss of the incremental benefit that clozapine afforded but also may lead to particularly severe, difficult to treat rebound psychosis. Cyproheptadine has been shown to limit this rebound.
There has been considerable speculation about clozapine's mechanism of action, but it remains unknown. Using PET data Kapur et al. reasoned that a loxapine and cyproheptadine combination could have a 5HT-2A/D2 ratio, D4 antihistamine and antimuscarinic receptor blockade profile similar to clozapine. Receptor studies by others support this. Cyproheptadine mimics some of clozapine's actions. Cyproheptadine, can increase appetite and impair insulin activity. In addition, neither rats nor pigeons are able to discriminate clozapine from cyproheptadine. Finally, some patient's with whom we work that have discontinued clozapine report that cyproheptadine feels like clozapine to them.
The patient in this case is a 66 year old Caucasian female with a long history of treatment refractory schizophrenia. In spite of multiple antipsychotic medication trials, the patient's paranoid delusions had not abated.Her daily life was by increasingly impaired her delusions and she was referred for a clozapine trial.Clozapine was titrated to a maximum daily dose of 300 mgs.The patient had a rapid and significant decrease in her delusions from early in the trial, and these continued to abate with subsequent dose increases. Initially, hypotension limited dose increases, but at ten weeks she had a precipitous drop in her WBC/ANC that proceeded to full blown agranulocytosis over a 3 day period.Filgrastim treatment was begun; clonazepam was used to contain anxiety and the patient was started on cyproheptadine 4 mg tid to prevent a clozapine discontinuation rebound psychosis. When the patient's hematological indices returned to normal the patient was begun on loxapine 10 mgs a day to address her newly returned paranoid delusions.Over the next three weeks, the patient's delusions continued to decrease to levels lower than they had been on clozapine.At this time

some 5 months after clozapine discontinuation, the delusions are only minimally present and do not result in any inference in the patient's daily life.
The combination of loxapine and cyproheptadine mimic some of clozapine's action.In cases where a clozapine responder must discontinue the medication, they may be an alternative to clozapine's use. In addition, patients reluctant to take clozapine may be offered this combination to determine if clozapine may benefit them. Further assessment of this combination using standard symptom scales is indicated.

P3- 40
DEVELOPING STANDARDS FOR TERTIARY MENTAL HEALTH PROGRAMS AND SERVICES IN BRITISH COLUMBIA
Lead Author: Lynn Pelletier, B.Sc., M.H.Sc.
Co-Author(s): Connie Coniglio, Ed.D., M.Ed., Shannon Griffin, MBA, Jana Davidson, M.D., M.Sc., Pamela Joshi, M.Sc.

SUMMARY:
The Provincial Health Services Authority has supported and facilitated the development of Tertiary Mental Health Standards for the province of British Columbia (BC) since April 2013. Based upon research evidence, evidence informed practices, and cross-jurisdictional review of existing standards (nationally and internationally), the Tertiary Mental Health Standards guide the delivery of high quality, specialized tertiary mental health care for adults living in BC with serious and complex mental health and substance use conditions. As part of the development process, tertiary mental health clinical and operational staff and leaders from BC Regional Health Authorities were consulted throughout the development process to provide conceptual, pragmatic and strategic input. The Tertiary Mental Health Standards consist of overarching standards, and standards specific to tertiary acute mental health and tertiary rehabilitation mental health settings. This poster presentation will provide an overview of the standards and share theoretical assumptions, performance measurement considerations, and implementation considerations for the Tertiary Mental Health Standards.

P3- 41
ETHICAL IMPLICATIONS OF INTERDISCIPLINARY CONFLICT DURING END OF LIFE CARE
Lead Author: Cheryl Person, M.D.
Co-Author(s): Enstin Ye, Rebecca Wiatrek, MD

SUMMARY:
Medical decision making during end of life care is complex and poorly understood. Patients and their families expect teams to be unified in their approach, however there are times when interprofessional conflicts arise. We hypothesized that one aspect of interprofessional conflict may be the way an individual prioritizes the ethical principles of: beneficence, non-maleficence, justice and autonomy for a particular scenario. We developed and validated a survey instrument which assessed ethical principles and prioritized them in relation to five different end of life case-based scenarios. We surveyed medical professionals in a large, urban safety-net hospital. 124 survey participants (response rate 62%) completed the survey from

the following groups: internal medicine, palliative care, medical oncology, surgical oncology, intensivists, mental health, spiritual care, nursing staff, and social work.
Results: Collapsing the categories into nursing (RN), physicians (MD) and other (O) there were significant differences in two of the five scenarios. Scenario 1 involved a patient who wanted a reversal of procedure after a diverting colostomy due to pancreatic cancer. The most important principle chosen was significantly different (Chi-Square=12.51, p=0.05), with more MDs prioritizing non-maleficence and more RNs prioritizing beneficence. In Scenario 2, a young adult was informed about his acute myeloblastic leukemia progression with poor prognosis. The patient wanted to discontinue treatment, however also deferred decision-making to his mother who wanted to continue aggressive treatment. The most important principle for this scenario was ranked significantly differently by the professional groups (Chi-Square 13.01, p=0.04), with more individuals in the MD group choosing non-maleficence and more in the O group choosing autonomy. In the questions about personal beliefs, the MDs, RNs, and O responses were also significantly different in belief in heaven (Chi-Square=38.03, p<0.001), belief in miracles (Chi-square=26.20, p<0.001), and belief in medical miracles (Chi-Square=23.74, p<0.001).
Conclusion: Medical decision making during end of life care can involve multiple individuals bringing together a complex interplay of different personal beliefs, backgrounds, and professional experiences. Health care members may prioritize the core ethical principles differently in making ethical decisions, thus multidisciplinary teams should consider the complexity of interprofessional ethics in discussing these dilemmas to alleviate conflict in reaching decisions regarding end of life care.

P3- 42
DEVELOPMENT OF THE CHILDREN'S PSYCHIATRIC SYMPTOM RATING SCALE (CPSRS)
Lead Author: David L Pogge, Ph.D.
Co-Author(s): Derek Nagy, PhD, John Stokes, PhD, Philip Harvey, PhD

SUMMARY:
Objective: To describe the development of the Children's Psychiatric Symptom Rating Scale (CPSRS) a rating scale designed to be used by professionals in child psychiatric settings. Methods: Items content was developed using a rational/empirical approach. Items were constructed to map onto the symptoms of the most common DSM disorders for which children present for psychiatric care. To increase inter-rater reliability anchor points for severity were developed and then validated through the methods of retranslation. Several different studies were the conducted to determine test-retest and inter-rater reliability of the scales, and to examine its convergent and discriminant validity using information from medical records and other psychometric scales. The reliabilities and validities of the CPSRS and BPRS-CA ratings were compared. Sensitivity to treatment was examined for all scales and inpatient restraint and seclusion data were utilized to determine if any predicted patterns of scale elevations were seen on the CPSRS and BPRS-CA. Results: The inter-rater reliability, test-retest reliability, and convergent and discriminant validity of the CPSRS and BPRS-CA were similar. The CPSRS was sensitive to benefits of inpatient treatment and had baseline elevations on critical scales in children who experienced seclusion or restraint. A study of the factor structure in a sample of

1747 children revealed 6 factors which corresponded closely to goals of the scale developers. Conclusions: To the extent that users are interested in capturing clinicians' ratings of the critical symptoms of the most common disorders of childhood, the CPSRS may be as psychometrically sound the BPRS-CA and more relevant than that more commonly used instrument.

P3- 43
SOCIAL MEDIA AND ITS CLINICAL IMPLICATIONS ON PSYCHIATRY
Lead Author: Stephanie Pope, M.D.

SUMMARY:
Background: In Psychiatry, the early literature suggests a social media is changing the baseline and acute states of patients. Other pieces of literature showcase how suicidal statements and "status updates" on MySpace and Facebook are an increasing used forum for interventions. There are no specific guidelines for Psychiatrists or Psychologist in how to navigate the changing climate of privacy with social media and the therapeutic relationship or how to include or exclude collateral from social media. It seems different clinicians are using their own judgment in such cases. The purpose of this study is find to objective data if, how and when Psychiatrists and Psychologists are using social media as they assess and treat their patients.
Method: This study surveyed Psychiatrists and Psychologists and their experience with and clinical implications of social media. This included their use of social media including which forms they use as well as their observations of social media in their practice. The survey was collected over a 4 week period and analyzed for categorical data as percentages of responses
Results: This study found, that within the responders, a majority state that social media has played a large part of their clinical assessments. These assessments included safety evaluations including suicide risk assessments, violence risk assessments and worsening mood, anxiety and psychotic symptoms. This study also found an association between the Psychiatrists and Psychologists familiarity with a social media form and their likelihood of reporting an impact of social media within their practice.
Discussion: Social media is a part of clinical experiences of Psychiatrists and Psychologists. Further investigation and considerations for the impact of social media on symptoms and safety assessments should be apart of future research and clinical guidelines. There is also a need for Psychiatrists and Psychologists to become familiar with social media as it is becoming a larger part of their clinical practice.

P3- 44
QUALITY OF ALCOHOL WITHDRAWAL TREATMENT: MONITORING SYMPTOMS AND VITAMIN SUPPLEMENTATION WITH ELECTRONIC MEDICAL RECORDS
Lead Author: Stephanie Pope, M.D.
Co-Author(s): Kasia Gustaw-Rothenberg, Christina Delos Reyes

SUMMARY:

Background: The standard of care for those at risk for alcohol withdrawal, specifically, those with physiological dependence on alcohol, should be supplemented with Thiamine, Folate and Multivitamins as well.

Objective: The purpose of this study was to find objective data regarding the adherence of vitamin supplementation in hospitalized patients at risk for alcohol withdrawal.
Methods: The total numbers of Folate, Thiamine and Multivitamin and CIWA sets ordered from two congruent time periods within a hospital system before and after linking the orders and compared to determine the effectiveness of the change. Frequency counts of the order sets containing CIWA with and without Folate, Thiamine and Multivitamin dosages being ordered were extracted from EMR.
Results: The study found that before the invention, Thiamine was ordered only 41 times, Folate ordered 42 times and Multivitamin 42 times while CIWA was ordered 1,228 times within the time parameters (3.34%, 3.42% and 3.42% respectively). As a summation, this would be an average rate of 10.28%. After linking Thiamine, Folate and Multivitamin orders to CIWA, the average rate of these vitamins being ordered with CIWA reached 77.84%.
Conclusion: This study finds that linking CIWA and vitamin supplementation orders within EMR increases the likelihood of them being ordered together. We propose that this can be applied to other commonly ordered interventions and linking such orders should be implemented. This would improve the standards of care for all patients.

P3- 45
IMPLEMENTING MEASUREMENT-BASED CARE (MBC) FOR DEPRESSION IN AN OUTPATIENT MENTAL HEALTH CLINIC SETTING: A COMPARISON OF FIVE SELF-REPORT INSTRUMENTS
Lead Author: Shayne N Ragbeer, M.A.

SUMMARY:
Measurement-based care (MBC) is widely used to monitor chronic diseases in other areas of medicine, as well as in psychiatric clinical research, yet it is less commonly used in standard community mental health practice. While there are several empirically-supported measures of depression, these instruments are not routinely incorporated into the treatment of patients with Major Depressive Disorder (MDD) in outpatient psychiatric clinics. MBC offers additional tools to assess and monitor symptom severity over time, and enhances treatment outcome evaluation. In the current literature review, five depression inventories, the "gold standard" 21-item Beck Depression Inventory-II (BDI-II; Beck, Steer, Ball, & Ranieri, 1996), the 16-item Quick Inventory of Depressive Symptomatology-Patient Self Report (QIDS-SR16; Rush et al., 2003), the Clinically Useful Depression Outcome Scale (CUDOS; Zimmerman, Chelminski, McGlinchey, & Posternak, 2008), the Center for Epidemiologic Studies Depression Scale-Revised (CESD-R; Eaton, Muntaner, Smith, Tien, & Ybarra, 2004), and the 9-item Patient Health Questionnaire (PHQ-9)(Kroenke, Spitzer, & Williams, 2001), were examined to assess the potential feasibility and utility of using each inventory to implement MBC for depression in an outpatient mental health setting. Psychometric properties and empirical support for validity, reliability, and measurement sensitivity were globally sound. Other factors such as

cost, time and ease of administration and scoring, and existence of other versions (e.g., validated Spanish-language versions, clinician-administered versions) were considered and compared. Findings regarding the relative strengths and limitations of the five measures across indices will be presented. Implications for using these measures to implement MBC in community mental health practice will be discussed.

P3- 46
IATROGENIC PSYCHOSIS: A LITERATURE REVIEW.
Lead Author: Rumana Rahmani, M.D.
Co-Author(s): Farial Islam, MS-IV; Pankaj Manocha, MD; Asghar Hossain, MD.

SUMMARY:
Abstract- Iatrogenic psychosis can be defined as a psychosis that emerges subsequent to a medical intervention.
The aim of this literature review is to emphasize the importance of recognition of development of psychotic symptoms in patients treated with medications. We are presenting a literature review that will recapitulate several cases of specific drugs that induce psychosis such as stimulants (Adderall), antimicrobials (Ofloxacin, Trimethoprim/Sulfamethoxazole), anticonvulsants (Levetiracetam, Pregabalin) and anti-tuberculosis drugs (Cycloserine). One such case reported is of a 12-year-old girl who was placed on Adderall for attention deficit hyperactive disorder (ADHD) symptoms. One month later, patient was followed up at the ER for endorsing visual hallucination and her anxiety symptoms. Patient was hospitalized during which she underwent a drug-free trial for a week and experienced resolution of her psychotic symptoms. In another case, a 5-year-old girl experienced visual (e.g. helicopters hovering about) and tactile (e.g. bugs crawling on skin) hallucinations subsequent to combination therapy with Ofloxacin and Ornidazole.This combination therapy was stopped during the hospital stay. The child remained asymptomatic and was discharged from hospital next day.We also found a case of a 42-year-old woman with diagnosis of acute myeloid leukemia that experienced a brief psychotic episode with visual hallucinations during her second course of TMP/SMX therapy. This therapy was therefore discontinued and she returned to her baseline within approximately 48 hours. In another case, an 11-year-old girl presented to outpatient clinic for persistent restlessness and visual hallucinations (e.g. snakes crawling over body) following treatment with high dose Levetiracetam for her generalized tonic convulsion. Levetiracetam was discontinued and symptoms resolved in 72 hours..The PubMed search resulted a case of a 44-year-old woman who refused surgery and received high dose Pregablin for her lumbar pain endorsed visual hallucinations and exhibited psychosis, irritability, and an acute confusion (temporal/spatial disorientation). Pregabalin was discontinued and the patient reached a stable state within the next 24 hours. A case reported concerning a 21-year-old TB patient, who developed manic symptoms after he was treated with Cycloserine, which was added to his pre existing treatment regimen. Cycloserine was thought to have been the offending agent and was discontinued which resulted in the resolution of manic symptoms within 3 day.Educational Objective: Clinicians should carefully monitor medications and further assess for changes in symptom presentation since it is critical to distinguish between the drug induced psychosis and a psychiatric illness in order to prevent unnecessary treatment of

antipsychotics. Sometimes just a withdrawal of offending medication leads to resolution of symptoms.

P3- 47

IS THERE AN ASSOCIATION BETWEEN ORAL CONTRACEPTIVE USE AND OBSESSIVE-COMPULSIVE SYMPTOMS?

Lead Author: Rumana Rahmani, M.D.
Co-Author(s): Pankaj Manocha, MD; Lara Addesso, MD; Asghar Hossain, MD.

SUMMARY:

Introduction- Despite long-observed associations between estrogen and mental illness, limited data exist presently to inform clear, empirically derived causal associations or treatment guidelines. Several research studies published in literature have reported onset or worsening of obsessive-compulsive disorder (OCD) symptoms related to reproductive cycle events, especially at menarche, pregnancy, and postpartum. One such study describes the novel observation of a possible link between estrogen and development of compulsive behaviors in male animals. In another study done to understand the effect of Flutamide (a synthetic, nonsteroidal, competitive antagonist of the androgen receptor) on OCD symptoms, lack of response to treatment with Flutamide suggested that any effects of gonadal steroids to exacerbate OCD symptoms is more likely to be mediated through estrogen receptors.

Educational Objective: In this review, the authors review proposed mechanisms for the role of estrogen in the development of Obsessive-compulsive symptoms and review the utility of monitoring serum estrogen levels in certain patient populations. Authors also study potential therapeutic role of supplemental estrogen in the management of certain psychiatric disorders.

Case - We report a case of a 20-year-old Caucasian female with no past history of mental illness presenting with obsessive-compulsive symptoms following oral contraceptive pills (OCP) use. Her obsessive-compulsive symptoms (such as washing her hands several times during the day, staying in washroom for several hours) started upon initiation of OCP one year ago with recent worsening during past 2 months.

Conclusion â€" Several research articles published in literature present the significant role of estrogen in psychiatric disorders and emphasize the importance of utilizing a multidisciplinary approach of involving primary care, obstetrics and gynecology and psychiatry for the well being of women.

P3- 48

NARCOLEPSY: GENETIC MARKERS OF NARCOLEPSY AND NEW TREATMENT TARGETS- A LITERATURE REVIEW

Lead Author: Mahreen Raza, M.D.
Co-Author(s): Samreen Faisal, M.B.B.S, Ketan Hirapara, M.B.B.S., Najeeb Hussain, M.D.

SUMMARY:

Narcolepsy is a disabling sleep disorder affecting humans and animals characterized by daytime sleepiness, cataplexy, and striking transitions from wakefulness into rapid eye movement sleep. It is a frequently occurring but under-diagnosed condition affecting 0.2% of

the general population. The hypocretin/orexin deficiency is likely to be the key to its pathophysiology in most of cases, although the cause of human narcolepsy remains elusive. An autoimmune process targeting hypocretin neurons in response to yet unknown environmental factors is the most probable hypothesis in most cases of human narcolepsy with cataplexy. Although narcolepsy presents one of the strong associations with a specific human leukocyte antigen (DQB1*0602), there is strong evidence that nonâ€HLA genes also confer susceptibility as about one quarter of the general population in the U.S. carries the HLA-DQB1* 0602 but only one out of 500 of these people develops this form of Narcolepsy. In addition to a point mutation in the preproâ€hypocretin gene, a few polymorphisms in monoaminergic and immuneâ€ related genes have been reported associated with narcolepsy.
The treatment of narcolepsy has evolved significantly over the last few years. Available treatments include stimulants for hypersomnia such as modafinil, antidepressants, and gammaâ€hydroxybutyrate.
Linked with discovery of hypocretin deficiency, hypocretin replacement therapy is expected to prevent the daytime sleepiness and cataplexy. However, hypocretin has not been efficacious so far as it does not cross the blood brain barrier. Another method would be to restore hypocretin production in the brain using gene therapy. Other cells in the brain could be coaxed to produce hypocretin to make up for the loss of the normal hypocretin-producing neurons. This approach has been very effective in reducing cataplexy and sleepiness in experiments using mice with narcolepsy. However, an appropriate vector is needed. A third approach would be to reintroduce new hypocretin-producing cells into the brain using stem cell techniques. This method would take an individual's own cells and convert them into hypocretin-producing cells in the lab. In theory, those cells could then be placed into the brain to restore hypocretin signaling and improve the symptoms of narcolepsy. Treatments for narcolepsy based on gene therapy or stem cells are exciting, as they could produce lasting improvements without the side effects of current medications. Much more research is needed before these can be developed into safe and effective treatments for people with narcolepsy.
Given the possible immune mediated nature of narcolepsy, plasmapheresis, immunosuppressive agents and intravenous immunoglobulin are interesting potential options. There is an evidence of inverse histamine H_3 receptor agonist appears to have wakefulness promoting properties in these patients. However, it is still too early to predict which of them will be available in the coming years.

P3- 49
CLOZAPINE USE IN HIV POSITIVE TREATMENT REFRACTORY SCHIZOPHRENIA PATIENTS: WHERE DOES FILGRASTIM FIT IN?
Lead Author: Anupriya Razdan, M.B.B.S.
Co-Author(s): Richard McCarthy,MD

SUMMARY:
Introduction- Clozapine has been long approved for use in treatment resistant schizophrenia.
We attempted to study the use of clozapine in HIV positive patients on HAART medication and the possible use of Filgrastim in maintaining the treatment with clozapine in immunocompromised patients.

Method- Review of literature done using key words like schizophrenia, HIV, clozapine and filgrastim to study the possible use of clozapine in patients on HAART medication. Also search of hospital database done to look for cases with HIV and treatment resistant schizophrenia on Clozapine.
Discussion- Some 20-30% of patients are deemed to be treatment refractory and candidates for a clozapine trial. Also, seriously mentally ill patients are 8 times more likely to contract HIV. Hence one would believe that there would be a subset of treatment resistant schizophrenic patients with HIV on clozapine or suitable for clozapine. Search of our database- a state psychiatric facility in a large city, revealed no case of treatment resistant schizophrenia with HIV on clozapine. Also, review of literature shows very few case reports where HIV positive patients were started and maintained on Clozapine. Additionally, there are few reports but no guidelines about the use of filgrastim (Granulocyte- Monocyte Colony Stimulating Factor) in HIV positive clozapine patients, an eventuality that may be necessary in the case of neutropenia, whether or not it was induced by clozapine.
Based on the above findings, we studied the risks and benefits of HAART medications when taken with clozapine and the possible drug-drug interactions between them. We have tried to propose some guidelines into the use of clozapine in HIV positive treatment refractory schizophrenics. Our approach is predicated on stratifying patients into different groups based on the presenting WBC/ANC counts, i.e., neutrophil counts. These are, Neutrophil counts within normal limits; Neutrophil counts in patients with Benign Ethnic Neutropenia (BEN) and Patients presenting with Neutropenia. These groups are further divided into Relative CD_4 + counts, i.e., the need for concurrent HAART medications. The use of filgrastim to rescue or sustain a clozapine trial has been be emphasized.
Conclusion- through our literature review, we have tried to emphasize the importance of use of Clozapine in treatment refractory schizophrenia patients who are HIV positive and to introduce the concept of use of Filgrastim to address the issue of neutropenia so that clinicians don't shy away from Clozapine use.

P3- 50
PANTOPRAZOLE-INDUCED DELIRIUM: A CASE REPORT
Lead Author: Anupriya Razdan, M.B.B.S.
Co-Author(s): Ramaswamy Viswanathan, MD, DMSc; Alan Tusher,MD

SUMMARY:
Background: Proton pump inhibitors (PPI) are frequently prescribed anti-ulcer agents in hospitals. Studies show that PPI's are safer than H-2 blockers for ulcer prevention. However, PPI's may present with side effects also. We present a case report of PPI-induced delirium of which there has not been much discussion in the literature.
Case report:-A 93 yo woman with no past psychiatric history and co-morbid hypertension and arthritis, was hospitalized for syncope workup. The patient was started on her home medications comprising of amlodipine 10 mg daily, and oxybutynin 5mg daily. She was started on dexamethasone 2 mg IV q 12 hrs for treatment of spinal canal stenosis and cord compression with edema, and pantoprazole for GI prophylaxis. Initial lab workup was negative except low Vitamin D level. Patient received double dose of pantoprazole and was noted to be

delirious following its administration with active auditory and visual hallucinations. Pantoprazole was stopped along with dexamethasone. The delirium resolved. Dexamethasone was restarted after 2 days, along with a H-2 blocker for
GI prophylaxis. Delirious symptoms did not reappear.
Discussion- PPI's have shown to be safer than H-2 blockers in cases of delirium. PPI induced delirium has been hardly reported in the literature even though package inserts mention it as a rare side effect . In our patient, dexamethasone and pantoprazole were started and stopped at the same time. But symptoms of delirium did not reappear when dexamethasone was re-started in the absence of pantoprazole. There are no known drug-drug interactions between the two drugs which may contribute to delirious symptoms. We infer from this sequence of events that pantoprazole was more likely responsible for the delirious symptoms.
Conclusion: Delirium is an important cause of morbidity and mortality in the elderly. Physicians often fail to recognize delirium early on and address it. We recommend physicians to keep an open eye for PPI-induced delirium. Early detection is essential to reassure the patient and he family that these symptoms are medication side effects and not imply an underlying psychiatric illness, and also to take steps treat the delirium to reduce associated morbidity and mortality.

P3- 51
TOP 10 SELF-HELP RESOURCES FOR ADDICTIONS IN GENERAL PSYCHIATRY
Lead Author: Karen Reimers, M.D.

SUMMARY:
Introduction : Self-help resources - including books, pamphlets, websites and mobile apps - can be empowering tools for psychiatric patients, to support their mental health and assist in recovery from various disorders including addictions. Many self-help resources are available to help patients and families struggling with addictions. Patients and providers may not be aware of useful and accessible self-help resources for addictions. Sorting through the many options can be daunting.
Methods: Using internet search and following a review of various resources, the top 10 self-help resources for addictions in general psychiatry are selected based on their usefulness and practicality in a general adult outpatient psychiatry setting.
Results: Here, the top 10 self-help resources for addictions in general psychiatry are listed and briefly reviewed. These are self-help resources that mental health care providers may wish to recommend to patients in their clinical practice.
Conclusions: This poster will familiarize clinicians with important and useful self-help resources for addictions in general psychiatry.

P3- 52
UNILATERAL AUDITORY HALLUCINATIONS ASSOCIATED WITH SUBJECTIVE UNILATERAL HEARING LOSS AND A PINNAL MASS: A CASE REPORT
Lead Author: Kacy Richmond, B.A., M.A.
Co-Author(s): Michelle Benitez, MD; Douglas Opler, MD

SUMMARY:
Background: Nearly all cases of unilateral auditory hallucinations (AH) reported in the literature involve ipsilateral ear lesions. The otological etiologies of unilateral AH include conductive hearing loss, sensorineural hearing loss, and deafness. Deprivation of other senses has similarly been associated with hallucinations, as in Charles Bonnet syndrome where individuals with blindness experience visual hallucinations, and in phantom limb syndrome where amputees have painful tactile hallucinations as a result of damage to peripheral nerves. We examine a case of this infrequent presentation to underline the importance of a thorough otological evaluation in treating patients with unilateral AH.
Case Report: This is a case of a 40-year-old man with a history of seizures, alcohol and cannabis use disorders, alcohol withdrawal, and multiple hospitalizations for falls and traumas who was admitted to the medical service after an observed seizure. Psychiatric consultation was requested to evaluate AH. He reported hearing a voice in the left ear for about 5 years, which began around the time he lost hearing in that ear. The voice at times makes noises versus says the name of the mother of his children, is quieter when he drinks alcohol, and is described as different from regular conversation. He places it in the external part of his auditory canal. He wonders if the voice is someone doing something to him, although he otherwise denies paranoia, ideas of reference, or depression. Physical examination revealed a mass-like enlargement of the left pinna, which was also noted on a CT scan of the head without contrast that was otherwise unremarkable. An EEG showed a left temporal seizure focus. The patient's phenytoin was restarted and he was also started on risperidone. After his second day in the hospital, the voice became quieter. He continued to report decreased hearing in the left ear. Of note, the patient had been noted to have impaired hearing to finger rub on the left side on prior admissions. An otological evaluation was recommended but was not accomplished prior to discharge.
Discussion: Although epilepsy, drugs and schizophrenia were once posited as potential etiologies of unilateral AH, the majority of cases reported involve an ipsilateral ear lesion. Since the patient's hearing was not thoroughly evaluated, the contribution of substance use, ictal- vs. post-ictal state, or withdrawal could not be ruled out. However, his reports of left ear hearing loss that coincided with the onset of the AH as well as the presence of a mass at the left pinna are suggestive of sensory deprivation as the most likely etiology. Other cases in the literature have reported resolution of unilateral AH with use of a hearing aid or with surgery for otosclerosis. Others saw the disappearance of unilateral AH with administration of antipsychotics. The case described here represents a missed opportunity to rule out non-psychiatric, potentially treatable causes of AH.

P3- 53
A COMPARISON OF MIRROR SIGN WITH OTHER FORMS OF DELUSIONAL MISIDENTIFICATION
Lead Author: David Roane, M.D.
Co-Author(s): Takashi Matsuki, MD,Erman Bagcioglu, MD,Todd E. Feinberg, MD

SUMMARY:

Introduction: Delusional misidentification syndrome (DMS) has been reported in both psychiatric and neurological disorders and there is evidence that DMS is more common in females. Mirror sign is a form of DMS where the patient believes that their mirror image is a separate person. We reviewed all reported cases of mirror sign and compared them, with regard to etiology and gender, to two other forms of DMS, Capgras syndrome and the delusion of inanimate doubles (DID).
Methods: We performed a comprehensive literature search using PubMed. For Capgras syndrome, we investigated studies published from 1995 through 2014. For mirror sign and DID we searched for any studies published through 2014. We collected additional cases from relevant journals and reference lists of articles extracted from the database searches. Gender and etiology for each case was recorded. We used a Fisher's exact test to examine differences between mirror sign and both Capgras syndrome and DID.
Results: We identified 23 cases of mirror sign (M:F 6:17), 191 cases of Capgras syndrome (M:F 87:104) and 20 cases of DID (M:F 6:14). All cases of mirror sign had neurological etiology: either dementia or diffuse cerebral dysfunction. Nine cases also had evidence of right hemisphere abnormalities. Among Capgras cases, 92 had neurological/medical etiologies (M:F 49:43). The most common was dementia seen in 34 (M:F 16:18). Ninety-nine cases had psychiatric etiologies (M:F 38:61). Most common was schizophrenia with 63 (M:F 24:39). DID included 6 cases with neurological/medical causes and 14 with psychiatric causes. Cases of mirror sign were more likely to result from a neurological etiology than Capgras cases (100% vs. 48%, $p< 0.0001$) or DID cases (100% vs. 30%, p,0.0001). For gender, we compared mirror sign cases (all neurological) with the neurological/medical cases of Capgras syndrome. Among these cases, mirror sign was significantly more likely to be female than Capgras syndrome ($p=0.0216$). There was no statistical gender difference between mirror sign and DID. We also found that Capgras syndrome in neurological cases was statistically more likely to be male than in the psychiatric cases ($P=0.0391$).
Conclusion: While Capgras syndrome and DID both have a mixed etiology, all cases of mirror sign had neurological causes and no cases had schizophrenia. This suggests that delusional misidentification of one's reflection in the mirror is a distinct form of DMS that requires cognitive or perceptual impairment. In mirror cases, compared to neurologically associated Capgras cases, there was a significant predominance of females. This may suggest a particular psychological significance of the mirror image in females or a gender difference in facial processing.

P3- 54

SELF-REPORTED REASONS FOR CANNABIS USE AND RELATED SEVERITY OF SYMPTOMS IN BIPOLAR, DEPRESSED, AND PSYCHOTIC INDIVIDUALS

Lead Author: Maria Roccisano, M.D.

SUMMARY:

Research has shown that cannabis using bipolar and depressed individuals experience more severe illness. Cannabis users were commonly found to exhibit agitation yet further exploration of this finding is poorly documented. No data explores self-reported reasons for cannabis use in relation to diagnostic categories and symptom severity. Cannabis use has

various negative (dysphoria, anxiety, paranoia) and positive (euphoria, contentment, and a sensation of calmness) effects on psychological states and behaviors (increase or decrease activity). We speculate that cannabis users may have different reasons for use and these reasons may be governed by psychiatric symptoms therefore, self-reported reasons for use may differ between diagnostic categories. We hypothesize that patients who self-report using cannabis to alleviate depressed mood may score higher on Beck Depression Inventory (BDI), and Young Mania Rating Scale (YMRS), items 2 and 9 assessing agitation. Methods:We collected self-rated BDI, and Cannabis Use Disorder Identification Test (CUDIT) as well as research clinician rated YMRS from adult male and female psychiatric inpatients of Beth Israel Medical Center. Cannabis use must have been within the last six months. DSMIV diagnoses included were unipolar depression, bipolar disorder or psychotic disorder. Four questions related to reasons for cannabis use were also answered and the self-reported reasons were compared across diagnostic categories. We also looked at how these reported reasons are related to symptoms across and between diagnostic categories, by examining relationships between total CUDIT, BDI, YMRS scores and reasons for cannabis use. Means were compared by one way ANOVA with T-Tests for 2 group comparisons. Rates were compared using chi-square tests for significance. To avoid type-II error, correction for multiple comparisons were not employed. Results:Unipolar depressed(50%), bipolar(83%), and schizophrenic(73%) patients use cannabis to treat depressive symptoms. These differences approach statistical significance,p=0.067. Individuals with unipolar depression and psychosis who self-medicate depression with cannabis had greater BDI scores. The observed difference in unipolar depression is statistically significant,p=0.039, and in psychosis approaches statistical significance,p=0.052. Depression self-medicators had higher mean agitation scores than non self-medicators, p=0.022. Conclusion: Subjects in different diagnostic categories report different patterns of reasons for cannabis use. Those who identify as self-medicating depression have higher levels of cannabis use, and greater depressive and manic symptoms. The effects are strongest for depression severity in unipolar depressive disorder and psychotic disorder subjects. Perhaps psychiatric patients are more prone to become agitated when using cannabis and depression is under recognized/treated in psychiatric patients highlighting an area of treatment focus.

POSTER SESSION 4

P4- 1
FRAMINGHAM RISK SCORE FOR STROKE IS ASSOCIATED WITH NEUROCOGNITIVE IMPAIRMENT IN OLDER ADULTS WITH HIV DISEASE

Lead Author: Alan T Rodriguez Penney, B.S.
Co-Author(s): Jennifer E. Iudicello, Ph. D., Ronald J. Ellis, M.D., Ph. D., Scott L. Letendre, M.D., Steven Paul Woods, Psy. D.

SUMMARY:
Cardiovascular disease (CVD) risk factors are elevated in HIV disease and are thought to play a prominent role in the expression of neurocognitive impairment among older HIV-infected adults. This study sought to determine the association specifically between Framingham Risk

Score for Stroke (FRS-S) and HIV-associated neurocognitive disorders (HAND) across the lifespan. Participants included 64 HIV+ individuals with HAND (43 aged 50 and older, 21 aged 40 and younger) and 105 HIV- persons (61 older and 44 younger). HAND was diagnosed according to Frascati criteria and operationalized using a comprehensive neuropsychological, psychiatric, and medical research assessment. Multivariable regression controlling for hepatitis C infection, psychiatric comorbidities, and other demographics revealed a significant interaction between age and HIV on FRS-S (p=.02). Planned post-hoc tests showed that the older HIV+ group had higher FRS-S scores than the older HIV- participants (p=.002), but there was no serostatus effect among the younger cohort (p=.43). Older HIV+ adults with Minor Neurocognitive Disorder had slightly higher FRS-S scores than those with Asymptomatic Neurocognitive Impairment (p=.06). Within the older HIV+ group, higher FRS-S scores were most strongly related to poorer scores on measures of delayed verbal memory (ps<.05). Findings indicate that cerebrovascular risk factors may play a differential role in the expression of HAND across the lifespan. Future neuroimaging, biomarker, and neuropathological studies may shed light on the specific mechanisms of vascular injury in older HIV+ persons.

P4- 2

EARLIEST PHOTOGRAPHIC EVIDENCE OF CHILDREN WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER

Lead Author: Eduardo Rueda Vasquez MD, FAPA,

SUMMARY:

Mathew B. Brady was one of the first American photographers best known for his scenes of the Civil War and Abraham Lincoln. Brady tried to take a photograph of several children who were watching him take a picture of St. John's Church in Richmond, VA with his mobile studio, the same day that president Abraham Lincoln visited Richmond on April 4,1865. Ten days later, Lincoln was fatally shot. Brady decided to take a picture of some children instead of photographing Abraham Lincoln liberating the slaves which could have become the greatest picture in American history. Instead, a few paintings have survived depicting the event of liberation.

P4- 3

SCHIZOAFFECTIVE DISORDER AND ANTIPSYCHOTIC TREATMENT IN A HALF-STAY UNIT

Lead Author: Humberto Ruibal
Co-Author(s): Claudio Garay Bravo

SUMMARY:

A Half-Stay Psychiatric Unit (HSPU) is a clinical disposal oriented to give basic care services, rehabilitation and psychoeducative activities to severe psychiatric patients. Besides the scarce literature related to schizoaffective disorders epidemiology, Marneros and cols (1992) have found that this disorder represents 28,5% of the total population of "mayor psychotics", similar to the affective disordes that represent 30%. Few controlled clinical trials have studied the

pharmacological strategies on these patients, and none of them regarding to long term outcomes or relapse prevention.
We aim to investigate the antipsychotic drugs used on schizoaffective patients in a HSPU.

P4- 4

A CASE OF NEUROSARCOIDOSIS PRESENTING AS OBSTRUCTIVE HYDROCEPHALUS AND DEMENTIA

Lead Author: Keith E Ryan, B.A.
Co-Author(s): Christine Winter, DO, MBA, David Williamson, MD

SUMMARY:
Introduction: Sarcoidosis is characterized by non-caseating granulomas in more than one organ and is diagnosed with biopsy or the exclusion of other granulomatous disease etiologies. Nervous system involvement is found in approximately 5% of sarcoidosis cases; optic neuritis and facial palsy are the most common symptoms. This case of hydrocephalus with associated cognitive decline is unusual as hydrocephalus has been documented in only 6% of neurosarcoidosis patients. The correlation of clinical signs and symptoms can be made with MRI, although this case demonstrated clinical signs before MRI abnormalities consistent with neurosarcoidosis.
Case: A 39-year-old African-American male presented to the emergency department with eye pain and temporal headaches, later diagnosed with optic neuritis. One year later, he presented with ataxic gait, vertigo, horizontal nystagmus, dysmetria and tremulous hands. He was released for a follow-up lumbar puncture as an outpatient to rule-out suspected multiple sclerosis. Three months later he presented with confusion, ataxia, and a history of headaches and memory loss. CT identified significant hydrocephalus and bilateral ventriculoperitoneal shunts were placed. His ataxia resolved, but cognitive impairments persisted. X-ray revealed bilateral hilar lymphadenopathy. Bronchoscopy confirmed sarcoidosis and treatment was initiated with high dose corticosteroids.
Results: One week following the beginning of prednisone treatment, the patient's MMSE and MoCA scores were 18/30 and 10/30, respectively. His primary deficits were in language, abstraction, and delayed recall. After two weeks of steroid therapy, these scores improved to 21/30 and 17/30. Three weeks following initiation of treatment he continued to exhibit significant impairment of visual-spatial memory, requiring cues multiple times daily to navigate back and forth from his room to a common area only fifty feet away. The patient's executive functioning failed to improve with additional time and repeat imaging revealed continued hydrocephalus. Additional bilateral ventricular drains were placed without improvement in cognitive functioning.
Discussion: This case presentation of dementia secondary to hydrocephalus as an initial manifestation of neurosarcoidosis is rare and may have delayed identification and biopsy confirmation of pulmonary sarcoidosis and initiation of corticosteroid treatment. Clinical findings initially did not correspond to MRI changes. Although drainage of hydrocephalus and initiation of corticosteroid treatment resulted in better cognitive test scores, delayed recall, attention, and orientation remained impaired. The patient required additional surgical intervention and his inpatient treatment is ongoing. This case further illustrates the need for

neurosarcoidosis as a differential diagnosis of both optic neuritis and early onset dementia even in the absence of MRI findings consistent with sarcoid lesions.

P4- 5

QUALITY OF LIFE AND ITS DETERMINANTS AMONG HOMELESS ADULTS IN VENTURA, CALIFORNIA

Lead Author: Robert Rymowicz, B.Sc.
Co-Author(s): Pallavi Joshi, M.A., Samer Roumani, B.S.

SUMMARY:

Homelessness affects men, women, and children of all races and ethnicities. Although socioeconomic deprivation in the setting of complex medical and psychiatric problems has been shown to diminished Quality of Life (QoL), little is known about the individual determinants of QoL among the homeless. This study was conducted to quantify the QoL of homeless individuals and to further explore the relationship between QoL and addiction severity, mental illness, and personal history.

Homeless adult men and women living in urban Ventura, California were interviewed on their personal history, substance use, mental health history, and QoL. Our study sample consisted of 24 adult participants (78% male). The mean age in the sample was 36 +/- 4.5 years. The most frequently used substances were alcohol (58.3% within the past 30 days, 62.5% lifetime use) and cannabis (41.6% within the past 30 days, 45.8% lifetime use). Half (50%) of those surveyed endorsed feeling depressed within the past 30 days and 62.5% within the lifetime; 33.3% endorsed feeling anxious within the past 30 days and 50% within the lifetime. Exploratory data analysis was carried out to further understand the relationship between living situation, substance use, mental illness and QoL.

Routine screening for substance use, depression, and anxiety need to be part of the assessment for all homeless individuals. Initial data underscores the need for additional research exploring protective factors among this population. Interventions focusing on potentially modifiable factors, such as substance use, merit further study.

P4- 6

ALTERATIONS OF BDNF AND GDNF SERUM LEVELS IN ALCOHOL-ADDICTED PATIENTS DURING ALCOHOL WITHDRAWAL

Lead Author: Mehmet Bülent Sönmez
Co-Author(s): Yasemin Görgülü, Rugul Köse Çınar, Evnur Kahyacı Kılıç, Aycan Ünal, Mehmet Erdal Vardar.

SUMMARY:

Introduction: Brain-derived neurotrophic factor (BDNF) and glial cell line-derived neurotrophic factor (GDNF) are neurotrophic neuropeptides that play important roles in the synaptic plasticity, neuronal growth, survival and function. A possible neuroprotective role of neurotrophic factors against alcohol-induced cell damage has been suggested, and dysregulations in neurotrophic factors may be involved in the vulnerability to addiction and in the brain damage caused by long-term alcohol exposure.

Hypothesis: We hypothesized that BDNF and GDNF serum levels of alcohol-addicted patients are decreased compared to healthy controls, these serum levels increase during alcohol withdrawal, and there are possible associations between BDNF and GDNF serum levels and clinical features related to drinking behavior.
Methods: BDNF and GDNF serum levels of 34 male inpatients diagnosed with alcohol addiction according to DSM-IV-TR were investigated during alcohol withdrawal (day 1, 7 and 14) in comparison to 32 healthy controls using an enzyme-linked immunosorbent assay (ELISA). Severity of alcohol withdrawal was measured by Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar), and intensity of alcohol craving was measured by Penn Alcohol Craving Scale (PACS) during alcohol withdrawal (day 1, 7 and 14).
Results: BDNF and GDNF serum levels were reduced in alcohol-addicted patients, whereas they did not differ signiï¬cantly between the patient and control group. BDNF serum levels increased significantly during alcohol withdrawal (p=0.020). In pairwise comparisons, BNDF serum levels on day 14 were significantly higher than those on day 1 (p=0.016). There was a non-signiï¬cant tendency to increase in GDNF serum levels during alcohol withdrawal. We observed increased BDNF serum levels and decreased GDNF serum levels on day 14 in the patient group compared to the control group, whereas they did not differ signiï¬cantly between the groups. BDNF serum levels were negatively correlated to the severity of alcohol withdrawal, and the correlation was close to being statistically significant (p=0.058).
Conclusions: We found a significant increase in BDNF serum levels during alcohol withdrawal and a near-significant association between BDNF serum levels and withdrawal severity.
Discussion: Our study results provide support for the putative dysregulations of neurotrophic factors in alcohol addiction and the previously hypothesized role for neurotrophic factors in the neuroadaptation during alcohol withdrawal. Further studies are required to better determine the profile of neurotrophic factors in different stages of alcohol addiction and during early/late periods of alcohol abstinence.

P4- 7

DNK: IMPROVING THE ENGAGEMENT PROCESS AND ATTENDANCE RATE FOR NEUROPSYCHIATRY AND NEUROLOGY SOCIAL WORK APPOINTMENTS

Lead Author: Laura Safar, M.D.
Co-Author(s): Laura Morrissey, LICSW

SUMMARY:

Background:
Neuropsychiatry patients have complex conditions including compromised cognition, behavioral disturbance, and psycho-social complexity; the same conditions which require treatment interfere with attending appointments. The lack of adherence affects treatment outcomes. In the current fee-for-service model, unkept appointments threaten the economic solvency of the service.
Hypothesis:
An intervention based on a communication tool distributed to patients and clinicians can assist in reducing the rate of unkept appointments and increasing engagement in treatment.
Method:

We conducted brainstorming sessions with clinicians and phone and paper surveys of our patients, to understand the factors involved in the lack of adherence to appointments. These data gathering methods also facilitated increased interest and 'buy in' to participate in this project. We created a communication tool, "A Conversation about appointments", used by clinicians and patients to facilitate discussion of this topic during appointments. This intervention took place during one month. We gathered data about the use and effectiveness of the communication tool through weekly clinicians tally sheets, and through a patients' survey. We gathered data of No-Show and Cancellation rates pre and post intervention.
Results:
The pre-intervention brainstorming sessions and survey showed that for many patients, there are several concurrent factors which affect their attendance to appointments; this is especially true of patients with lower adherence. There was some degree of discrepancy among the clinicians and patients responses, with clinicians placing higher importance in factors related to patients' motivations and values, and patients placing higher importance in illness-related and practical psychosocial factors. The communication tool was effective as a tool to improve treatment engagement. The intervention had a modest effect on decreasing the unkept appointments rate. The project acted as a catalyst for a review of the clinic policy about unkept appointments and modification of the clinic Initial Patient Package and No Show letters.

Conclusions:
The lack of adherence to treatment is a significant problem in psychiatry with clinical and systems' repercussions. There are numerous factors involved in this phenomenon. Root cause analysis and interventions can occur at the individual treatment, and at the clinic level. A communication tool can assist clinicians and patients in processing treatment adherence difficulties and problem- solving around this issue.

P4- 8

NEW ONSET MANIC EPISODE IN UNDIAGNOSED HIV INFECTION: A CASE REPORT

Lead Author: Alexander R Sanchez, M.D.
Co-Author(s): Norma R. Dunn, M.D., Richard Gersh, M.D, Ronnie G. Swift, M.D.

SUMMARY:

Introduction:
Psychiatric symptoms and HIV infection has been described in literature. We present a case of a new onset acute mania in an individual with no prior psychiatric illness and an asymptomatic HIV infection. The initial occurrence of manic episode leads to the discovery of his infection with HIV.
Case report:
We present a case of a 40 year-old male with no prior psychiatric history, who presented with acute onset of mania. He was in his usual state of health, until the day he was found acting bizarrely at work, having elated mood, being grandiose and making inappropriate phone calls which prompted his supervisor to bring him to the Psychiatric Emergency room. Patient was subsequently admitted in the psychiatric unit. Patient's routine laboratory results were within normal limits except for a positive RPR and TPPA. He was started on valproate, risperidone and

penicillin treatment. He reported a remote history of intravenous methamphetamine abuse and admitted to having unprotected sex with men. He agreed to HIV testing and resulted positive with a CD4 count of 257 cells/mm3. On hospital day 9, he developed tachycardia with a heart rate of 120-135 bpm, a temperature of 103Â°F, and a drop in his BP from 130/80mmHg to 83/44mmHg. Patient was transferred to the medical intensive care unit to rule out meningitis and neurosyphilis. Lumbar puncture was performed and cerebrospinal fluid analysis showed normal results and VDRL was negative. He completed 3 doses of penicillin 2.4 million units. Infectious disease was consulted and an HIV genotype was requested before antiretroviral medication treatment would be initiated. Patient was continued on his psychotropic medications, valproate 1250mg BID and risperidone 3mg BID, and his manic symptoms resolved. He was discharged home on the same medication with follow up appointments in the mental health clinic and virology clinic.
Discussion:
Mania is more prevalent in patients with HIV or AIDS. Many patients who develop mania secondary to HIV may not be aware of their HIV status. In our case report, it was unknown that the patient had acquired HIV infection until he developed mania. Mania may be triggered by the direct effect of the virus on the central nervous system or by other HIV-related opportunistic infections.
Conclusion:
Clinicians need to be aware that HIV infection should be considered in all patients with new onset mania in those with HIV risk factors and no known bipolar disorder or family history. Secondary mania is a known neuropsychiatric manifestation of the HIV infection.

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P4- 9

POSITIVE SYMPTOMS ARE NOT ASSOCIATED WITH COGNITIVE DEFICITS IN TREATMENT-RESISTANT SCHIZOPHRENIA

Lead Author: Pedro M Sanchez-Gomez, M.D.
Co-Author(s): Elizagárate E, Ojeda N , Peña J, García A, Crego M , Méndez R, Bello J, Yoller AB, Ezcurra J

SUMMARY:
BACKGROUND:
Treatment refractory schizophrenia, compared to non-refractory, is characterized by higher presence of positive symptoms. Cognitive deficits in schizophrenia have been partially associated with positive symptoms. Therefore, we could expect more severe cognitive deficits in treatment resistant patients with schizophrenia (TRS).
METHODS:
Fifty-two TRS and 43 patients with patients with schizophrenia who respond adequately to

pharmacological treatment (NTRS) were recruited following the criteria of Kane et al (1988). Forty-five healthy controls matched by age, sex and education were also recruited. Clinical evaluations included: Positive and Negative Symptom Scale (PANSS), functional disability (WHO-DAS) and the Clinical Global Impression (CGI) scale. All patients underwent 12 neuropsychological tests for 6 cognitive domains: attention, processing speed, working memory, verbal memory, language, and executive function, and an estimation of premorbid intelligence measured by Vocabulary (WAIS).
RESULTS:
Patients were classified into the groups TRS & NTRS but no differences between these two groups were found in age of disease onset, number of hospitalizations or length of hospitalization. From a clinical point of view, the TRS group showed greater severity of positive symptoms ($p<0.01$) and higher global deterioration ($p<0.0001$), which did not translate into greater functional disability. As expected, the control group performed better than the two patient groups (both TRS and NTRS) in all neuropsychological domains. Not expected, TRP group scored similarly in all cognitive domains evaluated compared to NTRS, except for one test of attention.
CONCLUSION:
Our data suggest that a higher presence of positive symptoms is not always associated with higher cognitive deficits in schizophrenia but most probably with global severity of the illness and poor psychosocial functioning.

P4- 10
INHALED LOXAPINE FOR THE CONTROL OF AGITATION:
RESULTS FROM A NATURALISTIC LONGITUDINAL STUDY
Lead Author: Pedro M Sanchez-Gomez, M.D.
Co-Author(s): Edorta Elizagárate, Jesús Ezcurra, Ana B. Yoller, Juan Larumbe, Rafael García, Blanca Revuelta, Esther Ibarrola, Natalia Ojeda, Javier Peña, Acebo García, Luis F. Callado.

SUMMARY:
Introduction: Inhaled preparation of powdered loxapine, delivered by a novel thermal handheld device, has proved to be effective in the rapid control of agitation associated with schizophrenia or bipolar disorder. This study examined the effect of inhaled loxapine in a sample of in-patients who needed an immediate and effective treatment to control agitation.
Methods: This was an observational, open-label, prospective, repeated-measures study conducted at the Treatment-Refractory In-patient Unit of the Hospital PsiquiÃ¡trico de Ã lava in Spain. Patients had a primary DSM-5 diagnosis of schizophrenia or bipolar disorder, judged to be clinically agitated and in need of an immediate treatment for the agitation. The primary efficacy endpoint was change in PANSS-EC from baseline at different time points over a 24-hr follow-up. Additional outcomes of interest were frequency of responders, patients' satisfaction with treatment, and nursing staff's satisfaction with onset of effect. Patients' self-reported side-effects were registered.
Results: A total of 14 patients with agitation were included in this study. A repeated-measures one-way ANOVA indicated that there was a significant difference in the mean changes of PANSS-EC scores from baseline baseline $F(9,117) = 85.9$, $p< 0.0001$. Nearly half of the

magnitude of improvement (53.2%) took place within the first two minutes. A single dose was enough to control the episode of agitation, without the need for an additional dose or rescue medication. Our results showed a median time for response of 2 minutes. Inhaled loxapine presented a very good tolerability profile with only mild and transient side-effects. Additionally both patients and nurses showed high levels of satisfaction with this treatment.
Conclusions: Inhaled loxapine is an effective option for the immediate treatment of agitation. It holds a great advantage over oral medication due to its faster onset of effect and also over intramuscular medications as patients do not associate this route of administration with previous unpleasant experiences of coercive treatments. Inhaled loxapine should be considered as a first line option when there is an unstable and quick escalation of agitation in patients with schizophrenia or bipolar disorder.

P4- 11

EFFECTIVENESS OF MODAFINIL IN THE TREATMENT OF COCAINE DEPENDENCE

Lead Author: Dinesh Sangroula, M.B.B.S.
Co-Author(s): Vivek C Shah, MD, Fatima Bilal Motiwala, MD

SUMMARY:

Abstract
Background: Though being one of the most prevalent public health problems worldwide, there is no any FDA approved medication for the treatment for cocaine abuse or dependence. The sole treatment depends upon the various forms of behavioral therapy and psychotherapy. Multiple studies have been conducted on Topiramate, Vigabatrin, Lamotrigine, Tiagabine, Disulfiram and Bupropion with inconsistent results while studies conducted on Psychostimulants like Amphetamine and Methylphenidate have shown promising results but their addictive property has limited their use. Modafinil is a novel non-amphetamine psychostimulant which has fewer side effects and minimum abuse potential and seem to be more effective for cocaine dependence. The different proposed mechanisms include blockage of Dopamine Transporter(DAT) [Volkow et al.,2009], increase Glutamate [Ferraro et al,1998, 1999], increase orexin mediated histaminergic activity [Willie JT et al, 2005] and decrease GABA [Scoriels et al, 2012]. Because of variable results with different experiments, my work in this research project would focus on finding out if Modafinil really works for cocaine users by answering the question "Is Modafinil effective in treatment of cocaine dependence?"
Methods: By using keywords like 'Modafinil', Crack, 'Cocaine', 'Dependence', 'Addiction' and 'Treatment', research literatures were searched using' PubMed', 'JAMA Psychiatry', and 'Neuropsychopharmacology.org'. More than 100 articles were found which included true experiments in humans, regression analysis studies, animal studies and meta-analysis. Five recent randomized, placebo controlled studies that were conducted in human subjects and with the greatest internal validity were selected and reviewed.
Result: Out of the five studies, four studies suggested that Modafinil may be effective in the treatment of Cocaine dependence and no serious side effects were noted. These studies demonstrated the advantages in different ways including decrease in cocaine self administration and craving, increasing cocaine non use days, reduction of cardiovascular effects, reduction of cocaine-associated reinforcing, and normalizing sleep pattern in cocaine

abstinent. However, all of the studies have used combined Cognitive Behavior Therapy and other psychotherapies along with Modafinil.
Conclusion: Modafinil, if combined with psychotherapy, may be considered as a good choice in the treatment of cocaine dependence. But, larger studies with homogeneous age, sex and ethnic distribution needs to be conducted.

Keywords: Modafinil, Cocaine, Crack, Dependence, Addiction, Treatment

P4- 12

USE OF PEER NAVIGATORS IN ENGAGING CONSUMERS SUFFERING FROM CO-OCCURRING SUBSTANCE USE DISORDERS

Lead Author: Manish Sapra, M.D.
Co-Author(s): Anthony Lucas, MPH; Amy Shanahan MS, CADC; Keirston Parham, CPS, CWF; Beverly Wilson, MS; Terry Horton, MD

SUMMARY:

Background: Patients with untreated substance use disorders (SUDs) are at risk for frequent emergency
department visits and repeated hospitalizations. This project is being conducted to facilitate entry of these patients to SUD treatment after discharge . Patients identified as having hazardous or harmful drug consumption receive bedside assessment with motivational interviewing and facilitated referral to treatment by a peer who has lived experience of suffering from substance use disorder. This project is a collaboration between a variety of stakeholders, including Allegheny County Department of Human Services, offices within the Pennsylvania Department of Public Welfare, local Medicaid managed care physical health and behavioral health plans, and area hospitals. Western Psychiatric Institute and Clinic (WPIC) of University of Pittsburgh Medical Center (UPMC) has started this pilot that will include intervention planning, implementation, and evaluation to address this issue. A grant of $300,000 is supporting peer navigators at the UPMC Mercy, UPMC McKeesport and UPMC East hospitals for 2 years.
Methods: Program-level data on treatment entry after discharge will be examined . Insurance claims will be reviewed for consumers who entered treatment after discharge . We will study any effect on Readmissions or utilization of services. Patient satisfaction and Staff attitude to a new service will be studied.
This Paper presents early data and experience from this project which is being conducted in three hospitals in Pittsburgh

P4- 13

A VET OF A DIFFERENT KIND: A CURIOUS CASE OF SECONDARY TRAUMATIC STRESS IN A LABORATORY ANIMAL TECHNICIAN

Lead Author: Sandeep Saran, D.O.
Co-Author(s): Miguel Magsaysay Alampay, MD, JD, Christopher W Harris, DO Benjamin Hershey, MD

SUMMARY:
OBJECTIVES:
1) Define "secondary traumatic stress" and describe its role in the diagnosis of PTSD.
2) Identify at least two risk factors for secondary traumatization in the veterinary care community.
3) Name at least two interventions that could potentially mitigate secondary traumatic stress in the veterinary care community.
BACKGROUND: Veterinary professionals are a traditionally understudied population in the field of mental health despite having significantly higher rates of mental health concerns -one and a half times the rate of depressive episodes, two to three times the rate of serious mental illness, and three times the rate of suicidal ideations. A 2005 study of members of the veterinary community found that 11% of respondents demonstrated moderate levels of post-traumatic stress symptoms. Approximately 45% of respondents cited euthanasia as one of the "worst parts" of their jobs; and only 25% had received training in grief counseling or stress management. Consistent with other studies of secondary traumatic stress, females had significantly higher rates of post-traumatic symptoms than males. The compassion-killing paradox, in which their profession requires both the care and euthanasia of animals, is thought to be a significant component of this psychological burden.

The diagnostic criteria for Post-Traumatic Stress Disorder (PTSD) in the DSM-5 now clearly includes "repeated or extreme exposure to aversive details of traumatic events." In doing so it allows for secondary traumatic stressors such as compassion fatigue and vicarious traumatization to serve as geneses for PTSD. This concept is particularly relevant to healthcare workers whose work often involves exposure to traumatic events.

CASE: The subject of this poster is a 44 year-old female veterinary technician who was initially referred for evaluation because of suspected malingering, diagnosed with an adjustment disorder, referred to a medical evaluation board for depression. Once patient's post-traumatic symptoms transpired, she was more accurately diagnosed with Post Traumatic Stress Disorder (PTSD) secondary to her work euthanizing laboratory animals. Treatment was adjusted accordingly and her symptoms improved.

CONCLUSION: The purposes of this poster are four-fold: First, it highlights the concept of secondary traumatic stress and its role in the diagnosis of PTSD in healthcare field. Second, it sheds light on the complexity of PTSD; which can at times mimic other diagnoses to the extent the underlying trauma is suppressed or repressed. Third, it familiarizes the psychiatric community with relevant resources currently available; as well as lays more groundwork for further research into the effects, and strategies to mitigate the emotional toll, of euthanasia in the veterinary community.

NOTE: This presentation does not purport to represent an official position or view of any agency of the US Government.

P4- 14

PERSONAL WELLNESS AND EMPATHY AMONG RESIDENT PHYSICIANS

Lead Author: Meredith Senter, B.S.
Co-Author(s): Nicole Guanci, MD
Petros Levounis, MD,Bart Holland, PhD,Neil Kothari, MD,Rashi Aggarwal, MD

SUMMARY:

Background: With the high demands of a medical career, resident physicians are prone to burnout, which is characterized by emotional exhaustion, decreased concern for patients, and worsening physical health. Decline in empathy for patients during medical training is also a known phenomenon, but studies correlating empathy with resident wellness using well-validated rating scales for these measures are lacking. A better understanding of this relationship will help define the role of wellness-promoting activities for residents, in terms of ability to affect empathy and patient care. We hypothesized that high self-reported personal wellness was associated with higher scores on an empathy scale.

Purpose: To assess the correlation between personal wellness and empathy among resident physicians, using well validated rating scales.

Methods: Questionnaires were distributed to residents from the departments of psychiatry, internal medicine and surgery at Rutgers - New Jersey Medical School. Residents self-reported demographic data and answered prompts to calculate personal wellness and empathy scores. The Brief Resident Wellness Profile (BRWP), used to assess wellness, has good reliability, convergent validity, discriminant validity and concurrent validity. The Jefferson Empathy Scale (JES), used to assess empathy, has good reliability, discriminant validity, and convergent validity. Data was analyzed using simple and multivariable-adjusted linear regression models in the SAS statistical software package.

Results: 126 resident physicians in the departments of medicine, surgery and psychiatry completed the questionnaire. Overall, for every 1-point increase in wellness, there was a 0.75-point (95% CI, 0.14-1.36) increase in empathy (p=0.017). The association between wellness and empathy was stronger after adjusting for medical subspecialty and gender (1.14-point increase; 95% CI, 0.55-1.73; p<0.001). This relationship was consistent among men (1.21-point increase; 95% CI, 0.30-2.11; p=0.010) and women (0.91-point increase; 95% CI, 0.14-1.68; p=0.022).

Conclusions: We observed a significant and robust association between wellness and empathy among resident physicians at our institution. The efficacy of formal wellness curricula in residency programs (such as access to a gym and healthy meals, resident retreats, faculty mentoring, and social outings) should be further explored to assess benefits not only to resident physicians but also to patient-physician interactions and patient care outcomes.

P4- 15

SYMPTOMS OF MAJOR DEPRESSIVE DISORDER- MEN ARE FROM MARS, WOMEN ARE FROM VENUS

Lead Author: Chandresh Shah, M.D.

SUMMARY:

Observations over centuries and studies over last half a century have shown that women (W) are twice more likely to suffer from Major Depressive Disorder (MDD) than men (M). This quantitative gender differences has been shown in many studies. This study is aimed to look at gender differences in symptoms of MDD in qualitative terms. Patients diagnosed with MDD were given Beck Depression Inventory (BDI).
There were 11 M (age=53.23Â±10.46 years) and 8 W (age=51.71Â±8.89 years) patients. The total BDI score reported by W was 28.39Â±9.92 which was higher than that reported by M which was 23.13Â±11.01. Similarly the BDI severity score was reported at higher level of 2.87Â± 1.91 by W as compared to that reported by M at 2.39Â±1.33.
Sad mood was the universal symptom reported by all patients alike, M as well as W. When looking at the top 10 symptoms reported by all patients, M more frequently reported physical symptoms like fatigue and loss of energy; difficulty with concentration and indecisiveness; changes in sleep and in interest in sex. They also reported agitation and irritability as major mood symptom. In contrast, W more frequently reported psychic symptoms like self dislike and criticalness; guilt and punishment; worthlessness and loss of pleasure. They were also more concerned about change in appetite and crying.
It was interesting to note that 62.5% of W reported suicidal ideation in comparison to only 30.76% of M reported so. But the severity score of suicidal ideation reported by M was 2.32Â±1.01, in contrast to one reported by W at 1.13Â±0.87.
Just as the prevalence of MDD is different in different genders, the symptoms of MDD also appear to have gender-based differences. M and W perceive and present MDD differently. It is important to recognize these differences so that the treatment could be tailored and made gender-centric.

P4- 16
META-ANALYSIS OF BULLYING AND CYBERBULLYING INTERVENTION PROGRAMS
Lead Author: Sina Shah, M.D., M.S.
Co-Author(s): Muhammad Waseem, MD

SUMMARY:
Background: As bullying and cyberbullying behavior among school-aged children has gained increased awareness, the need to examine the effectiveness of school-based intervention programs as a preventative measure has become more important. The increased number of publications addressing this issue provides investigators the opportunity to analyze findings across multiple studies using meta-analysis techniques.
Methods: This meta-analysis was conducted using peer-reviewed research studies published between 2009 to 2014. Using our inclusion criteria, 8 studies conducted in 5 countries were identified. The studies examined 326,900 student participants (Grades 1-12) and 1,225 teacher participants, measuring outcome changes in 24 variables. Effect sizes were calculated for each variable using Cohen's d method to determine whether any meaningful changes occurred.
Results: Using traditional meta-analysis statistical methods, the effect sizes of bullying interventions demonstrated significant positive effect size (ES â‰¥ 0.20) in almost half (11 of 24) of measured variables. Most of the significant changes observed reflected improved attitudes and increased knowledge about bullying, though a modest meaningful change was

also seen with regard to bullying behavior (ES = 0.33) and verbal bullying (ES = 0.62). Significant changes were also seen in reports of cyberbullying (ES = 0.38) and cybervictimization (ES = 0.45). The remaining student self-reported variables did not show meaningful effect size changes. These included self-report of victimization, feeling safe at school, empathy towards bullying victims, and self-efficacy for defending victims. Additionally, the only peer-reported variable mean which showed a change was coping with problem solving (ES = 0.21). The remaining peer-reported variables did not show any meaningful change, including reports of bullying, victimization, cybervictimization, and bullying avoidance. Teacher-reported variables showed a significant change in witnessing both direct (ES = 0.31) and indirect bullying (ES = 0.34).
Conclusion: While school-based bullying and cyberbullying intervention programs have shown to produce modest positive outcomes, including decreased bullying behavior and increased knowledge, a majority of variables did not show any significant change.

P**4- 17**

CARDIAC ARREST, VENTRICULAR FIBRILLATION AND NON-ST ELEVATION MYOCARDIAL INFARCTION ASSOCIATED WITH COCAINE ABUSE/INTOXICATION

Lead Author: Ulfat Shahzadi, M.B.B.S., M.D.
Co-Author(s): Sagy Grinberg MS III , Asghar Hossain M.D ,Rehan Puri M.D ,Rumana Rahmani M.D.

SUMMARY:
Cocaine is still a very popular drug that is used illicitly despite its well-known and established adverse cardiac effects. The incidence of myocardial infarction in cocaine associated chest pain is approximately 6%. Cocaine exposure was defined as self-reported cocaine use within the last 72 hours or a positive urine test for cocaine Cocaine-induced infarction is highly prevalent in patients aged 18 to 45 years of age and may not have any pre-existing coronary artery disease. The most common cocaine induced electrocardiogram changes are non-specific ST segment changes, ST segment elevation, T wave inversion, and QT interval prolongation. Cocaine induced non-ST-elevation myocardial infarction is an uncommon electrocardiographic presentation and seen in this case report. Patient was a 26 years old male with no significant medical or psychiatric history, snorted unspecified amount of cocaine at home. All of sudden fell on floor , found responded , CPR started by family , ACLS protocol initiated by EMS.In emergency room the blood pressure 60/00, pulse not palpable ,ventricular fibrillation ,hypothermia ,patient transferred to Intensive Care Unit, ventilator assisted respiration started. Patient remained unresponsive for 48 hours despite on all lifesaving protocols. Echocardiography showed EF 35-40%, Cardiac catheterization was normal. Studies showed that cocaine leads to coronary artery spasms, and the resultant platelet activation synergistically leads to the occlusion of the coronary arteries as in this patient. Adverse cardiac effects related to cocaine abuse/intoxication include sudden death, ventricular dysrhythmias and myocardial infarction.

P4- 18

TREATMENT RESISTANT PSYCHOSIS ASSOCIATED WITH GENETIC POLYMORPHISM: A CASE REPORT

Lead Author: Sarah Sheikh M.D

SUMMARY:

This is a 39 year old caucasian male patient with a long history of schizoaffective disordere and multiple in patient psychiatric hospitalizations, reportedly was discharged from brmc in 2011, with follow up of treatment with his private psychiatrist dr. Rabi, pt. Remained compliant with his medications. Reportedly, pt. Was last discharged from hackensack university medical center, admitted on the medical floor due to a superinfection with c.difficile and treated with antibiotics for 2 weeks, where pt.'s psychotic symptoms worsened and he was transferred to psychiatry for 4 weeks; pt. Was goven olanzapine , per collateral,and dishcarged when deemed not a danger to self or others. Pt. Was subsequently brought to brmc by his case worker voluntarily for his worsening psychotic symptoms, with constructional delusions(fbi is after him), grandiose delusions(writer, nobel prize winner, a doctor), persecutory delusions(fbi and solomon brothers after him), somatic delusions (bulbar dysphagia),

The patient dosen't endorse any perceptual disturbances.

The patient did not endorse any suicidal ideation or attempt, any homocidal ideation or attempt. Did not endorse any depressive or manic symptoms. Reportedly did endorse having manic, anxiety symptoms symptoms like less sleep for couple of days, grandiose thinking and the fact that he has lot of wealth. Palpitations, chest pain, sweating, no other anxiety symptoms reported.no substance abuse or relapse reported.

H/o schizoaffective d/o bipolar type diagnosed at the age of 19, h/o multiple inpatient psychiatric hospitalizations upto 20, last one was in september 2015 at humc. H/o being compliant with his medications , however treatment resistant to riperdal(gynecomastia), olanzapine and clozapine(super infection). He had his first psychiatric hospitalization when he was 19 years old.

P4- 19

RE-EXAMINING STANDARD OF CARE FOR ELECTROCONVULSIVE THERAPY: LESSONS FROM CHART REVIEW OF TWENTY THOUSAND TREATMENTS TEACHING HOSPITAL IN MUMBAI

Lead Author: Amresh K Shrivastava FRCPC, D.P.M., M.D.

Co-Author(s): Mosam Phirke DPM, Harshal Sathe.DPM, Avinash D'Souza, DPM Nilesh Shah, MD.DPM

SUMMARY:

Background

Electroconvulsive therapy is one of the most effective therapies for acute suicidal patients major depression and psychotic conditions are treated effectively and safely in both in-patient and outpatient facilities is widely used in India because of its efficacy and cost economy. A number of patients. Studies show that by and large the experience of ECT has shown to be effective, feasible and acceptable to patients. Current research regarding ECT and growing

technological advances are cause for ongoing review for modernizing procedures and setting up newer standards of care.
In the present study we review the records of 20,000 treatments with the objective to collect relevant information to re-examine its pattern of the ECT practice.
Method
The study was carried out in a teaching general hospital in Mumbai, where modified ECT is administered using modern technology Ethics permission was obtained form Institutions Ethics committeeÂ
. All records of ECT procedure in the past 5 years (2009-14) were reviewed. The observations were recorded on parameters of clinical details, indication, comorbid conditions, number of treatments and details of anesthesia, outcome and side effects. Data was collected on semi - structured preformat and statistically analyzed.Â
Results
The study showed that (1) all patients who received ECT had given informed consent. (2) 1,971 patients were given 21,796 modified ECT treatments under general anesthesia using brief pulse wave of current. (3) 62.6% were male, out of which 0.07% were <14 years, 7.0% were 15-18 years, and 3.2% were >60 years. Minimum age of patient was 7 years and maximum age was 77 years. 4) 8.9% improved with less than 4 ECT treatments, 63.3 needed 4-12 treatments and 13% patients received 12-20 treatments. 8.8% patients received maintenance treatment. Maximum number of treatments received by a patient was 144. (5) 68.2% patients had a diagnosis of psychosis. 18.7% had severe depression. 12% had bipolar disorder. (6) Significant, clinical improvement was observed in almost all subjects (8) There was comorbidity of tobacco in 16%, alcohol in 4.5% and multiple substances in 16.7%. ECT was safely administered in sizeable patients with medical comorbidity such as hypertension in 80, diabetes in 75, and seizure disorder in 112, and thyroid abnormality in 24, and active pulmonary tuberculosis in 13 patients.

Conclusion
In this institution ECT use was significantly high common, feasible, acceptable and effective treatment for major depression and psychosis as well as in severe comorbid conditions.
We suggest that, in order to setup better standard of care, the above factors needs to be taken into consideration in a given social, cultural and economical context. Further evidence-based practice of psychiatry needs to re-evaluate place of ECT treatment in therapeutic armamentarium for psychiatric treatment

P4- 20
STUDY OF SUICIDE ATTEMPT AMONG INDIVIDUALS WITH LONG-STANDING DURATION OF SCHIZOPHRENIA: AN EXPLORATIVE STUDY
Lead Author: Amresh K Shrivastava FRCPC, D.P.M., M.D.
Co-Author(s): Avinash DeSouza, Megan Johnston, Nilesh Shah

SUMMARY:
Background

Suicide is a prime cause of increased mortality in schizophrenia and at least 5% patients die due to suicide in their life time.
About a quarter of all suicide occurs in the chronic phase of illness.
Though suicide behavior is an integral part of schizophrenia which determines its course and outcome however not much attention is paid to suicide in management of schizophrenia.
We believe that it is due to poor awareness and lack of adequate scientific information, which can argue that suicide behavior is an outcome parameter and it needs careful consideration in management
We believe findings of clinical studies of suicide in schizophrenia will facilitate competency for identification, intervention and prevention of suicide. Objective of the study was to examine psychopathologic risk factors among patients with history of attempted suicide
Methods
We examined the database of two completed research projects of schizophrenia 1. Long term follows up of first-episode schizophrenia, 2. Effectiveness of clozapine in treatment-resistant schizophrenia
Data was extracted as per the criteria: 1] Availability of full clinical information. 2] Diagnosis of schizophrenia as per DSM IV. 5 years treatment was considered necessary for diagnosis of chronic schizophrenia. Empirical criteria for suicidality were defined as 1. The presence of suicidal ideas with and without the plan for an attempt. 2. History of suicide attempt in previous 2 years. These studies had used standard measurement tools.
Sample characteristics: We studied the records of 200 subjects of which 38% of patients had made at least one severe suicide attempt
More patients with suicide attempt had shown good clinical outcome (CGIS >2, 42.1% vs 33.0% p <. 001) in comparison to those who never made an attempt.Suicide attempters were predominantly male, with mean age of 34.2 years, majority of them were married (43.5% vs. 32.89% p<. 001), had semi-professional and skilled qualification (38.1% vs. 10.4%, p<. 001).
They had shorter duration of illness, (9.6 years Vs 11.4 Years <. 001) persistent positive (PS >7, 39.4% Vs 25.85 p 0.03) and negative symptoms (NS >7, 44.7% Vs 31.4% p .01) at the time of assessment.
The patients who had attempted suicide did not significantly differ from those who did not attempt suicide on a number of important risk factors e.g. independent living, employment, level of function, hallucinations, severity of depression, comorbid alcoholism, age of onset of schizophrenia, and family history of mental illness as well as family history a suicide.
Conclusion: Our study shows that 38% patients of schizophrenia had attempted suicide between 6 to 9 years of treatment Shorter duration of illness, persistent positive and negative symptoms presence of suicidal ideation are main risk factors. We propose that assessment of suicide needs to be done with special attention in schizophrenia.

P4- 21

CASE REPORT: ACCIDENTAL ELECTROCUTION OF A SCHIZOPHRENIC PATIENT

Lead Author: Shahan Sibtain, M.B.B.S.
Co-Author(s): Arham F. Abbas, MBBS., Askar Mehdi, MD., Kenneth E. Lai, MD.

SUMMARY:

Schizophrenia is a chronic, severe, and disabling mental disorder with schizophrenia may experience positive symptoms of hallucinations, delusions, and disorganized thoughts and speech. Negative symptoms of social withdrawal, alogia, avolition and flat affect are also common in schizophrenia. Antipsychotic medications are the primary treatment of schizophrenia with psycho social supports. Electroconvulsive therapy (ECT) have been indicated in various psychiatric disorders including mood as well as psychotic disorders. However is rarely used in treatment-resistant schizophrenia, but is sometimes recommended for schizophrenia when short term global improvement is desired, or the subject shows little response to anti-psychotics alone. Our patient that is presented below was exposed to high voltage electrocution while being non-compliant with to anti-psychotic medication.A 23 year old, Turkish American male, unemployed diagnosed with Paranoid Schizophrenia was following up in outpatient clinic. Patient went to Turkey for vacation was non compliant with the medication for more than a month in turkey, had a relapse in his symptoms with auditory hallucination and acting bizarre. Patient climbed an electric pole and got electrocuted. Patient was comatose for days and hospitalized for about 6 weeks following that and received treatment for his electric burns. During his first follow up visit after vacation he was in wheelchair and had bandages around his head and arms. He was physically dependent on others for daily work due to physical injuries. Even though patient was off of anti psychotic medication for months, he showed no active psychotic symptoms. Patient was was coherent and stable with some irritability due to housing issues. His insight, judgment, concentration and recent memory were normal. In the past, patient had several hospitalizations due to noncompliance of medication. ECT is a psychiatric treatment in which seizures are electrically induced in patients to treat psychiatric illnesses. ECT is mostly used as a last line of intervention for major depressive disorder, mania and catatonia. ECT is rarely used in treatment-resistant schizophrenia, but is sometimes recommended for schizophrenia when short term global improvement is desired, or the subject shows little response to antipsychotics alone. Even though these studies have shown that the advantage of ECT is minimal after 16 weeks, more studies are needed to establish more conclusive long term advantage. Also in terms of controlling psychotic symptoms is ECT effectiveness differ between positive and negative symptoms. A treatment which is showing a tremendous response over a short term should be studied and researched more to improve its efficacy and potency over a longer period of time.

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CASE REPORT: MANAGING DEPRESSION IN BREAST CANCER PATIENT

Lead Author: Shahan Sibtain, M.B.B.S.
Co-Author(s): Arham F. Abbas, MBBS., Askar Mehdi, MD., Asghar Hossain, MD.

SUMMARY:
Depression is one of the most commonly prevalent mental illness. According to WHO, major depression carries the heaviest burden of disability among mental and behavioral disorders. On the other hand female breast cancer is second most common cancer in United States. Depression is common in patient with cancer and long term palliative care. Oral medications, antidepressant, are the first line in the management of depression. Management of depression

with other comorbidities is not easy as antidepressants shows interactions with many other class of medicine. As these medicines induces or inhibits cytochrome P450 (CYP) isoenzymes during their metabolism. In this case the patients was diagnosed with breast cancer while she was being treated for depression. A 51 years old female present to hospital in June 2014 with worsening of depressive symptoms due to psycho 7social stress but she was compliant with the treatment. She stopped going to the church and complained of constant pain in the neck and shoulder. Her symptoms included sadness, hypersomnia, decreased energy, decreased memory, concentration, decreased appetite without weight loss, no suicidal or homicidal ideations. Patient was being prescribed bupropion XL 300 mg daily sertraline 200 mg daily for depression.Patient later in the year 2014 was diagnosed with breast cancer class 3b and underwent left breast, modified radical mastectomy and was planned to go for chemotherapy and radiation. At that time her mood was stable on her medications hence was continued and she was ready to fight back cancer. Patient while receiving chemotherapy was planned to be started on Tamoxifen treatment to prevent relapse. Patient current Antidepressant needed to be adjusted due to nature of their moderate to severe interaction with Tamoxifen. As many studies identified various antidepressant interacting with Tamoxifen and causing relapse. Our patient had a recurrence of breast cancer while undergoing four chemotherapy sessions. However she will now be receiving high dose of chemotherapy. Literature was reviewed to minimize interaction and prevent relapse of breast cancer and slecet much safer choice of antidepressant.

P4- 23

SUBJECTIVE COGNITIVE IMPAIRMENT: PREDICTOR OF EARLY COGNITIVE DECLINE

Lead Author: SATNEET SINGH, M.D.
Co-Author(s): Sandra Veigne MD, Romi Shah MD, Khurram s. Janjua MD

SUMMARY:

Subjective cognitive impairment (SCI) is a very common symptom in older people. Patients who are experiencing this symptom develop a further overt decline in cognitive functions in subsequent years. The understanding of SCI is crucial as it is one of the few complaints that may identify people undergoing initial cognitive decline. This condition is currently overlooked by most health care professionals. Very little knowledge is available about SCI as very few people report this initial decline in cognitive function to their physicians. Due to extensive studies, the world came to know about Mild Cognitive Impairment (MCI) which is recognized as a precursor of Alzheimer's disease. Most recently SCI has gained a critical focus as a pre-MCI stage, in which patients have memory deficit without objective evidence of cognitive lapses.

This poster will further highlight the importance of SCI as a marker of early cognitive decline by discussing current radiological evidence of changes in the brain during this stage. It will also propose SCI to be worthy of further research in diagnosis. Interventions to prevent further deterioration of cognition in SCI persons into MCI and eventually into AD should be identified. Detailed understanding of SCI, about its symptoms, association with depression and personality disorders can provide significant information to the clinicians for the better assessment of older patients

P4- 24

COMMUNITY OUTREACH, ASSESSMENT AND TREATMENT FOR OLDER ADULTS IMPACTED BY SUPERSTORM SANDY: SMART-MH

Lead Author: Jo Anne Sirey, Ph.D.
Co-Author(s): Jacquelin Berman, Ph.D., Patrick Raue, Ph.D.,Nancy Giunta, Ph.D.

SUMMARY:

Aim:

The psychological impact of natural disasters is long lasting with mental health consequences (Paxon et al., 2012; Rhodes et al., 2010). When a major hurricane hits, older adults tend to be more isolated, less likely to seek assistance, receive less assistance, and have the highest mortality (Banks, 2013; Peterson & Brown, 2014). In New York City, many older adults and low-income families live in coastal areas hit hardest by storms.

The Sandy Mobilization, Assessment, Referral and Treatment for Mental Health (SMART-MH) program uses a combined outreach and direct service delivery model to identify social service and mental health needs among older adults living in New York City areas impacted by Hurricane Sandy in 2012. By combining outreach with direct psychotherapy delivered in community settings the SMART-MH program is designed to overcome the well documented barriers to engagement in mental health services.

Method:

Using creative outreach strategies to identify and engage diverse, multilingual community-dwelling older adults, program staff is able to conduct brief needs assessments in multiple languages and in varied community settings (e.g., senior centers, churches, soup kitchens). The SMART-MH assessment combines measures of depression (PHQ-9), anxiety (GAD-2) and alcohol use as well as functioning, social support and storm impact. All assessments are reviewed by senior staff and a tailored service plan is created. Adults with untreated depression and anxiety or at risk alcohol use are offered a brief evidence-based psychotherapy delivered by SMART-MH staff at community settings. Adults with more complex mental health needs are linked to community providers. Social service needs satisfied through referrals.

Results:

From 10/2014 until 5/2015, 1058 assessments were conducted in Chinese, Spanish, Russian and English. Most interviewees were female (75%) with 36% Asian, 26% Caucasian, 9% African American with 18% of Hispanic origin. They reported multiple health problems and 44% rate their health fair to poor. As a result of the storm, 78% lost electricity and access to basic necessities, with 19% stuck in their homes unable to leave. 39% of older adults had to leave their homes. Currently, 27% of interviewees report flashbacks when hearing about weather threats.

19.5% of older adults had clinically significant depressive symptoms and 6% endorsed suicidal ideation. A quarter (26%) of depressed adults endorses suicidal ideation. Only a small percentage reported at risk alcohol use. Most depressed older adults referred for SMART-MH psychotherapy accepted the referral.

Summary:
SMART-MH offers a unique model that integrates outreach, assessment, and direct service. Even two years later, Hurricane Sandy remains palpable to many older adults who have higher rates of depression then other NYC senior populations. This model offers a strategy helps to identify and serve unmet mental health needs.

P4- 25

REPORTED CLOZAPINE RELATED ADVERSE DRUG REACTIONS IN AUSTRALIA 1993-2013

Lead Author: Dan Siskind, M.P.H., Ph.D.
Co-Author(s): K Winckel,A Wheeler,S Hollingworth

SUMMARY:
Background
Clozapine is the gold standard medication for treatment refractory schizophrenia. Its benefits for this patient population need to be weighed against its potentially life threatening adverse drug reactions (ADRs). The most notable of these are haematological (neutropenia and agranulocytosis) and cardiovascular (myocarditis and cardiomyopathy).
Objectives
To track the rates of reporting of clozapine ADRs in Australia using data from the Therapeutic Goods Administration (TGA).
Methods
Using data from the TGA Database of Adverse Event Notifications (DAEN), we examined all reported clozapine ADRs from the reintroduction of clozapine in 1993 to 2013. ADRs were grouped by organ class and tracked by year over the 20 year data collection period.
Findings
There were 7092 ADRs reported to the TGA DAEN involving clozapine. Of these approximately one third involved haematological ADRs and two fifths involved cardiovascular ADRs. There was a spike in reporting of cardiovascular ADRs in 2000, after the publication in 1999 of the case series of myocarditis in the Lancet by Kilian et al's group from Sydney. Cardiovascular ADRs have continued to increase over the study period, while haematological ADRs remain comparatively stable.
Conclusions
Clozapine ADRs remain a barrier to treatment for people with TRS. Rates of reported haematological ADRs are higher than for other ADRs. Previously published reports suggest that the rates of myocarditis are higher in Australia than in other countries. This could be in part due to a possible over-diagnosis of clozapine-induced myocarditis in Australia.

P4- 26

EFFICACY OF CASE MANAGEMENT FOR THE COMMUNITY DWELLING SCHIZOPHRENIA PATIENTS' A 36-MONTH PROSPECTIVE FOLLOW-UP STUDY.

Lead Author: JeeHoon Sohn, M.D., Ph.D.
Co-Author(s): Maeng Je Cho MD PhD,Ji Eun Park, MD,Ji Min Ryu MD,Seung Hui Ahn MSw

SUMMARY:

Abstract

Objectives: To observe a longitudinal course of patients with schizophrenia enrolled in a community mental health center (CMHC) in Seoul, Korea, and to evaluate a clinical efficacy of case management service offered for them.

Methods: Patients was enrolled from a community mental health center in Seoul. Eighty-four new patients enrolled in a CMHC with a DSM-IV-TR diagnosis of schizophrenia and qualified as study participants. Fifty of these patients opted to engage in case-management services and included in study group. The other thirty-four patients declined to engage but agreed to participate in research based follow-ups and included in control group. Both groups were regularly evaluated by this author for more than thirty six months.

Results: For the first year of observation, the change of yearly hospitalized duration was not significantly different between the case-managed group and the control group (-1.8 weeks vs -0.7 weeks), but change of yearly hospitalized duration of case-managed group became significantly positive for the second (-3.5 years vs + 3.6 years) and the third year (-3.8 weeks vs +4.2 weeks). We also found small improvements of psychopathology after second year follow-up., but there were no differences between two groups.

Conclusions: At least two years of case management was needed to reduce the duration of admission, but no improvement of psychopathology can be expected over control group. Shortening of admission days seems accomplished by prevention of long-term admission.

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PSYCHIATRIC EMERGENCY SERVICES (PES) PATIENT EXPERIENCE SURVEY (PES) POST-QUALITY INTERVENTION

Lead Author: Hava Starkman, B.Sc.

Co-Author(s): Dr. Janet Patterson and Pam Johnston

SUMMARY:

Acute Mental Health (AMH), specifically Psychiatric Emergency Services (PES) is a medical field that requires greater research in order to effectively improve patients' quality of care. Current literature suggests that, questionnaires are useful to assess the quality of care provided to AMH patients. A stage-I study, performed from mid-July (2014) to mid-October (2014) used the PES Patient Experience Survey (PES-PES) to help identify areas of high and low patient experience. At the end of a patients' PES treatment, they were given the opportunity to complete the PES-PES. Following a three month collection period, the survey data was compiled and analyzed by members of the research team. This was a 'pre-quality intervention' study because the results provided indications of low and high areas of patient experience in order to influence the direction of change of care in PES. Interventions are being implemented in the areas of indicated low patient experience. This stage-II study will include performing the exact same survey as the stage-I study in order to then compare the pre and post-intervention patient experience to establish a standard of care in PES. The results will also be assessed for validity and reliability in order to establish the efficiency of the PES-PES as a psychometric tool for patient experience in psychiatric hospital emergency settings.

P4- 28

THE THERAPEUTIC INTERVENTIONS FOR PEDIATRIC BIPOLAR DISORDER

Lead Author: Laima Spokas, M.D.
Co-Author(s): S.Sibtain MD , A. Hossain MD

SUMMARY:

Introduction:

There is growing evidence that Bipolar disorders are more prevalent among pediatric population than previously believed. Age-specific treatment logarithms were proposed to combine both mood stabilizers and antipsychotics to reduce symptoms of childhood onset bipolar disorder. Psychotherapeutic interventions are generally used as an adjunct to psychopharmacological therapy.

Method:

PubMed, PMC, National Institute of Mental Health (NIMH) and various Journals related to Pediatric Bipolar Disorder

Case:

A 15 years old female was previously diagnosed with bipolar disorder by a psychiatrist and was being treated with a combination of mood stabilizer and antipsychotic. The patient was stable for approximately 3 months. However patient's psychiatrist tapered and discontinued the Quetiapine as per patients and parental request while continuing her on Lithium. Patient began to report irritability, agitation, aggression and anxiety versus paranoia, difficulty with social interactions, periods of depression where she felt hopeless and helpless, low self-esteem, fatigue, difficulty focusing. Since then in short period of time patient was tried on Lurasidone ,Iloperidone,Risperidone,Ziprasidone with addition Buspirone ,Memantine .Patient began to have worsening social anxiety , increased paranoia at school .Patient continued to decompensate was noted to engage in self-mutilating behavior and exhibited manic symptoms such as: hyper talkativeness, hyper sexuality, flight of ideas. As per patients request Lithium started tapered down due to side effects and Divalproex sodium was started. However in short period of time patient presented to ED due to increasing restlessness and racing thoughts after evaluation, medication side effects and toxicity were suspected and in 2 days patient returned with acute manic symptomatology with psychosis and was admitted. Patient eventually was stabilized in 4 months of hospitalization .After manic and psychotic symptoms patient developed depressive with psychotic symtoms and eventually stabilized and discharged on Bupropion ,Risperidone, back home with plan to f/u in partial program.

Conclusion:

Management of bipolar disorder in adolescents is different when compare to adults, it requires more meticulous study of the patient, their risk factors, predisposing and precipitating factors. There are no strict guidelines for pharmacological interventions for bipolar disorders in adolescents but the user has to be very cautionary taking into consideration the side effects and development of treatment resistance. Psychotherapies along with pharmacotherapies could be used to overcome the frequent relapses and increase the remission period of the disorder. Close monitoring with frequent follow up to maintain the compliance and involve the family for the support is mandatory for successful maintenance therapy in the adolescents.

P4- 29

BIO-MARKERS IN THE DIAGNOSIS OF PSYCHOGENIC NON-EPILEPTIC SEIZURES/CONVERSION DISORDER: A SYSTEMATIC REVIEW

Lead Author: Tharani Sundararajan, M.D.
Co-Author(s): Xavier F Jimenez, MD

SUMMARY:
Background: Psychogenic non epileptic seizure (PNES) is a form of conversion disorder commonly faced by both neurologists and psychiatrists. Video electroencephalography (VEEG) is the gold-standard diagnostic method for PNES, but such assessment is complex, expensive, unavailable in many centers, requires prolonged hospital stay, and many times unable to capture an actual seizure episode during the VEEG monitoring. Objective: Systematically reviewed other biomarkers that may facilitate both neurologists and psychiatrists in diagnosing between epileptic seizures (ES) and PNES. Methods: PUBMED database was searched to identify relevant articles from 1980 â€" 2015; some of the studies were also selected via bibliographic/reference search. Inclusion criteria: adult PNES population with or without controls, studies published in English or with English translation. Exclusion criteria: review articles, meta-analyses, and single case reports. Results: A total of 23 imaging studies, 7 autonomic nervous system studies, 15 prolactin studies, 6 other hormonal studies, 5 enzyme studies and 4 miscellaneous marker studies satisfied the above criteria. Imaging Studies: SPECT and SISCOM showed no cerebral blood flow changes after PNES event, whereas diffusion tensor tractography shows the involvement of diffuse right hemisphere uncinate fasciculus in PNES. Functional MRI studies have shown PNES is hyper-linked with dissociation and emotional dysregulation centers in the brain. Autonomic nervous system: Heart rate variability is more specific in assessing the increased vagal tone observed in PNES when compared to controls and ES groups. Hormones: Prolactin is elevated in ES but not in PNES, although as a marker it shows low sensitivity. Basal hypercortisolism is seen in PNES but postictal levels are not reliable for differential diagnosis. Enzymes: Though postictal creatine kinase (CK) is elevated in generalized tonic clonic seizures and not in PNES, other possible causes of CK rise hampers its use in differentiating ES from PNES. Two studies involving neuron specific enolase observed elevated levels after ES but not after PNES. Miscellaneous: brain derived neurotropic factor (BDNF) is low both in ES and PNES when compared to healthy subjects; recently neuropeptides like ghrelin and leptin were also studied revealing levels comparable with healthy controls. Postictal leukocytosis and reduced density of platelet serotonin transporter system were also studied with limited utility. Conclusion: Overall certain bio-markers may serve as useful adjuncts to the gold standard of VEEG monitoring, but clinical assessment of various psychosocial risk factors (trauma, co-morbid psychiatric illness, phenotypic features of the seizure-like episode, etc.) remain critical in diagnosis of PNES and conversion disorder in general. Future studies are warranted to explore various biomarkers, particularly autonomic changes and neuroimaging findings specific to PNES/conversion disorder.

P4- 30

HOW SHOULD THE IMPLEMENTATION OF INTEGRATED CARE BE EVALUATED? PRELIMINARY FINDINGS FROM A MIXED METHODS STUDY

Lead Author: Nadiya Sunderji, B.A., M.D.
Co-Author(s): Abbas Ghavam-Rassoul, MD MHSc,Gwen Jansz, MD PhD,Anjana Aery, MPH Allyson Ion, MSc, Amanda Abate, MD

SUMMARY:
Integrated or collaborative mental health care is widely implemented in primary care settings, but often is not informed by evidence-based practices. This poster will present preliminary findings from a rigorous effort to develop quality indicators for integrated care.
We are conducting an exploratory, sequential mixed methods study to develop quality indicators for behavioral health integration into primary care. Through a scoping review of peer-reviewed and grey literature we are identifying quality indicators and classifying them using the Institute of Medicine and Donabedian frameworks. We are purposively sampling mental health and primary care providers, and consumers, to participate in qualitative interviews, and thematically analyzing interview transcripts to identify indicators. Based upon the literature and qualitative phase, we will create a survey that comprehensively lists potential metrics and conduct a modified Delphi expert consensus process regarding their relevance. Using the Canadian Institutes for Health Research's Knowledge-to-Action framework, we are engaging an advisory group of primary care and mental health providers, people with lived experience of mental illness, and quality improvement experts to guide interpretation of the findings throughout all phases of the study, and to participate in the Delphi process.
Through a systematic search strategy we have identified 3762 literature sources to date, of which 202 met screening criteria of implementing or proposing quality indicators for integrated mental health care in primary care. We have interviewed 13 mental health and primary care providers. Taken together, the work to date suggests that: a) co-location and adequate funding are integral to implementation of integrated / collaborative care, b) a tension exists between implementing evidence-based models of collaborative care versus adapting a model to the local context, c) team dynamics, relational skills, and physician buy-in may presage the functioning of a service, and d) high functioning teams may engage in multi-directional knowledge exchange, expanded scopes of practice and blurring of roles. Existing literature is heavily weighted toward evaluation of individual clinical outcomes such as depression symptom severity, health status and level of function, whereas qualitative sources also emphasized collaborative processes between clinicians, and facilitators and barriers to real-world implementation. The research team and its advisory group have been able to incorporate overarching principles for integrated care (e.g. equitability of access to care, meaningful choices available to consumers) and front-line perspectives on program operations (e.g. care management is available, metabolic monitoring is completed).
The development of quality indicators will provide a consistent method by which to evaluate and improve the quality of integrated and collaborative mental health care in primary care settings.

GLUCOCORTICOID RECEPTOR MRNA IN RESPONSE TO ACUTE STRESSOR: CSF CORTICOTROPIN-RELEASING FACTOR ROLE IN HPA AXIS REGULATION FOLLOWING EARLY LIFE STRESS

Lead Author: Shariful Syed
Co-Author(s): Olcay Batuman, Jeremy Coplan

SUMMARY:

Introduction:

HPA axis dysregulation has been widely researched due to its contribution to the pathophysiology of certain psychiatric disorders, including anxiety and mood disorders. The role of early life stress (ELS) is also of central importance in establishing potentially adaptive and maladaptive HPA axis modifications that persist into adulthood. The variable foraging demand (VFD) model of ELS, where maternal availability of food alternates between low and high foraging demand, with persistent bio-behavioral alterations noted in the offspring. We have previously shown that early life stress in nonhuman primates mediates increased cerebrospinal fluid (CSF) corticotropin releasing-factor (CRF) concentrations that persist into adulthood whereas HPA axis function is persistently suppressed. Others have shown the role of central glucocorticoid receptor (GR) messenger RNA (mRNA) expression as an indicator of HPA axis neuroadaptation to ELS, particularly within hippocampal neurons. We sought to further elucidate the role of GR mRNA expression during acute stress exposure and post-stress in the context of a marker of early life stress, namely CSF CRF.

Methods:

Juvenile CSF CRF had been determined in 6 juvenile bonnet macaques, (3 reared under ELS and 3 subjects reared under unstressed conditions) (data on one control subject was not available). Later, as mature adults, pre-stress monocyte GR mRNA was measured, followed by subsequent measures at time of stress, and post stress (t = 4 hours, 5 days and 7 days). Concomitant plasma cortisol was determined. The acute stressor comprised light restraint capture for 90 minutes.

Results:

The acute stress exposure was associated with an increase in cortisol. There was a highly significant adult acute GR mRNA stress response by juvenile CSF CRF concentration interaction [$F(2,6) = 31.17$; $p = 0.0006$]. At baseline, adult GR mRNA expression was positively predicted by juvenile CSF CRF; during acute stress, GR mRNA expression was both reduced and inversely predicted by juvenile CSF CRF whereas during recovery there was a return of the positive prediction by CSF CRF of GR mRNA with an overshoot of GR mRNA in subjects reared under ELS conditions.

Conclusion:

This data suggest that under ambient conditions, relatively high juvenile CRF mediates more adult HPA axis restraint through relatively high GR mRNA expression. However, during acute stress, relatively high CSF CRF rapidly reduces HPA axis restraint. Return to the ambient state is observed in the post-stress state. An ELS-associated allostatic adaptation suggests basal HPA axis suppression but capacity for rapid and hyper-reactive HPA axis response following acute stress.

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TREATMENT OF DEPRESSION AND PSYCHOSIS IN HUNTINGTON'S DISEASE, A CASE REPORT

Lead Author: Laura Tait, M.D.
Co-Author(s): Sara Diekman, MD, Uma Suryadevara, MD

SUMMARY:

Huntington's Disease is a progressive neurodegenerative disorder associated with movement abnormalities, cognitive decline, and psychiatric signs and symptoms. The disease is an autosomal dominant inherited condition, which is characterized by a genetic defect on chromosome 4, a sequence that codes for the huntingtin protein. Extra CAG repeats in this region lead to the formation of huntingtin-aggregates that are believed to contribute to the neuropathology observed in Huntington cases. Pathological studies have show that striatal neurons are largely affected, followed next in severity by the cortex. As the defective chromosome 4 is passed down from generation to generation, the repeats increase and as a result, the symptoms of Huntington's disease are observed at younger ages. The disease is debilitating and is a frequent cause of increased morbidity and mortality. Depression is a common comorbid condition seen in at least thirty percent of the patients with Huntington's disease, and the risk of suicide in these patients is five times higher when compared to the general population. Therefore, the aggressive treatment of depression in patients with Huntington's disease is warranted. We present a case report involving a patient with Huntington's disease, who presented with major depressive disorder, suicidal ideation, and active auditory hallucinations. We will discuss the various options for the treatment of depression and psychosis in Huntington's patients including pharmacologic interventions and the use of ECT in order to achieve maximum benefit of symptom relief.

P4- 33

DELIRIUM DUE TO MULTIPLE ETIOLOGIES: THE IMPORTANCE OF CASTING A WIDE NET

Lead Author: Laura Tait, M.D.
Co-Author(s): Elizabeth Stein, MD, Ana Turner, MD

SUMMARY:

Altered mental status (AMS) is a term used to describe when someone is failing to interact with environmental stimuli in an appropriate, anticipated manner and the disturbance is usually acute and transient. AMS is a common presentation in emergency departments across the nation. Often times it is difficult to obtain pertinent facts surrounding an altered patient's history of illness and providers must use laboratory and diagnostic data to help them determine the underlying cause of the patient's confusion. We present a case of a patient with metastatic lung cancer presenting from hospice care involuntarily with acute on chronic psychosis and altered mental status. The case highlights the importance of fully evaluating all underlying common causes of delirium, etiologies often missed in medically complex patients or in patients with a psychiatric history.

Palliative care patients, such as the patient in this case, have a prevalence of delirium of up to 85% and carry multiple risk factors for delirium such as benzodiazepine and/or opioid treatment, dementia, and organic diseases such as brain metastasis. Practitioners must keep in mind that while certain risk factors certainly contribute to altered mental status, a patient assessment positive for these risk factors should not preclude a more exhaustive delirium work up. Patients with a history of psychiatric illness are at heightened risk for their providers overlooking delirium. Psychiatrists should be aware of the diagnosis of delirium and as consultants, are well positioned to not only to facilitate the diagnoses of delirium, but also, to educate other healthcare providers of the importance of early symptom recognition, full work-up, and effective treatment of its underlying causes.

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ACETYLCHOLINESTERASE INHIBITORS FOR DELIRIUM IN OLDER ADULTS

Lead Author: Rajesh R. Tampi, M.D., M.S.
Co-Author(s): Deena J.Tampi, Ambreen K.Ghori

SUMMARY:

Background: Current evidence indicates that there is a disruption of the normal activity of the cholinergic system in the brain of the individuals with delirium. The purpose of this review is to evaluate the data of the efficacy and the tolerability of acetylcholinesterase inhibitors for delirium in older adults greater than 60 years old.

Methods: The systematic review was conducted in accordance with the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta Analyses statement. Our literature search identified a total of seven RCTs that evaluated the efficacy of acetylcholinesterase inhibitors for the prevention and management of delirium in older adults (>60 years old).

Results: The systematic review of the literature identified a total of seven RCTs that evaluated the efficacy of acetylcholinesterase inhibitors for the prevention and management of delirium in older adults (>60 years old), but did not find benefit for the active drug when compared to placebo for either the prevention or management of delirium.

Discussion: The data available indicates that acetylcholinesterase inhibitors cannot be recommended for the prevention or the management of delirium in older adults. The investigators found during a comparison of the data that the reduction in delirium scores were not significantly different when comparing the effect of low dose haloperidol (< 3.0 mg per day) with olanzapine and risperidone, odds ratio, 0.63, 95% CI, 1.029- 1.38, P= 0.25. Low dose haloperidol did not have a higher incidence of adverse effects when compared to the atypical antipsychotics. When compared to the data on antipsychotic medications, the data for using acetylcholinesterase inhibitors is significantly weaker with five of the seven studies showing no benefit for the drugs and one study showing a worse outcome. Unless data from larger well conducted RCTs that are powered to detect a clear difference between acetylcholinesterase inhibitors and other active drugs or placebo is demonstrated, these drugs cannot be recommended for routine use.

Conclusion: The data from this systematic review does not indicate efficacy for acetylcholinesterase inhibitors for the prevention or management of delirium in older adults

(>60 years old). Strongly positive data from larger, well conducted RCTs will be needed before these drugs can be recommended for routine use in either the prevention or management of delirium in older adults (>60 years old).

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P4- 35

STRESS AND MENTAL HEALTH AMONG JAPANESE UNIVERSITY STUDENTS WITH DEPRESSIVE MOOD

Lead Author: Mika Tanaka, M.D.
Co-Author(s): Yuji Tanaka M.D. PhD

SUMMARY:
Objective: To investigate stress and mental health among university students with depressive mood.
Method: We conducted a questionnaire survey on students at our university who underwent regular medical checkups in both 2013 and 2014. The survey was composed of a questionnaire related to stress and depressive mood, including suicidal thoughts, and the 10-item Kessler Psychological Distress Scale (K10). We analyzed data from a total of 1425 students (600 men, 825 women) who participated in the survey and provided responses for both 2013 and 2014.
Result: Mean K10 scores for these 1425 students were 15.3 in 2013 and 15.9 in 2014. In 2014, 149 (10%) students scored higher than the cut-off score of 25, and 724 students (53%) felt that university life was a source of stress. Students were classified into the following four groups according to their K10 scores: (1) high score (â‰¥25 points) in 2013 and 2014; (2) high score in 2013; (3) high score in 2014; and (4) healthy (<25 points) in 2013 and 2014. Compared with students in the healthy group, a significantly higher proportion of students in the high score groups replied "yes" to questions related to stress or suicidal thoughts.
In addition, 27 students answered "I seriously considered suicide this year" in both 2013 and 2014, and immediate support was provided to six students who revealed that they had "attempted suicide". These students reported that they were experiencing high levels of stress due to reasons such as "a death in the family", "anxiety related to job hunting", "loss of self-confidence" or "difficulties in campus life"
Conclusion: An intergroup comparison revealed that the high score groups had a significantly greater tendency to have stress and suicidal thoughts. We hope to contribute to future health support activities using these data.

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THE HUMANISM SYMPOSIUM: A MODEL FOR HUMANISM IN MEDICAL EDUCATION

Lead Author: Ekta Taneja, M.D.
Co-Author(s): Elizabeth Allan, M.D.,Aurora Rivendale, M.D., Sarah Britz Skog, M.D.

SUMMARY:
Louis Lasagna, an American physician, stated in his revision of the Hippocratic Oath in 1964: "I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug." Today, the Liaison Committee on Medical Education specifically urges medical schools to teach standards of competence beyond basic science and clinical clerkships, including instruction in human values for patient care. A student-driven effort to bring both humanism and the humanities into the medical curriculum offers camaraderie, depth, and flexibility, but requires institutional buy-in and a plan for sustainability.
Two medical students at the University of Maryland School of Medicine recently developed a new course in humanism in medicine, aimed at filling a perceived gap in humanism teaching in its medical school curriculum. It strives to honor both the humanities and humanism in the practice of medicine. Though the founders have graduated, the course is still being offered to medical students who are motivated to explore the meaning of humanism in medicine as they forge their personal and professional identities. It is furthermore intended to highlight the individuality of medical students, who all too often are taught humanism in lecture format, without the opportunity for discussion. In short, the course aims to make a space in the curriculum to honor and nurture compassion and humanism among medical students.

Discussions with educators in psychiatry have guided much of this course's development. Several faculty psychiatrists are directly involved with leading sessions on substance abuse, clinical ethics, and approaches to challenging patient interactions. We look forward to presenting descriptive results of these sessions. One of the broader goals of this project is to undertake qualitative and quantitative evaluation of the teaching of humanism in a medical setting. However, it is notoriously difficult to track measures of competency in the realms of humanism and professionalism. Perhaps more urgently, then, this poster presents an opportunity to convene with other educators in psychiatry. We hope to formulate strategies for gathering evidence for the teaching of humanism, with the goal of gathering broader support for such projects going forward.

P4- 37
A TOOL TO ENGAGE THE PATIENT IN WEB-BASED COORDINATED TREATMENT OF OPIOID ADDICTION WITH BUPRENORPHINE
Lead Author: Bradley Tanner, M.D.
Co-Author(s): Mary P Metcalf, PhD, MPH, CHES

SUMMARY:
Office-based opioid treatment (OBOT) with buprenorphine by non-addiction specialists can break the cycle of addiction to opioids; however the quality of OBOT varies because OBOT involves novel agreements, expectations, and testing (e.g., urine drug testing). Opioid addicted patients too may have difficulty succeeding in a less structured office-based environment with a non addiction specialist. They must also navigate a complex treatment

process with special concerns and unique challenges including fixed and frequent outpatient visits, and standard procedures to limit diversion and misuse of buprenorphine.
With grant funding from NIDA we are developing and testing a novel supporting framework for OBOT called The Buprenorphine Patient Support Center (BupPatient). In the conceptualized BupPatient experience patient and provider work together to establish, document and assure understanding of a standard protocol for treating opioid addiction with buprenorphine. The BupPatient experience includes tools to make the patient aware of the process including informed consent as well as expected clinic behavior, and confidentiality/disclosure laws and protections. The experience also prepares the patient for adherence testing including urine drug testing. It outlines expectations in terms of proper storage and safekeeping of medications as well as the provider's response to "lost" medications, doctor shopping, or unapproved modifications in the dose; thus assuring the provider that diversion concerns are consistently addressed. Once expectations are firmly established and documented, data collection and sharing functionality allow patient and provider to work in tandem to treat opioid addiction.
Phase I has completed product design, prototype tools, and measured acceptability and usability of BupPatient. We surveyed future buprenorphine prescribers (n=248). Only about one quarter plan to definitely provide information to patients on relevant topics such as cues /avoiding cues, and cravings or recommend websites or apps with this information. Interest in providing this information to patients increased to 50% to 64% when presented as a structured solution like BupPatient (n=188).

Our preliminary work thus indicates that planned involvement of the patient in treatment process communication is currently lacking; however there is interest in engaging patients if it involves a trusted source and is integrated and documented as part of treatment. These results demonstrate both a need for BupPatient as well as evidence that it would be supported by the provider community.

In the next phase we are completing the tool and evaluating its impact using a randomized, cross-over wait-list control design, including impact on patient outcomes using standardized instruments including a checklist of required patient behaviors, the Brief Addiction Monitor (BAM), and measures of knowledge, attitude and behavior, as well as provider satisfaction and acceptability.

P4- 38
SOCIAL SUPPORT AND HEALTH SERVICE USE IN DEPRESSED ADULTS: FINDINGS FROM THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY
Lead Author: Alan R Teo, M.D., M.S.
Co-Author(s): Sarah B. Andrea, BS, Sarah A.R. Siegel, MPH

SUMMARY:
Purpose: We investigated the relationship between social support and health service use among adults with depression as moderated by depression severity and gender.

Methods: The sample included adults age 40 and older, with Patient Health Questionnaire (PHQ-9) score â‰¥ 5 in the National Health and Nutrition Examination Survey between 2005 and 2008 (n = 1379). Multivariable regression models used social support, stratified by depression severity, to estimate association with four categories of health service utilization (seeing a non-mental health provider, seeing a mental health provider, utilizing antidepressants, and overall mental health use). Models were assembled within the theoretical framework of the Andersen Behavioral Model of Health Services Use and adjusted for potential confounders and survey weights. Partial F-tests tested a priori interactions between perceived social support and gender.
Results: Odds of seeing a non-mental health provider were much higher when social support was adequate among individuals with moderate (OR:2.6[1.3-5.3]) and severe depression (OR:3.2[1.2-8.7]). Conversely, odds of mental health service use were 60% lower when social support was adequate among those with moderate depression (OR:0.4[0.2-1.0]). Gender moderated the relationship between social support and all categories of health service use among individuals with severe depression. Social support was unrelated to service use when depression was mild.
Conclusions: Social support has opposite associations with mental and non-mental health service use among adults with clinically significant depression; this association is largely attributable to the effect of men.

P4- 39
A CASE REPORT OF AUTONUCLEATION AND PSYCHOSIS
Lead Author: Amilcar A Tirado, M.B.A., M.D.
Co-Author(s): Raj Addepalli, M.D.

SUMMARY:
Introduction
Autoenucleation is considered major self-mutilation (MSM) and a rare but devastating complication of severe mental illness. Acute psychosis, in particular first-episode schizophrenia, appears to be the primary cause of MSM.
Case Presentation
A 33 year-old Bangladeshi man, single, domiciled, Christian, with a left ocular prosthesis status post left eye autoenucleation in 2008 and past psychiatric history of unspecified psychosis, moved to New York 11/2014, was brought in by his older siblings to the Psychiatric ER 12/2014 for bizarre behavior and not speaking for 7 days.
In 2002 while living in Bangladesh he had his first psychotic break where he stopped speaking for 2 years. During these 2 years he would have episodes of anger, breaking household items and burn his fingertips. Prior to his first psychotic break he met a female cousin who lived in India and believed her to be an angel. After meeting this cousin, he became religiously preoccupied and obsessed with the idea of going to India. In 2008 he pulled out 2 teeth and autoenucleated his left eye because he was frustrated with a delay for a planned trip to India. He was brought to see a psychiatrist who managed him with oxcarbazepine 300mg daily, clozapine 100mg daily, and ECT.

He was admitted to the inpatient psychiatric unit 12/2014. Physical exam and labs were unremarkable and Brain CT showed no acute intracranial abnormality, only the left ocular prosthesis. He remained non-verbal, at times would smile inappropriately or blurt out a few words, but was adherent with medications, did not act out, or engage in self-injurious behavior. He was discharged 2/2015 on clozapine 275mg daily, haloperidol 5mg daily, benztropine 0.5mg BID. He was referred for outpatient psychiatric follow up and weekly CBC lab checks.

Discussion

Most reported cases of autonucleation have described patients diagnosed with a psychotic illness, most commonly schizophrenia; but has been seen in other psychiatric and medical conditions. Large et. al, reviewed published case histories and suggested that the risk of MSM is significantly greater in First Episode Psychosis (FEP) compared with subsequent episodes of psychosis. Although psychosis, particularly first-episode schizophrenia, seemed to meet epidemiological criteria for causation of MSM, the reason for the decline in MSM after a period of initial treatment is uncertain. In comparison, other medical literature suggests that autoenucleation patients are at greater risk for further self-harm. Witherspoon et. al, reported that patients who had enucleated one eye are at an increased risk of enucleating the other eye, even under the care of hospital staff.

Conclusion

There is no conclusive evidence that the risk of MSM increases over time if treatment is delayed. However, there is convincing argument that earlier intervention in psychosis may reduce the chance of MSM because adequate antipsychotic treatment appears to be protective.

P4- 40

PRESCRIBING PRACTICES OF ANTIDEPRESSANT MEDICATIONS FOR TREATMENT OF MAJOR DEPRESSIVE DISORDER (MDD) AMONG INSURED MEMBERS (N=68,394)

Lead Author: Lara A Trevino, M.P.H., Ph.D.

Co-Author(s): Kenneth Trevino, Ph.D.,Patrick Racsa, M.S.,John R. Biggan, Ph.D.Dana Gresky, Ph.D.,Vipin Gopal, Ph.D.

SUMMARY:

BACKGROUND: Antidepressant medication is often the first line treatment for patients with Major Depressive Disorder (MDD). Although specific prescription guidelines in terms of medication type and dosage have been established, in practice prescriptions are ultimately based on the clinician's judgment.

To date, few studies have evaluated the prescribing practices in clinical practice to determine if and how they differ from established or recommended treatment guidelines.

OBJECTIVE: The purpose of this study was to evaluate the prescribing practices of clinicians, including which antidepressants are most commonly prescribed, as well as the most common dosage of these medications, for the treatment of MDD among members of a managed healthcare organization.

METHODS: Members (N=68,394) were identified who had continuous insurance coverage and had a claim for MDD (ICD-9s: 296.2, 296.3, 311) in 2013, were in a fully insured plan, and

between 19 and 90 years of age. Prescription claims from members who filled a prescription for an antidepressant medication in 2013 (N=54,107) were evaluated to determine the most commonly prescribed antidepressant medication, as well as dosing information. Frequencies of prescriptions and percentages of members who were prescribed that drug were calculated for each drug. The most common dosage and percentage of members on that drug that were prescribed the most common dosage were calculated.
RESULTS: Members were predominantly female (N=39,816, 74%), Medicare members (N=48,266, 89%), older adults (M: 67.53, SE: 0.05, Range: 19-90), and received antidepressant treatment (80%). The top 10 most commonly prescribed antidepressant medications were, in order from most frequent to least frequent: Citalopram (N=11,995, 22%), Sertraline (N=10,791, 20%), Trazodone (N=9,501, 18%), Bupropion (N=8,479, 16%), Fluoxetine (N=7,692, 14%), Duloxetine (N=6,808, 13%), Venlafaxine (N=6,345, 12%), Escitalopram (N=6,229, 12%), Paroxetine (N=4,706, 9%), and Mirtazapine (N=4,323, 8%). Per drug, the most common daily dosages were: 20 mg Citalopram (44%), 50 mg Sertraline (31%), 100 mg Trazodone (28%), 300 mg Bupropion (42%), 20 mg Fluoxetine (37%), 60 mg Duloxetine (51%), 150 mg Venlafaxine (32%), 20 mg Escitalopram (45%), 20 mg Paroxetine(38%), and 15 mg Mirtazapine (42%).
CONCLUSION: The application of prescribing antidepressant medications in clinical practice is within recommended guidelines. Future studies should examine prescribing practices between primary care physicians and psychiatrists.

P4- 41
CAPACITY IN THE CROSS CULTURAL CONTEXT: LIMITATIONS OF A LEGAL CONCEPT
Lead Author: Pauline Tsai, M.D.

SUMMARY:
The concept of capacity can be used as one way to address cultural disagreements about diagnosis and treatment of medical problems. This concept is of limited utility in these situations, when first, it is used as a way to impose Western biomedical cultural values on another culture. Second, the concept of capacity can oversimplify and prematurely end a complex negotiation from vastly different positions: though there may be an official clear way to move forward, in practice, it is not the best way. These limitations are partly due to inherent problems with capacity itself and partly due to application of this concept to inappropriate contexts. Another complicating factor is tension in contemporary understandings of cultural psychiatry between ethnic stereotypes and anthropological explorations. These ideas will be illustrated through a review of the literature of capacity and case examples of capacity applied in cross cultural contexts. Other methods of resolving these conflicts will also be explored.

P4- 42
INTRACRANIAL, PALLIDUM, AND LATERAL VENTRICLE ENLARGEMENT IN AUTISM SPECTRUM DISORDER
Lead Author: Andia H Turner, B.S.
Co-Author(s): Theo G.M. van Erp, PhD

SUMMARY:
Introduction:
Autism Spectrum Disorder (ASD) comprises a range of developmental disorders characterized by abnormalities in social cognition, communication, and repetitive behaviors. Studies focused on brain morphology in these patients often have a small sample size and findings have been inconsistent. Here, we aim to compare subcortical and intracranial volumes between patients diagnosed with ASD and healthy volunteers, using a database of high-resolution structural brain scans from a large, multi-site collection provided by the Autism Brain Imaging Data Exchange (ABIDE.)

Methods:
This study compared subcortical and intracranial brain volumes between 472 (mean ageÂ±SD=17.7Â±8.6, 418 males) patients with DSM-IV ASD diagnoses and 538 healthy volunteers (HV; mean ageÂ±SD 17.3Â±7.7, 443 males), obtained from the ABIDE dataset. Quality assurance was performed and 84 of the 1,102 scans were excluded due to significant motion artifacts. FreeSurfer failed on an additional 8 scans resulting in a total of 92 excluded scans. Left and right lateral ventricle, thalamus, caudate, putamen, pallidum, hippocampus, amygdala, and accumbens volumes as well as intracranial volumes were obtained using Freesurfer Version 5.0.0.
Group differences for each region were examined using univariate mixed model regression analyses (Proc Mixed, SAS v9.2, SAS Institute Inc.) predicting subcortical volumes with group, site, sex, age, group Ã— site, group Ã— hemisphere, site Ã— hemisphere, and group Ã— site Ã— hemisphere interactions.
Additional analyses were completed splitting the sample into childhood / adolescent and adult samples (â‰¤ 18 and > 18 years of age, respectively). Also, all analyses were repeated using a male-only sample given that there were significantly more males than females in the ASD sample.

Results:
Compared to healthy volunteers, we found larger intracranial volume in ASD patients between 6 to 18 years of age (Cohen's d=0.18; 0.20 for male-only sample) but no difference in patients between 18-64 years of age. We also found larger pallidum (Cohen's d=0.12; 0.18 for male-only) and lateral ventricle volumes (Cohen's d=0.17; 0.21 for male-only) in ASD patients 6 to 64 years of age.

Conclusion:
The observation of larger intracranial volumes in ASD patients younger than 18 years, but not in ASD adults between the ages of 18-64 years, is consistent with accelerated growth during early brain development and normalization of brain size by adulthood in ASD. Our findings of larger pallidum volumes in ASD patients supports the involvement of the pallidum in disorders of social bonding.
Strengths and weaknesses of using a large multi-center data pool are noted, and more large-scale prospective, standardized, and longitudinal infant brain imaging studies are needed to identify abnormal brain developmental trajectories associated with ASD.

P4- 43

NO APPARENT CARDIAC CONDUCTION EFFECTS OF ACUTE TREATMENT WITH RISPERIDONE IN CHILDREN WITH AUTISM

Lead Author: Krysti Lan Chi Vo, M.D.
Co-Author(s): Courtney McCracken, PhD, Michael Kelleman, MSPH, Lawrence Scahill, MSN, PhD

SUMMARY:
Background: The promise of the atypical antipsychotics was equal or better efficacy in the treatment of schizophrenia and lower risk of neuromotor adverse effects. Registration trials in the 1990s raised new questions about the potential for antipsychotic medications alone or in combination with other medications to prolong the QTc interval and induce life-threatening cardiac arrhythmias. Indeed, the promising antipsychotic medication, sertindol, was not approved due to this concern. Risperidone is among the best studied drugs in autism and is approved for the treatment of serious behavioral problems in children with autism(1). Few studies, however, have systematically examined the cardiac effects of risperidone in this pediatric population. Methods: We used data from an eight-week, multi-site trial conducted by the Research Units on Pediatric Psychopharmacology (RUPP) Autism Network comparing risperidone (n=49) to placebo (n=52). All subjects met diagnostic criteria for autism accompanied by serious behavioral problems such as tantrums, aggression and self-injury. Risperidone was superior to placebo in reducing the severity of the serious behavioral problems. Subjects had a standard 12-lead electrocardiogram (ECG) before and after treatment. The aim of the current analysis is to evaluate the effects of risperidone on cardiac conduction in children with autism. We examined the effect of risperidone on the QTc interval compared to placebo based on readings by a single pediatric cardiologist. We also compared the agreement between the automated machine readings and the pediatric cardiologist. Results: Complete pre- and post-treatment ECG data were available on 65 subjects (placebo=30; risperidone =35). The cardiologist readings did not indicate a clinically meaningful change in the mean QTc on the ECG across risperidone and placebo groups. Three subjects in the risperidone group and four in the placebo group were identified as exceeding 450 msec on the QTc at Week 8 by the cardiologist. These findings were not statistically significant. Overall, cardiologist and machine showed excellent agreement (93.8%, 95% Wald CI [84.6% â€" 98.0]) on detecting normal QTc values, but showed lower agreement at higher QTc values. Visual examination of Bland-Altman plots suggests a systematic bias. Compared to the cardiologist, the machine readings were higher for smaller QTc values and lower for higher QTc values. Conclusions: After 8-weeks of treatment, risperidone had no significant effect on cardiac conduction compared to placebo based on cardiologist review. Taken together, these findings suggest that, compared to the cardiologist, the machine readings can misclassify abnormalities in both directions.
1. Research Units on Pediatric Psychopharmacology Autism Network (2002). Risperidone in Children with Autism and Serious Behavioral Problems. N Engl J Med 347:314â€"321, 2002.

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INTEGRATED GROUP THERAPY OF PATIENTS WITH OPIOID USE DISORDER AND CO-OCCURRING PSYCHIATRIC DISORDERS: DESIGN, RATIONALE, AND FAVORABLE 3-MONTH OUTCOME

Lead Author: Julie Volpe, M.D.
Co-Author(s): David Marcovitz, MD; R. Kathryn McHugh, PhD; Hilary S. Connery, MD, PhD

SUMMARY:
Background: Effective psychosocial treatment for buprenorphine/naloxone(BN)-initiated patients with opioid use disorder (OUD) in mental health populations has not been defined, despite high co-occurrence rates and treatment need.
Methods: A weekly outpatient integrated group therapy program, lead by BN-prescribing psychiatrists encouraging medication adherence, abstinence from all substance use, and mental health recovery was developed, replicated, and retrospectively studied for 3-month opioid and other substance use outcomes. A previous IRB-approved feasibility pilot of this model demonstrated strong patient satisfaction and retention in care at an academic psychiatric outpatient setting. The model was continued at that site and replicated at a second site, a community mental health center. Data reported are from naturalistic, retrospective chart reviews completed at both sites for quality improvement.
Results: Patients with OUD entering acute stabilization treatment with BN between 2006-2013 at two sites (N= 202) had a mean age of 40.1 years (SD = 12.4), were 37% female, and diverse with respect to race (37% Caucasian, 24% African-American, 27% Latino/Hispanic, 12% did not report race) and co-occurring mental illness/substance use. Rates of BN adherence were very high, with 98% of available urine drug screens positive for BN at Month 1, 100% at Month 2, and 100% at Month 3. In Month 1, 31% of patients provided at least one opioid-positive urine drug screen; this decreased to 12.4% in Month 2, and 5% in Month 3 with cumulative dropout rates of 11.4%, and 28.7% in those months, respectively. Non-opioid drug use also decreased over time: 55.4% provided drug-free urines in Month 1 and 83.3% provided drug-free urines by Month 3. Repeated-measures ANOVAs indicated that these reductions were statistically significant ($F[2,280]=12.88$, $p<.001$ for any drug use; $F[2,280]=10.83$, $p<.001$ for opioid use). Results of a forward stepwise regression indicated that the following variables predicted positive drug screen at Month 3: drug use in Month 1 ($B = 1.89$, $SEB = .39$, $p < .001$), unemployment ($B = 0.76$, $SEB = .38$, $p < .05$), and younger age ($B = -0.05$, $SEB = .02$, $p < .01$).
Conclusions: This model of integrating mental health care with BN stabilization of OUD is acceptable to treatment-seeking outpatients with co-occurring disorders, adaptable to community mental health settings, and provides an ideal opportunity for clinicians-in-training to acquire competency with BN prescribing and opioid overdose prevention in dually diagnosed patients. Although drop-out is a significant challenge in this population, those retained in treatment were highly adherent to treatment and achieved strong opioid and other drug use outcomes. These outcomes are comparable to large controlled clinical trials, even with a more diverse and psychiatrically severe patient population and across two different types of treatment settings.

P4- 45

CHILDREN WHO EXPERIENCED BULLYING PERCEIVED HIGHER ACADEMIC ACHIEVEMENT

Lead Author: Muhammad Waseem, M.D.
Co-Author(s): Maria Syta, MD,Toussaint Reynolds, MD,Steven Vargas, MD,Yudil Velez, MD Mark Leber, MD

SUMMARY:

Objective: To explore whether a child's exposure to bullying impacts their attitude toward school and whether it influences their own perception of their academic achievement. We hypothesized that non-bullied children would like school better and be more optimistic about their academic achievements than bullied children.
Designs & Methods: This study was conducted in the Emergency Department (ED) of an urban Hospital. First, we explored exposure to bullying and based on this disclosure, children were divided into 2 groups (bullied and non-bullied group). Attitude towards school were assessed using the Likert scale (I dislike school very much, I dislike school, I neither like nor dislike school, I like school and I like school very much), and the MacArthur Scale was used to appraise child and parent perception of the child's academic achievement.
Results: We interviewed 50 children (n=50) (aged 8-17 year), which included 27 boys and 23 girls. The mean age was 12.5 years (Range 8-17; SD 2.1). Forty (80%) children reported being bullied in the last few months, and 34 (85%) had told someone about the bullying. Regarding attitude towards school, we divided them into a dislike group (16 total) and a like group (25 total), [9 neither liked nor disliked their school]. Stratifying by exposure to bullying vs. non-bullying children, there was no correlation in bullied children between school likeness and the child's McArthur Scale for academic achievement Ï*f*=.05 (p=.77), and fair correlation in non-bullied children between school likeness and the child's McArthur Scale for academic achievement Ï*f*=.46 (p=.19). The study was underpowered to determine significance in the non-bullying group. Non-bullied children liked school better than bullied children 2.5 vs.2.1 (p=.37) but bullied children perceived themselves to be doing better academically 7.33 vs. 5.80 than non-bullied children (p=.04).
Conclusions: In this limited sample, children's attitudes toward school, as reported by perceived academic achievement, did not relate to being bullied. Our initial hypothesis that a safe secure environment leads to increased school likeness and a higher perception of academic achievement, is likely an over simplification. Further studies would be needed to demonstrate an association between school attitudes and behavioral issues â€" with a more in depth evaluation of bullying causes and psychological consequences with consideration of different emotional support systems.

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CHILDREN PERCEIVE HIGHER ACADEMIC ACHIEVEMENT THAN THEIR PARENTS

Lead Author: Muhammad Waseem, M.D.
Co-Author(s): Toussaint Reynolds,MD, Steven Vargas, MD,Yudil Velez, MD,Mark Leber, MD

SUMMARY:

Objective: To determine perception of children and their parents of their socioeconomic status (SES) and the academic achievements of their children
Methods
Design: Cross sectional study
Setting: Pediatric Emergency Department (ED) of an Urban Teaching Hospital
Population: Children 8-17 years of age referred to the ED because of behavioral problems
Instrument: MacArthur Scale
The MacArthur Scale is a simple visual scale (a picture of a ladder) which asks participants how they measure up to a particular group to which they can relate. This ladder provides a measure of perceived SES. The ladder ranges from 0 to 10 with each rung representing 1 unit. The average is 5 rungs and exceptional is 0 or 10.
Both adult and youth versions of this scale were used. First parents were asked to indicate where they would place themselves on an SES ladder "representing the stratus of SES for people in the United States". Then they were asked how they would rate their child academically using a similar scale. Similarly, we asked the children of these parents the same questions regarding their socioeconomic and academic status. Both parents and children were blinded to each other's answers. We stratified the results by grade and gender of the participating child.
Results: We compared the responses of 50 children with that of their parents. The childrens' estimate of their academic skill ranking varied based on their grade in school. Children's' perception of their academic achievement was as follows: Elementary school average rating 7.31, middle school 7.33, high school 5.14; Parental perception of academic achievement was consistently lower than their children's ratings as follows: Elementary school 5.54, middle school 5.67, high school 4.57. The mean score was 7.0 (children) and 5.5 (parents).
Children's' perception of SES similarly varied by grade as follows: elementary school 7.62, middle school 6.27, high school 5.29; Parental perception of academic achievement revealed an equivalent pattern of lower scores as the grade level increased as follows: elementary school 6.31, middle school 5.60, high school 5.57. The mean score was 6.5 (children) and 5.8 (parents).

Conclusions: Children perceived higher academic achievement than their parents. However, academic achievement trended downward as children advanced through the school system as perceived by both parents and children. Parents rated their children as below average in academic achievement when their children were in high school.

P4- 47

HEALTHCARE RESOURCE USE OF PALIPERIDONE PALMITATE 3-MONTH INJECTION VS. PLACEBO: AN ANALYSIS OF THE PSY-3012 PHASE III CLINICAL TRIAL HOSPITAL DATA

Lead Author: Kimberly Woodruff, Ph.D., Pharm.D., R.Ph.
Co-Author(s): Costel Chirila, PhD, Qingyao Zheng, MS, Gosford Sawyerr, MA, Isaac Nuamah, PhD

SUMMARY:

Introduction: Clinical trial PSY-3012 was a randomized, multicenter, double-blind, parallel-group, relapse-prevention study of paliperidone palmitate 3-month injection (PP_3M) vs.

placebo. Adults with schizophrenia were stabilized with once-monthly injection (PP1M) in an open-label (OL) 17-week transition phase, followed by a single PP3M injection in an OL 12-week maintenance phase. Qualifying subjects were then randomized to PP3M or placebo in the double-blind (DB) phase. One of the exploratory objectives was to compare healthcare resource utilization (HCRU) between PP3M and placebo, using the HCRU questionnaire during the double-blind (DB) phase.
Methods: HCRU was measured at the start of transition and maintenance phases, and at end of open-label phase (double-blind baseline), and every 12 weeks during DB until end of study/early withdrawal. Information collected included hospitalizations, ER visits, day or night clinic stays, outpatient treatment, daily living conditions, and occupational status. Logistic regression was used to model the probability of hospitalization vs. no hospitalization for both psychiatric and social reasons, as well as hospitalizations for psychiatric reasons only during the DB phase. The models controlled for OL baseline hospitalizations, OL phase hospitalizations, and time in study.
Results: A total of 145 subjects were randomized to placebo and 160 subjects to PP3M during the DB phase. The odds of hospitalization for psychiatric and social reasons during 1 year for placebo subjects were 7.74 times the odds of hospitalization for PP3M subjects (95% CI: 2.39, 25.05, p<0.001). The probability of hospitalization during 1 year was 0.24 (95% CI: 0.15, 0.36) for placebo subjects, and 0.04 (95% CI: 0.01, 0.11) for PP3M subjects. Similar results were observed when evaluating hospitalizations for psychiatric reasons only. The odds of hospitalization during 1 year for placebo subjects were 6.72 times the odds of hospitalization for PP3M subjects (95% CI: 1.72, 26.18, p=0.006). The probability of hospitalization during one year was 0.15 (95% CI: 0.08, 0.26) for placebo subjects, and 0.03 (95% CI: 0.01, 0.09) for PP3M subjects.
Conclusions: Subjects who received placebo had significantly higher odds of hospitalization for either psychiatric and social reasons, or psychiatric reasons alone compared to subjects who received PP3M. Further analysis of the economic impact of such resource reductions is warranted.

P4- 48

TOO FIT FOR DUTY: OCCUPATION RELATED EATING DISORDER IN AN ADULT MALE

Lead Author: Mercedes Xia, M.D.
Co-Author(s): Miguel Alampay, MD, JD.,Rita Richardson, MD - Jennifer Costello, MD - Karen Parisien, MD

SUMMARY:

OBJECTIVES:
1) Understand the role and applicability of various fitness standards required for military service and how these can influence behaviors.
2) Identify developmental and social risk factors that can predispose males to eating disorders.
3) Describe the objective physiological effects eating disorders can have; and the relevant objective indicators useful in the workup and continued treatment of these patients.
4) Devise treatment plan to address eating disorders in males.
BACKGROUND:

More recent scholarship has shown eating disorders to be more common in males than previously thought. Actual rates of eating disorders in males have been difficult to ascertain for reasons that include historical (in regard to original psychodynamic hypotheses of impregnation) and current (e.g. amenorrhea) sex biases. Despite in-patient studies suggesting a ratio of one male for every ten to twenty females; more recent and detailed community sampling suggests ratios closer to one male for every three to four females. Regardless of sex, the sequelae of eating disorders can lead to a myriad of potentially life-threatening sequelae. To this end the proper identification and treatment of eating disorders is essential.The most effective treatment approach includes cognitive behavioral therapy and SSRIs.

CASE:

Patient is a 23 year old single heterosexual male active duty Navy dive school candidate with a family history of anxiety and alcohol abuse in addition to his own childhood history of depression and ADHD. He was referred to a tertirary miltiary facility for work-up and management following a two-year history of excessive exercise, late-night binging, with intermittent purging. Although overweight for most of his life, patient lost over 100 pounds by the end of high school to qualify for a ROTC scholarship. Following college he was stationed across the country in an unstructured environment. He became increasingly lonely and increasingly spent time worrying about meeting fitness standards requisite for diver training. Throughout the year prior to seeking care he had averaged one marathon per month with an additional three 100-mile runs. A structured eating disorder evaluation was administered, CBT initiated, he was placed on a limited duty, and reassigned to a military treatment facility closer to his family.

CONCLUSION:

The historically low rates of eating disorders in males may be a result of decreased attention to the illness amongst clinicians; sexual biases in diagnosis; and pro-social rationalizations by patients. The interplay of family history, developmental experience, and social pressures in this case appears to further exacerbate risk. This case demonstrates the importance of provider vigilance and early attention to the eating and exercise patterns of male patients.

NOTE: The information herein should not be construed as sponsored by nor the views of any agency of the US Government.

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COMMUNITY PARTICIPATION AMONG PERSONS WITH SEVERE MENTAL ILLNESS: RELATIONSHIP WITH HOUSING TYPE, PSYCHIATRIC, AND NEIGHBORHOOD FACTORS

Lead Author: Philip Yanos, Ph.D.

Co-Author(s): Ana Stefancic, Ph.D., Mary Jane Alexander, Ph.D., Lauren Gonzales, MA, & Brianna Harney, MA

SUMMARY:

Since deinstitutionalization, a goal of community support programs for people diagnosed with severe mental illness has been to facilitate community participation. Although data indicate that people diagnosed with severe mental illness tend to participate in their communities less than other community members (Yanos, Stefancic & Tsemberis, 2012), a shortcoming of much

of the previous research on this issue is a failure to adopt an integrated approach considering the impact of personal capacity, resource, and social environment factors on community participation. The present study addresses this limitation by using the "Capabilities Framework" (Sen, 1999), a comprehensive theoretical model of human development. With the Capabilities Framed as a theoretical guide, the present study examines how individual, housing, and neighborhood characteristics interact to predict community participation. Preliminary findings will be presented from a study of roughly three hundred and sixty persons diagnosed with severe mental illness recruited from 3 communities in the New York City area representing a range of social disadvantage (Harlem- poor, Crown Heights/East Flatbush - working poor, Westchester- middle class). In each community, participants are recruited from 2 groups: persons living in supported independent housing and persons living in congregate housing with on-site support. Participants complete assessments of community participation as well as measures of individual-level psychiatric and psychological variables, including independent living skill, psychiatric symptoms, substance use severity, coping style and self-efficacy. In each neighborhood, a survey of 600 general community members (200 per community) about attitudes toward mental illness and their reported and intended behavior toward people with mental illness, is also conducted to assess the degree of mental health stigma evident in each community. Preliminary findings will be presented on the degree of community participation in each neighborhood/housing type, and associations between individual/neighborhood factors and community participation.

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UNDERSTANDING AND MANAGING THE IMPACT OF K2 USE IN ACUTE CARE SETTINGS

Lead Author: Deval Zaveri, M.D.
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SUMMARY:

After a recent increase in episodes of psychotic agitation and aggression at a large city hospital in NYC was noted, several clinicians collaborated to discuss the factors underlying this and identified that some of this was accounted for by a spike in reported use of "K2", one name for a group of new psychoactive substances classified as synthetic cannabinoids. The proliferation of use of these substances, which were previously marketed as incense or legal, herbal alternatives to marijuana, contributed to the presentation of extremely psychotic and frequently extremely aggressive people to the hospital who often had no prior history of such behavior. Review of available literature showed little data regarding the management of someone under the influence of these agents and after examination of the strategies attempted and the outcomes, a protocol was identified to help guide care in a consistent manner and allow monitoring of the efficacy of those outcomes. The protocol adopted by this group involved identifying common presenting symptoms with K2 intoxication including high risk behaviors noted during their inpatient stay, comorbid Axis I and Axis II diagnoses as well as any comorbid substance use issues and the interventions that were tried: psychopharmacological, behavioral and group psychotherapy. The protocol also reviewed data on additional social history, which can be of help for formulating relapse prevention strategies in the community.

These cases were identified by either self or family report of use of the illicit drug, or by examination of the common characteristics of these cases as during the initial presentation a reliable history of use is not always available and current drug monitoring protocols were not reliably able to identify the presence of this extremely diverse and frequently evolving group of agents. This presentation aims to share the findings about the psychiatric presentation of these cases, the protocol used for managing them and discuss outcomes and strategies for helping patients learn about and discuss risks of these agents.

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IMPROVING INPATIENT CARE OF LGBT PATIENTS: A RESIDENTS CHALLENGE

Lead Author: Muhammad Zeshan, M.D.
Co-Author(s): Juan A. Rivolta, M.D., Luisa S. Gonzalez, M.D., Panagiota Korenis, M.D.

SUMMARY:

Despite Psychiatrists-in-training receiving exposure to information about sexuality and related issues, little is known about how to effectively educate the health care providers, particularly psychiatry residents in reference to mental health needs and clinical management of the Lesbian, Gay, Bisexual, Transgender (LGBT) community. As a heterogeneous population, there is a great diversity in etiology and presentation of transgender individuals and their needs relating to mental health services. While it is known that the LGBT community is particularly vulnerable to depression, anxiety disorders, adjustment reactions and suicidality, few studies surrounding how effective psychiatrists are at providing treatment to this unique population exist. Clinicians and psychiatric residents may find it a challenge to provide care to this population and may need to have specialized training, and learn how to implement the limited guidelines that are available. Implementation of guidelines and information regarding mental health needs how to obtain an accurate sexual history and clinical management on the inpatient psychiatry unit are fundamental to understanding and effectively working with this patient population.

Here we present the case of a bisexual male with PTSD and bipolar disorder, hospitalized for agitated and aggressive behavior in the context of medication noncompliance. We use this case to illustrate challenges when working with the LGBT community. In addition, we will provide the results of two surveys. One survey is a self-assessment of psychiatry residents in training's sense of expertise when working with this special population. The second survey asks members of the LGBT community about their experience with medical professionals. We aim to discuss the results of these surveys and propose recommendations for inpatient psychiatric management for this population for residents in training.

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CATATONIA AS A PRESENTING CLINICAL FEATURE OF ACUTE TRAUMATIC BRAIN INJURY

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SUMMARY:

Catatonia has been well known to psychiatrists for over a centuryÍ¾ however, its underlining mechanism still remains poorly understood. It can present in a number of psychiatric, neurological, systemic, and drug induced diseases. While catatonia has been reported in neurological conditions including strokes, tumors, inflammatory disorders, epilepsy, and paraneoplastic syndrome, few cases have been reported with catatonia after traumatic brain injury. We report a case of catatonia and low grade fever after a history of traumatic brain injury. Psychiatric, CSF cytology, CSF and blood culture, and radiology evaluations were performed. Literature search was carried out using PubMed.
The patient was a 43 year old previously cheerful man with no past psychiatric or medical history who was admitted for low grade fever and significant catatonic symptoms (not talking, eating, or ambulating) 5 days after a work-related injury to the jaw. Family members reported that the patient became depressed after the injury. His CSF and blood cultures did not indicate any infection. His catatonic symptoms did not respond to treatment of lorazepam. A repeat of magnetic resonance imaging revealed periventricular and central deep white matter lesions not present on admission scans.
Review of literature shows that very few cases of catatonic symptoms after traumatic brain injury were reported. More questions need to be answered regarding the associations between traumatic brain injury and catatonia. Acute traumatic brain injury is worth being included in the differential diagnoses of the cases with catatonic presentation. Extra effort for a detailed history is warrant to avoid unnecessary psychotropic medications.

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ARIPIPRAZOLE LAUROXIL: AN INNOVATIVE LONG-ACTING INJECTABLE ANTIPSYCHOTIC IN DEVELOPMENT FOR THE TREATMENT OF SCHIZOPHRENIA

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SUMMARY:

The symptoms of schizophrenia are usually classified into positive, negative and cognitive domains.Exacerbation of positive symptoms usually requires immediate treatment. While negative symptoms are not regarded as "urgent", they often contribute to impaired functioning.Atypical antipsychotics have demonstrated efficacy in reducing the severity of both positive and negative symptoms.Aripiprazole lauroxil(AL)is a novel, long-acting injectable atypical antipsychotic with an innovative delivery system in development for the treatment of schizophrenia.The safety and efficacy of AL was demonstrated in a double-blind,placebo-controlled,12-week study in patients experiencing an acute exacerbation of schizophrenia.Patients received AL 441 mg IM,AL 882Â mg IM or matching placebo(PBO)IM monthly.Patients also received 15 mg oral aripiprazole or PBO for the first 3 weeks of treatment.The primary efficacy endpoint was the change from baseline to Day 85 in PANSS total score.Other endpoints included the change from baseline to Day 85 in PANSS Positive and Negative subscales scores and overall responder rate(defined as a â‰¥30% reduction in PANSS total score or CGI-I score of

2(much improved)or 1(very much improved) at Day 85. The incidence of treatment-emergent adverse events (TEAEs) was also evaluated.A total of 623 patients were randomized and received study drug; 596 patients had â‰¥1 post-baseline PANSS score. Patients were markedly to severely ill at baseline(mean PANSS total scores ranged from 92-94). Using ANCOVA with LOCF,statistically significant and clinically meaningful improvements on PANSS total score were demonstrated for both AL doses at study endpoint with placebo-adjusted difference of -10.9(p<0.001)and -11.9(p<0.001)for AL 441 mg and AL 882 mg, respectively.At Day 85, placebo-adjusted differences in PANSS Positive subscale score were -3.23(p<0.001)and -3.72(p<0.001)for AL 441 mg and AL 882 mg, respectively;and were -2.23(p<0.001)for AL 441 mg and -2.35(p<0.001)for AL 882 mg in PANSS Negative subscale score.Statistically significant separation from PBO was observed as early as Day 8 and was consistently observed throughout the study period for PANSS total score and both subscale scores. With LOCF, the PANSS responder rates were significantly greater for the AL 441 mg group 35.7%(p<0.001)and AL 882 mg group 34.8%(p<0.001)than PBO(18.4%).The most common TEAEs(>5% of patients in either AL dose group)were akathisia, insomnia, headache, and anxiety.These findings demonstrate the robust efficacy of both doses of aripiprazole lauroxil as treatment of acute psychotic symptoms in patients with schizophrenia. Additionally, significant reduction in PANSS subscale scores as early as Day 8 suggests that both doses of aripiprazole lauroxil may rapidly reduce both positive and negative symptoms.Both doses of aripiprazole lauroxil were generally safe and well tolerated with a side effect profile consistent with oral aripiprazole.