

## PSYCHIATRIC SUMMARY XV

Fall 2015

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This issue marks the fifteenth installment consolidating recent clinical updates, mental health policy news, popular press news patients may be reading, and changes in the landscape of psychiatry in Wisconsin. Download the full issue.

### OF GENERAL INTEREST

#### **“Lies, damn lies and statistics”**

In an editorial appearing in JAMA Psychiatry (8/5/2015, [LINK](#)), Helena Chmura Kraemer discusses how adjusting for covariates essentially improves statistically non-significant findings to the realm of statistical significance in randomized controlled studies. Indeed, randomization is meant to provide that control. She writes:

Often, the first table of an RCT report compares the baseline characteristics of the T1 vs T2 samples to assess the success of randomization, ignoring the fact that randomization (1) is a process, not an outcome, and (2) is meant to generate 2 random samples from the same population, not 2 matched samples. When a few baseline variables significantly differentiate the 2 groups at the 5% level, researchers often propose to adjust for those covariates in testing the treatment effect. This is post hoc testing (like offering to bet at prerace odds on a horse as it approaches the finish line), which frequently leads to false-positive results.

The author goes on to argue that:

Any covariates to be used in adjusting should be specified a priori, listed in the RCT registration, and taken into consideration in the power analysis. Such adjustment changes the hypothesis to be tested from comparing all T1 patients vs all T2 patients (overall ES) to comparing T1 patients only with T2 patients matched in one way or another on the particular covariates proposed.

Dr. Kraemer concludes:

The bottom line is that covariates proposed a priori should always have strong rationale and justification and should be as few in number and as noncorrelated as possible. Often the best choice is to ignore covariates and to test and estimate overall ES and then to explore possible moderators of treatment response (ie, baseline variables for which covariate ES differs for different covariate values).

#### **To Wit: Only 36 of 100 Psychology Papers Replicated:**

The journal Science ran a heavily publicized article from the Open Science Collaboration (28 August 2015, [LINK](#)) in which the authors “conducted replications of 100 experimental and correlational studies published in three psychology journals using high-powered designs and original materials when available.” They reported that:

Ninety-seven percent of original studies had significant results ( $P < .05$ ). Thirty-six percent of replications had significant results; 47% of original effect sizes were in the 95% confidence interval of the replication effect size; 39% of effects were subjectively rated to have replicated the original result; and if no bias in original results is assumed, combining original and replication results left 68% with statistically significant effects.

### **Reckless Prescribing as Homicide?**

A physician in California is being charged with multiple counts of murder in the context of overprescribing of controlled substances. Reporting in the L.A. Times on the trial of Dr. Hsiu-Ying “Lisa” Tseng, journalist Marisa Gerber (8/31/2015) noted that “Tseng is charged with second-degree murder for the deaths of Vu Nguyen, 28, of Lake Forest; Steven Ogle, 25, of Palm Desert; and Joey Rovero, 21, an Arizona State University student, who prosecutors say traveled more than 300 miles with friends from Tempe, Ariz., to get prescriptions from Tseng. She is also charged with several felony counts of prescribing drugs to people with no legitimate need for the medications and a count of fraudulent prescribing.” She added “evidence seized from Tseng’s office, [Deputy Dist. Atty.] Niedermann said, shows that coroner’s or law enforcement officials had called Tseng more than a dozen times and informed her that patients of hers had died of an overdose or potential overdose. Despite those calls — and various other “red flags,” which Niedermann said included a patient overdosing in the hallway of her clinic — Tseng didn’t change her prescribing practice.”

### **CLINICAL PSYCHIATRY IN THE NEWS, IN BRIEF**

#### **Birth Defects and SSRIs:**

Appearing in the British Medical Journal (Reefhuis et al., [LINK](#)) the authors studied 17952 mothers of infants without birth defects and 9857 mothers of infants with birth defects at 10 centers in the United States calculating posterior odds ratio estimates with adjustments. They found that: “Sertraline was the most commonly reported SSRI, but none of the five previously reported birth defects associations with sertraline was confirmed. For nine previously reported associations between maternal SSRI use and birth defect in infants, findings were consistent with no association. High posterior odds ratios excluding the null value were observed for five birth defects with paroxetine (anencephaly 3.2, 95% credible interval 1.6 to 6.2; atrial septal defects 1.8, 1.1 to 3.0; right ventricular outflow tract obstruction defects 2.4, 1.4 to 3.9; gastroschisis 2.5, 1.2 to 4.8; and omphalocele 3.5, 1.3 to 8.0) and for two defects with fluoxetine (right ventricular outflow tract obstruction defects 2.0, 1.4 to 3.1 and craniosynostosis 1.9, 1.1 to 3.0).”

#### **Social Integration Reduces Suicide Risk:**

In a population based study (Tsai et al., JAMA Psychiatry, [LINK](#)) of 72,607 nurses ages of 46 to 71, authors examined social connectedness via a seven item survey. “During more than 1.2 million person-years of follow-up (1992-2010), there were 43 suicide events. The incidence of suicide decreased with increasing social integration. In a multivariable Cox proportional hazards regression model, the relative hazard of suicide was lowest among participants in the highest category of social integration (adjusted hazard ratio, 0.23 [95% CI, 0.09-0.58]) and second-highest category of social integration (adjusted hazard ratio, 0.26 [95% CI, 0.09-0.74]). Increasing or consistently high levels of social integration were associated with a lower risk of suicide. These findings were robust to sensitivity analyses that accounted for poor mental health and serious physical illness.”

#### **Checklist to Curb Child Overprescribing:**

Appearing in Psychiatric Times (8/3/2015 [LINK](#)) Allen Frances, MD provides a list of considerations to be reviewed prior to prescribing psychotropics in children, driven by his view (shared by many) that “There

has been an unchecked, exponential growth in the use of psychostimulants, antidepressants, and antipsychotic drugs in kids—often harming more than helping them.”

### **Omega 3 Protection from Psychosis:**

In a follow-up to past reports, Amminger et al. (Nature Communications, [LINK](#)) reported on a double blind study of 12 week intervention at median 6.7 years follow-up:

We have previously shown that a 12-week intervention with omega-3 PUFAs reduced the risk of progression to psychotic disorder in young people with subthreshold psychotic states for a 12-month period compared with placebo. We have now completed a longer-term follow-up of this randomized, double-blind, placebo-controlled trial, at a median of 6.7 years. Here we show that brief intervention with omega-3 PUFAs reduced both the risk of progression to psychotic disorder and psychiatric morbidity in general in this study. The majority of the individuals from the omega-3 group did not show severe functional impairment and no longer experienced attenuated psychotic symptoms at follow-up.

### **5 Red Flags it isn't ADHD:**

Current Psychiatry ran an article from Manuel Mota-Castillo MD (originally Vol. 1, No. 4 / April 2002, [LINK](#)). In summary: 1) moodiness is not part of ADHD, 2) ADHD is not intermittent, 3) Symptoms should be present early in life, 4) More than one diagnosis probably means “none of the above” - ie conduct disorder, or ODD with ADHD, 5) Worsening of symptoms is not an expected outcome of stimulant medication.

### **Shortage of Psychiatrists Felt at VA**

The VA office of the Inspector General ran this report [LINK](#) underscoring the fact that despite a large hiring push, the VA has not been able to hire high enough numbers of psychiatrists to provide adequate access to mental health providers for the nation's veterans.

### **Ketamine Overstated?**

In an editorial appearing in the British Medical Journal ([LINK](#)), Melvyn W B Zhang and Roger C M Ho claim “Ketamine's potential as a rapid antidepressant was overplayed”.

### **Psychiatric Shortage:**

Writing for Doximity, Jonathon Block (9/8/2015) reported that while the number of physicians increased by 45% from 1995 to 2013, the number of psychiatrist increased by just 12%. At the same time, citing the Associated Press, the average annual wage for psychiatrists was reported at “\$182,700, just below the mean for primary care”. Another concern, he reported was “stigma surrounding mental health, even among practitioners, and a perception that psychiatry isn't as highly regarded as other specialties given that “psychiatry is devalued by some in the medical profession,” Darrell Kirch, MD, president of the Association of American Medical Colleges, told the AP.”

## **MENTAL HEALTH IN THE POPULAR PRESS**

### **Vasopressin for Social Impairment:**

Recent research on correlating blood and CSF markers of vasopressin, then comparing these values to theory of mind, was published in PLoS One by Dr. Karen Parker, PhD. U.S. News and World Report (Haelle,

7/22/2015, [LINK](#)) quoted her: ““Vasopressin may be a biological marker of, and potential drug target for, social impairments in autism,” Parker said. “There are currently no medications that effectively treat the social deficits in people with autism.””

### **Chronic Marijuana Use in Teen Boys not Linked to Physical or Mental Health?**

Many news outlets picked up on a study published by Bechtold et al., (Psychology of Addictive Behaviors, 8/3/2015 e-pub ahead of print, [LINK](#)) which followed 408 males from adolescence to their mid thirties. This longitudinal study surveyed marijuana use, physical health and mental health, and found no significant difference among trajectories for four different categories of marijuana use.

### **Transgender and Suicide:**

According to an article published at USA Today (Laura Ungar, 8/16/2015 [LINK](#)), among transgender individuals, “41% try to kill themselves at some point in their lives, compared with 4.6% of the general public. The numbers come from a study by the American Foundation for Suicide Prevention and the Williams Institute, which analyzed results from the National Transgender Discrimination Survey.

### **9 Alzheimer’s Risk Factors:**

Published in Time (Maya Rhodan, 8/20/2015, [LINK](#)): “Two-thirds of Alzheimer’s cases could be attributed to nine risk factors that are potentially fixable, according to a new study released Thursday. Researchers linked obesity, carotid artery narrowing, low educational attainment, depression, high blood pressure, frailty, smoking habits, high levels of homocysteine (an amino acid), and type 2 diabetes in the Asian population to about two-thirds of global Alzheimer’s cases in a recent analysis of existing data.

### **Identification of Self as Goth and Depression/Self Harm:**

Many popular press new outlets reported on an article published in The Lancet (Bowes et al., e-pub ahead of print, [LINK](#)) in which the authors report: “Our findings suggest that young people identifying with goth subculture might be at an increased risk for depression and self-harm. Although our results suggest that some peer contagion operates within the goth community, our observational findings cannot be used to claim that becoming a goth increases risk of self-harm or depression.”

## **MENTAL HEALTH POLICY**

### **Mental Health Services Expanding in Dane County:**

According to an article by Bill Novak appearing at Madison.com on 7/28/2015 ([LINK](#)), Joe Parisi (Dane County Executive) “announced a new mental health program that he and other officials say will guarantee access to services for virtually everybody in Dane County. This will come about through the county’s Comprehensive Community Services (CCS) program, certified in July by the Wisconsin Department of Health Services. CCS is fully funded by federal and state agencies and doesn’t require county matching funds. It’s a Medicaid benefit “consisting of individualized, community-based rehabilitation services for people with mental health and/or substance abuse needs.

### **Mental Health Parity Subverted?**

Kaiser Health News (Jenny Gold, 8/3/2015, [LINK](#)) reported on ways in which health insurers have continued to limit mental health coverage some argue in violation of the landmark 2008 parity law. The

article focuses on medical necessity reviews. Notably, “only a handful of states have dug into whether insurers are complying with parity laws. And in the seven years since the federal law was passed, the U.S. government has not taken a single public enforcement action against an insurer or employer for violating the law.”

#### **Senators Propose Mental Health Reform Law:**

As reported in many news outlets (here quoted from the Bruce Alpert in the Times-Picayune, 8/3/2015, [LINK](#)):

The Cassidy-Murphy legislation would encourage states to break down walls between primary care and mental health care. Among the provisions:

Clarify that federal privacy laws shouldn't stop mental health professionals from sharing with family members treatment steps and what Cassidy said are "important signs to be on the lookout for" following treatment.

Make grants up to \$2 million grants available for states to integrate mental health and physical health programs.

Establish a grant program facilitating early intervention for children as young as 3 three years old.

Set up an assistant secretary of mental health and substance abuse post at the Department of Health and Human Services to elevate the priority given those issues in the federal government.

End a Medicaid prohibition that bars funding for mental health and primary care services on the same day at the same location -- a separation that makes no sense and make it less likely mental health needs will be addressed, Cassidy and Murphy said.

#### **Funding to Address Heroin:**

According to the New York Times (Michael D. Shear, 8/17/2015, [LINK](#)) “The Office of National Drug Control Policy said it would spend \$2.5 million to hire public safety and public health coordinators in five areas in an attempt to focus on the treatment, rather than the punishment, of addicts. The funding — a sliver of the \$25.1 billion that the government spends every year to combat drug use — will help create a new “heroin response strategy” aimed at confronting the increase in use of the drug.”

#### **Parity has Teeth:**

Writing in Clinical Psychiatry News, Whitney McKnight (8/21/2015 [LINK](#)) reported on 2nd U.S. Circuit Court of Appeals ruling “that health insurance claims administrators who exercise “total control” over health plans may be sued for violating mental health parity law under the Employee Retirement Income Security Act of 1974. The decision, made Aug. 20, states that the New York State Psychiatric Association (NYSPA) is authorized to sue third-party administrators of Employee Retirement Income Security Act (ERISA)-regulated health plans on behalf of its members and their patients for violations of the mental health parity law.”