

## PSYCHIATRIC SUMMARY XXVI

Fall 2018

By Frederick Langheim, MD, PhD

This issue marks the twenty-sixth 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.

### **OF GENERAL INTEREST**

#### **Physician Burnout Triples Medical Errors:**

In a national population study of over 6000 physicians appearing in Mayo Clinic Proceedings (Tawfik et al., [LINK](#)) authors reported:

Of 6695 responding physicians in active practice, 6586 provided information on the areas of interest: 3574 (54.3%) reported symptoms of burnout, 2163 (32.8%) reported excessive fatigue, and 427 (6.5%) reported recent suicidal ideation, with 255 of 6563 (3.9%) reporting a poor or failing patient safety grade in their primary work area and 691 of 6586 (10.5%) reporting a major medical error in the prior 3 months. Physicians reporting errors were more likely to have symptoms of burnout (77.6% vs 51.5%;  $P < .001$ ), fatigue (46.6% vs 31.2%;  $P < .001$ ), and recent suicidal ideation (12.7% vs 5.8%;  $P < .001$ ). In multivariate modeling, perceived errors were independently more likely to be reported by physicians with burnout (odds ratio [OR], 2.22; 95% CI, 1.79-2.76) or fatigue (OR, 1.38; 95% CI, 1.15-1.65) and those with incrementally worse work unit safety grades (OR, 1.70; 95% CI, 1.36-2.12; OR, 1.92; 95% CI, 1.48-2.49; OR, 3.12; 95% CI, 2.13-4.58; and OR, 4.37; 95% CI, 2.06-9.28 for grades of B, C, D, and F, respectively), adjusted for demographic and clinical characteristics.

#### **Stimulants May Impair Function in Neurotypicals:**

In a small study of healthy college students (Weyandt et al., Pharmacy, [LINK](#)) authors note that future research is required due to the small study size, but that mixed amphetamine salts resulted in impaired working memory rather than improvement.

#### **Pharmacogenomic Testing in Psychiatry Resoundingly Unsupported:**

In another careful analysis of the literature, authors Zubenko, Sommers and Cohen (JAMA, [LINK](#)) conclude their introductory paragraph by writing:

Environmental factors (age, sex, diet, alcohol use, hormonal status, general health) and comedication are usually more important factors than inherited determinants of drug metabolism and response.<sup>5</sup> While the activity of metabolic enzymes is heritable, extremely rapid or slow metabolism is rare, and dosing needn't be guided by Pgen rather than by careful dose choice and monitoring therapeutic and adverse effects.<sup>6</sup> Thus, the available evidence suggests that Pgen tests will not contribute much to care.

#### **Neuroscience of Fear in Propaganda:**

Exploring why propaganda driven by fear is so effective in shaping people's attitudes, Andrew Nierenberg (Psychiatric Annals, [LINK](#)) argues that fear activates the salience network, shutting down the information processing required to make thoughtful assessment, that is to say, if a bear is attacking one need not recall whether their attributes are Kodiak or Grizzly.

#### **Parental Depression Increases Child Healthcare Utilization:**

In a study of 22,252 patients at a large London-based primary care center, authors Dreyer et al. (BMJ, [LINK](#)) used multivariate regression analysis to conclude that parental depression markedly increased emergency room, inpatient and outpatient services by the child.

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### Plant Nervous Systems?

Appearing in Science (Muday and Brown-Harding, [LINK](#)) authors argue that plant signaling in response to herbivory uses long distance calcium signaling through glutamate-like receptors.

### Satisfying Patients:

Lending evidence to what most of us have known for some time, an article appearing in JAMA Internal Medicine (Martinez et al., [LINK](#)) found that prescribing what patients are seeking results in higher patient satisfaction scores, in this instance antibiotics for upper respiratory symptoms.

## CLINICAL PSYCHIATRY IN THE NEWS, IN BRIEF

### Post ED Follow-Up May Reduce Suicidal Behaviors:

In a small study at 9 ER locations, authors (Stanley et al., JAMA Psychiatry, [LINK](#)) explored the impact of an ER Safety Planning Intervention (SPI) on post ER discharge suicidal behaviors. The intervention included coping skills listing and prioritization and telephone based follow-up with at least two phone calls. They found:

Of the 1640 total patients, 1186 were in the intervention group and 454 were in the comparison group. Patients in the intervention group had a mean (SD) age of 47.15 (14.89) years and 88.5% were men (n = 1050); patients in the comparison group had a mean (SD) age of 49.38 (14.47) years and 88.1% were men (n = 400). Patients in the SPI+ condition were less likely to engage in suicidal behavior (n = 36 of 1186; 3.03%) than those receiving usual care (n = 24 of 454; 5.29%) during the 6-month follow-up period. The SPI+ was associated with 45% fewer suicidal behaviors, approximately halving the odds of suicidal behavior over 6 months (odds ratio, 0.56; 95% CI, 0.33-0.95, P = .03). Intervention patients had more than double the odds of attending at least 1 outpatient mental health visit (odds ratio, 2.06; 95% CI, 1.57-2.71; P < .001).

### Managing Clozapine Induced Constipation:

Appearing at the Psychopharmacology Institute, Jonathan Meyer MD published a simple staged management to avoiding ileus in those on clozapine [LINK](#):

- The first step is to minimize the use of systemic anticholinergics.
- Docusate should be used routinely. Bulk agents can make constipation worse and should be avoided.
- After docusate, the next agent to add is PEG 3350.
- Lubiprostone, a more expensive agent, can also be tried. It can be used if the combination of docusate + PEG-3350 + a stimulant is not effective.

### TBI as Suicide Risk Factor:

Published in JAMA (Madsen et al., [LINK](#)), a retrospective cohort study involving nearly 7.5 million individuals in Denmark, and over 150 million person years, authors found that: "Compared with the general population, temporal proximity since the last medical contact for TBI was associated with risk of suicide (P<.001), with an IRR of 3.67 (95% CI, 3.33-4.04) within the first 6 months and an incidence IRR of 1.76 (95% CI, 1.67-1.86) after 7 years."

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### **Chronic Pain as Suicide Risk Factor:**

Appearing in Annals of Internal Medicine (Petrosky et al., [LINK](#)) authors evaluated completed suicides from 1/1/2003 to 12/31/2014 and found that:

Of 123 181 suicide decedents included in the study, 10 789 (8.8%) had evidence of chronic pain, and the percentage increased from 7.4% in 2003 to 10.2% in 2014. More than half (53.6%) of suicide decedents with chronic pain died of firearm-related injuries and 16.2% by opioid overdose.

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

### **Screen Time → ADHD:**

In a heavily publicized study, use of screen time appeared to increase the risk of attention deficit suggesting the mutable nature of attention based on experience. As reported in the APA Headlines of 7/18/2018:

The [Wall Street Journal](#) (7/17, Hernandez, Morris, Subscription Publication) reports that frequent use of digital media by adolescents may be associated with an increased risk for attention-deficit/hyperactivity disorder (AD/HD), researchers concluded after following some 2,500 teenagers over two years. The [findings](#) were published July 17 in the Journal of the American Medical Association.

[CNN](#) (7/17, Howard) reports that the study's "results 'affirm the [2016 American Academy of Pediatrics guidelines](#) to prioritize activities that promote adolescent executive functioning and well-being, including sleep, physical activity, distraction-free homework, and positive interactions with family and friends,' wrote" Jenny Radesky, MD, "who was a lead author of the [academy's guidelines for young children](#)." In an [accompanying editorial](#), Radesky observed that "although not directly addressed by this study, the American Academy of Pediatrics recommendations for parent involvement in their adolescent's media use – including discussions about prosocial uses of media, digital citizenship, misinformation, and persuasion awareness – are relevant to the cognitive and emotional reactions to digital media of adolescents."

According to [Newsweek](#) (7/17, Gander), "the American Psychiatric Association states five percent of children have" AD/HD, but "the figure could be higher according to the Centers for Disease Control" and Prevention.

Also covering the story are a [USA Today](#) (7/17) video, [USA Today](#) (7/17, Suppe), [Reuters](#) (7/17, Rapaport), the [NBC News](#) (7/17, Fox) website, the [NPR](#) (7/17, Chatterjee) "Shots" blog, [HealthDay](#) (7/17, Norton), [MedPage Today](#) (7/17, Hlavinka), and [Healio](#) (7/17, Demko).

### **Doubling of Calls to National Suicide Prevention Lifeline 2014-2017:**

Appearing in USA Today (Pitofsky, 7/18/2018, [LINK](#)) the National Suicide Prevention Lifeline noted a doubling of calls from 2014 to 2017, coincident with a 25% increase in suicide rates from 1996 to 2016.

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### Overdose Deaths Surpass 72,000:

As featured in the APA Headlines of 8/16/2018:

In a front-page story, the [New York Times](#) (8/15, A1, Sanger-Katz) reports that drug overdoses killed more than 72,000 Americans in 2017, a rise of about 10 percent from the year prior, according to new preliminary estimates from the Centers for Disease Control. The rising death toll “reflects two major factors: A growing number of Americans are using opioids, and those drugs are becoming more deadly.” Experts who are monitoring the epidemic point to the increase in synthetic opioids like fentanyl “most likely explains the bulk of the increased number of overdoses last year.” According to the CDC estimates, “overdose deaths involving synthetic opioids rose sharply, while deaths from heroin, prescription opioid pills and methadone fell.”

The [Washington Post](#) (8/15, Ingraham) reports the CDC “cautions that these figures are early estimates based on monthly death records processed by the agency.” The deaths are geographically distributed similarly to how they have been in past years, with Appalachia and New England showing the highest mortality rates. The highest rates were “seen in West Virginia, with 58.7 overdose deaths for every 100,000 residents. The District of Columbia (50.4), Pennsylvania (44.1), Ohio (44.0) and Maryland (37.9) rounded out the top five.” The CDC data also show, despite the nationwide increase, “overdose rates fell in a number of states, including North Dakota and Wyoming, compared with the prior year. Particularly significant were the decreases in Vermont and Massachusetts, two states with relatively high rates of overdose mortality.”

[Fortune](#) (8/15, Mukherjee) reports the nearly 72,000 overdose deaths “outpaced fatalities from suicide, or from influenza and pneumonia, which claimed about 44,000 and 57,000 lives, respectively, in 2016.”

### Rapid Onset Gender Dysphoria?

In a highly publicized paper, author Lisa Littman MD/PhD, (PLoS One, [LINK](#)) examined parental reports of rapid adolescent onset of gender dysphoria apparently related to peer groups. Acknowledging the limitations of studying parental reporting on children, the study has been contentious while many detractors report that open discourse and exploration of scientific questions is important. A review of the article also appeared at Medscape (Betty McCall, [LINK](#)).

### Antipsychotics for Disruptive Behaviors and Metabolic Syndrome:

Appearing in JAMA Psychiatry (Nicol et al., [LINK](#)) authors studied 144 youth (ages 6 to 18 years) who did not respond to traditional treatments. Participants were randomized to receive aripiprazole, olanzapine, or risperidone. All groups showed mistreated behavioral improvement but also showed increases in total body fat, greatest in the olanzapine group with mean increase relative to baseline of 4.12%. Significant reductions in insulin sensitivity were also noted in the pooled study sample.

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### **Mental Health Costs Rising:**

As reviewed in the APA headlines on September 27:

[CNBC](#) (9/27, LaVito) reports data from Aetna Behavioral Health show that the amount spent by employers on mental health “has been rising at a rapid clip – with annual costs increasing twice as fast as all other medical expenses in recent years.” Darcy Gruttadaro, director of the American Psychiatric Association Foundation’s Center for Workplace Mental Health, said, “We all have a point at which stress can creep into negatively impacting our overall health and wellness,” and “employers are increasingly recognizing ... the importance of taking care of health, well-being and mental health, and also the role stress, isolation, loneliness and some of these other factors can play in overall mental health and well-being.”

### **MENTAL HEALTH POLICY**

#### **Utah Initiative to Reduce Suicide Rates:**

As reported in the APA Headlines of 6/30/2018:

[Modern Healthcare](#) (7/28, Johnson, Subscription Publication) reported, “Salt Lake City-based Intermountain Healthcare is addressing in a new initiative to stop” Utah’s “rising suicide rate.” Just this month, “Intermountain launched Zero Suicide, a collaboration between the system, the state’s health department and community groups.” The Zero Suicide “program not only expands access to behavioral healthcare services by continuing to task primary-care physicians with screening for depression and anxiety, but it helps clinicians better address firearm safety and proper storage of firearms.”

#### **UW Center for HHS Mental Health Technology:**

As reported by Tom Ziemer within UW (9/5 [LINK](#)) the UW-Madison Center for Health Enhancement Systems Studies (CHESS), part of the Department of Industrial and Systems Engineering, has received a \$3.7 million, five-year grant to serve as the Mental Health Technology Transfer Center for The Health and Human Services Midwest region. The goal is to provide more rapid dissemination of evidence-based practices in Mental Health both through on site and online educational experiences. The grant is part of a national effort to enhance mental health services in the United States.

#### **FDA, MDMA and PTSD:**

As reported in the APA daily email on 9/19/2018, the FDA is fast tracking efforts to allow use of MDMA assisted therapy in treatment of PTSD.

The CBS Evening News (9/18, story 4, 4:05, Glor) reported, “Researchers this month are beginning the final phase of a study of a radical treatment for PTSD, post-traumatic stress disorder.” The treatment, MDMA-assisted therapy, “is showing some promising results, especially with veterans.” The FDA is now “fast-tracking it.” CBS News correspondent Jim Axelrod said that should Phase 3 trials go well, “MDMA will be available by prescription as early as 2021.” [The CBS News](#) (9/18, Axelrod) website also covers the story.