

PSYCHIATRIC SUMMARY XXV

Summer 2018

By Frederick Langheim, MD, PhD

This issue marks the twenty-fifth 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

Wisconsin Supreme Court Restores Cap on Non-Economic Damages:

The Wisconsin Supreme Court issued its ruling on June 27 in the *Ascaris Mayo v. Wisconsin Injured Patients and Families Compensation Fund* case to uphold the \$750,000 cap on noneconomic damages, thus restoring medical malpractice caps in Wisconsin. [Read more.](#)

Opioid Prescriptions Down 10%:

Appearing in multiple news sources, including the Washington Post (Carolyn Johnson, 4/19/2018 [LINK](#)), The New York Times (Abby Goodnough, 4/19/2018 [LINK](#)) and the Associated Press (Linda Johnson, 4/19/2018 [LINK](#)) data from IQVIA's Institute for Human Data Science showed a nationwide 8.9% average drop in opioid prescriptions filled at retail and mail-order pharmacies. Prescribing had already appeared to peak in 2011 but this is the most rapid year over year drop since prescriptions began to decline, possibly linked to state initiatives such as the ePDMP.

Only 37% of Quality Performance Measures Pass Validity Test:

Publicized at Healthcare Finance (Jeff Lagasse, 4/19/2018, [LINK](#)), an article appearing in The New England Journal of Medicine (MacLean et al., [LINK](#)) seriously questions the roughly 15.4 billion dollar annual cost of performance metrics by evaluating their validity. Evaluating measures of importance, appropriate care, clinical evidence base, measure specifications, feasibility and applicability, authors evaluated 86 of 271 measures (those applicable to internal medicine). They found that:

Among these [measures], 32 (37%) were rated as valid by our method, 30 (35%) as not valid, and 24 (28%) as of uncertain validity. We also determined the proportion of the measures that had been developed by the National Committee for Quality Assurance (NCQA) or endorsed by the National Quality Forum (NQF) that were rated as valid by our method. As compared with measures that were not endorsed by these organizations, greater percentages of NCQA-developed and NQF-endorsed measures were deemed valid (59% and 48%, respectively, vs. 27% for nonendorsed measures), and smaller percentages were deemed not valid (7% and 22%, vs. 49% for nonendorsed measures).

Anticholinergic Medicine → Dementia?

According to research published in the British Medical Journal (Richardson et al., [LINK](#)) there is a strong correlation between use of some anticholinergic medications and future development of dementia. The case control study included "40 770 patients aged 65-99 with a diagnosis of dementia between April 2006 and July 2015, and 283 933 controls without dementia". The authors looked at daily defined doses of anticholinergic medicine and odds ratios of developing dementia. Their results:

14 453 (35%) cases and 86 403 (30%) controls were prescribed at least one anticholinergic drug with an ACB score of 3 (definite anticholinergic activity) during the exposure period. The adjusted odds ratio for any anticholinergic drug with an ACB score of 3 was 1.11 (95% confidence interval 1.08 to 1.14). Dementia was associated with an increasing average ACB score. When considered by drug class, gastrointestinal drugs with an ACB score of 3 were not distinctively linked to dementia. The risk of dementia increased with greater exposure for antidepressant, urological, and antiparkinson drugs with an ACB score of 3. This result was also observed for exposure 15-20 years before a diagnosis.

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When to Discontinue Antipsychotics after First Break Psychosis:

In a randomized controlled study of 178 patients with first break psychosis with 10 year follow-up (Hui et al., Lancet Psychiatry, [LINK](#)) authors found that “patients with first-episode psychosis with a full initial response to treatment, medication continuation for at least the first 3 years after starting treatment decreases the risk of relapse and poor long-term clinical outcome.” More specifically:

Poor 10 year clinical outcome occurred in 35 (39%) of 89 patients in the discontinuation group and 19 (21%) of 89 patients in the maintenance treatment group (risk ratio 1.84, 95% CI 1.15-2.96; p=0.012). Suicide was the only serious adverse event that occurred in the follow-up phase (four [4%] patients in the early discontinuation group vs two [2%] in the maintenance group).

Physician Suicide Highest of Any Profession:

According to work reported on at Medscape (Anderson, 5/8/2018, [LINK](#)) a systematic review found physician suicide rates between 24 and 40 per 100,000, with one completed suicide per day.

An Egg a Day . . .

According to a study of nearly half a million Chinese adults as published in the BMJ journal Heart (Qin et al, [LINK](#)) eating up to an egg a day appears to be associated with lower cardiovascular and stroke risk.

CLINICAL PSYCHIATRY IN THE NEWS, IN BRIEF

Disclosing Childhood Abuse in Childhood Increases SI?

According to a 4/18/2018 posting by Philip Baiden at Psychiatry.com, ([LINK](#)) childhood disclosure of abuse to child protection services made by children with limited support appeared to increase risk of suicide, while having a support structure appeared to mitigate this risk. The study explored data from 9,076 adults who had experienced at least one childhood abuse event before age 16 as recorded in Statistics Canada’s 2012 Canadian Community Health Survey–Mental Health. Dr. Baiden wrote:

We found that only 6% of Canadian adults who were abused when they were children disclosed the abuse to someone from child protection services before age 16 years. Those who disclosed the abuse were more likely to experience suicidal ideation. However, those with adequate social support and a trustworthy person to turn to for advice when having problems were less likely to experience suicidal ideation. The findings also indicated that those who experienced severe physical and sexual abuse before age 16 years were more likely to experience suicidal ideation.

Autism Rates Increasing:

According to the CDC’s Morbidity and Mortality Weekly Report (Baio et al., 4/27/2018, [LINK](#)) rates of Autism Spectrum Disorders in the United States have increased to 16.8 per 1000 children.

Even Mild TBI with LOC Doubles Dementia Risk:

In a study appearing in JAMA Neurology (Barnes et al., [LINK](#)) a propensity-matched comparison between nearly 179,000 veterans with TBI and those without found that even minor TBI with loss of consciousness led to a 2-fold increase in the risk of dementia diagnosis.

Meta-analysis Reveals Antidepressant Qualities of Resistance Training:

According to work published in JAMA Psychiatry (Gordon et al., [LINK](#)) a meta-analysis of randomized clinical trials of resistance exercise in treatment of depression found:

Fifty-four effects were derived from 33 randomized clinical trials involving 1877 participants. Resistance exercise training was associated with a significant reduction in depressive symptoms with a moderate-sized mean effect Δ of 0.66 (95% CI, 0.48-0.83; $z = 7.35$; $P < .001$). Significant heterogeneity was indicated (total $Q = 216.92$, $df = 53$; $P < .001$; $I^2 = 76.0\%$ [95% CI, 72.7%-

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79.0%]), and sampling error accounted for 32.9% of observed variance. The number needed to treat was 4. Total volume of prescribed RET, participant health status, and strength improvements were not significantly associated with the antidepressant effect of RET. However, smaller reductions in depressive symptoms were derived from randomized clinical trials with blinded allocation and/or assessment.

Hypertensives Disorders of Pregnancy —> ADHD/ASD:

In a meta-analysis appearing in JAMA Psychiatry (Maher et al, [LINK](#)), authors identified 1166 studies of which 61 met inclusion criteria, showing a correlation between hypertensive disorders in pregnancy and increased risk of it with ADHD and autism spectrum disorders:

Twenty studies reported estimates for ASD. Eleven of these (including 777 518 participants) reported adjusted estimates, with a pooled adjusted OR of 1.35 (95% CI, 1.11-1.64). Ten studies reported estimates for ADHD. Six of these (including 1 395 605 participants) reported adjusted estimates, with a pooled adjusted OR of 1.29 (95% CI, 1.22-1.36).

rTMS Not Helpful in Treatment Resistant Depression among Veterans:

According to research published in JAMA Psychiatry by Yesavage et al. ([LINK](#)), the authors wrote:

In this randomized clinical trial of 164 US veterans with depression, the overall remission rate was 39%, with no significant difference between the active and sham groups. Patients with comorbid posttraumatic stress disorder showed the least improvement.

Folic Acid Protects Against Psychosis?

In an interesting cohort study appearing in JAMA Psychiatry (Eryilmaz et al., [LINK](#)) authors explored cortical thinning in those born before and after the folic acid fortification roll out to age normative cortical thinning. Based on reported correlation between cortical thinning rates and psychosis risk, the authors abstract findings read:

In a cohort of 292 youths 8 to 18 years of age with normative results of clinical magnetic resonance imaging, delayed age-associated thinning of the cerebral cortex, a pattern suggesting reduced risk for severe mental illness, emerged among individuals who gestated during and after the fortification rollout in the United States (1996-1997). Studies of 2 additional independent US cohorts (N = 1078) confirmed the reliability and temporal specificity of fortification-associated delays of cortical thinning and demonstrated an associated reduction in psychosis risk.

MENTAL HEALTH IN THE POPULAR PRESS

Gabapentin Abuse on the Rise:

An article published through the Associated Press (Perrone, 5/7/2018, [LINK](#)) consolidated data regarding increased abuse of gabapentin (9th highest prescribed medicine in the nation). According to work of Rachel Vickers Smith:

People tracked in her research describe gabapentin as a “cheap high” that is almost “always available.” They report mixing the drug with opioids, marijuana and cocaine to enhance the high, with effects ranging from “increased energy” to a “mellow” numbness.

Reportedly, the abuse rate of gabapentin increased 400% from 2005 to 2016. Last year, Kentucky became the first state to classify it as a controlled substance.

Burnout Explained:

Reporting in The Atlantic, Rena Xu (5/11/2018, [LINK](#)) provides an excellent delay introduction to those factors contributing to physician burnout. The article begins with a comparison of physicians to chefs

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where in the clientele is increasing the number of cooks decreasing while each chef must also deal with “bussing tables, washing dishes, coordinating with other chefs so orders aren’t missed, even calling the credit-card company when cards get declined.” Furthermore, each chef must enter their work into a record keeping system were in an order of eggs Benedict requires details as to whether the egg is white or brown, free range or other etc. Not just looking at the problem, the article also explores potential solutions, citing data of the indicate use of scribes improves physician and patient experiences while also increasing both quality of documentation and billing.

Herpes → Alzheimer’s?

Reported in the APA and AMA electronic newsletter is on June 22 and publicized widely in the popular press:

[The New York Times](#) (6/21, Belluck, Subscription Publication) reports that researchers have “found that viruses interact with genes linked to Alzheimer’s and may play a role in how Alzheimer’s develops and progresses.” The [findings](#) were published in *Neuron*.

[NBC News](#) (6/21, Fox) reports on its website that the researchers “found that viruses called human herpes virus 6 (HHV-6) and HHV-7 were more abundant in the brains of people who died with Alzheimer’s.”

The [NPR](#) (6/21, Hamilton) “Shots” blog reports that the researchers “also found evidence that the viruses can interact with brain cells in ways that could accelerate the disease.”

Fitness Reduces Dementia Risk?

As reported in the APA Headlines e-newsletter of 6/28/2018:

The [New York Times](#) (6/27, Bakalar) reports, “Physical fitness in middle age is tied to a lower risk of later-life depression and death from cardiovascular disease,” researchers concluded after studying “17,989 men and women, average age 50, from 1971 to 2009,” following “them from the time they initiated Medicare coverage through 2013.” The study revealed that “people in the highest” fitness category “were 16 percent less likely to have depression, 61 percent less likely to have cardiovascular illness without depression, and 56 percent less likely to die from cardiovascular disease after becoming depressed,” when compared to people “in the lowest fitness category.” The [findings](#) were published online June 27 in *JAMA Psychiatry*.

[TIME](#) (6/27) reports that “people who are more fit have lower rates of inflammation, which contributes to both heart disease and depression.” Future research, however, “will need to determine if changing fitness levels can actually lower people’s depressive symptoms and heart disease; the current study was not designed to follow such changes in exercise and fitness patterns.”

Also covering the story are [HealthDay](#) (6/27, Reinberg), [MedPage Today](#) (6/27, Smith), and [Healio](#) (6/27, Demko).

MENTAL HEALTH POLICY

Suicide Rates Continue Climbing:

According to research published in the *American Journal Preventive Medicine* (Rossen et al, [LINK](#)) County by county assessment of suicide deaths showed that rate increased more than 10% from 2005 to 2015 in over 99% of counties and over 20% in 87% of counties. Rural areas suffered greater increases than urban areas. A heavily publicized CDC report is also available here [LINK](#).

Drug Related Fatal Car Crashes:

As reported by the AMA on June 1:

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[USA Today](#) (5/31, Bomey) reports “drugs are being detected in a growing share of drivers responsible for fatal crashes, according to a new study by the Governors Highway Safety Association.” USA Today adds, “Some 44% of drivers killed in crashes in 2016 who were tested afterward had drugs in their system, according to the...study.” That is “up from 28% a decade ago.”

The [Wall Street Journal](#) (5/31, Calvert, Subscription Publication) reports that about 20 percent of the drug-positive drivers in 2016 tested positive for opioids, up from 17 percent, while for marijuana the number rose to 41 percent in 2016 from 35 percent in 2006. The report notes that nearly half of all fatally injured drivers were not tested for drugs because testing varies widely across the country.

Deaths by Suicide and Firearms Rising Sharply:

Also reported in the June 1 AMA newsletter:

[TIME](#) (6/1, Ducharme) reports new data from the CDC’s National Center for Health Statistics show that “after years of progress, deaths by suicide, homicide and other means of injury are way up among kids.” The report does not explain “why rates of suicide, homicide and other injury deaths are climbing for kids and adolescents,” but it “notes that firearms were involved in 87% of all homicides and 43% of all suicides among this age group.”

Cannabis Use Precedes Psychotic Symptoms (Not Reverse):

Anticipating a change in cannabis policy in Canada scheduled for July 2018, authors explored the correlation and potential causation between cannabis use frequency and emergency psychotic symptoms, bidirectionally (Bourque et al, JAMA Psychiatry, [LINK](#)). Studying a cohort of nearly 4000 students in the greater Montreal area, Statistical evaluation highly favored a transactional model that included to cross-lagged associations, indicating a higher likelihood of delayed impact of cannabis use frequency on the emergence of psychotic symptoms in adolescents aged 13 to 16.

Opioid Deaths May Be Underestimated:

Authors Buchanich et al. (Public Health Reports, 6/27/2018, [LINK](#)) explored the number of unintentional drug overdose deaths reported without involved substance, estimating that the proportion of unidentified substances in overdose deaths that would be related to opioids would be consistent with the proportion of all identified recreational overdoses that are attributed to opioids rather than other recreational substances. Concluding that states may be grossly underestimating the number of deaths attributed to opioids:

From 1999 to 2015, a total of 438 607 people died from unintentional drug overdoses. Opioid-related overdose deaths rose 401% (from 5868 to 29 383), non-opioid-related overdose deaths rose 150% (from 3005 to 7505), and unspecified overdose deaths rose 220% (from 2255 to 29 383). In 5 states (Alabama, Indiana, Louisiana, Mississippi, and Pennsylvania), more than 35% of unintentional overdose deaths were coded as unspecified. Our reallocation resulted in classifying more than 70 000 unspecified overdose deaths as potential additional opioid-related overdose deaths.