

PSYCHIATRIC SUMMARY XXIV

Spring 2018

By Frederick Langheim, MD, PhD

This issue marks the twenty-fourth 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

1st Opioid Marketing trial Date Set:

As reported by the AP (Miller, 1/12/2018, [LINK](#)) Judge Thad Balkman has set a trial date of May 28, 2019 for the lawsuit filed in June 2017 by the Oklahoma Attorney General that seeks unspecified damages from Purdue Pharma, Allergan, Janssen Pharmaceuticals, Teva Pharmaceuticals and several of their subsidiaries.

Nearly 2/3rds of Doctors Struggling:

According to a Medscape survey ([LINK](#)) as reported by Reuters (Larkin, 1/17/2018, [LINK](#)) nearly 2/3 of doctors are feeling depressed, burned out or both. In addition:

“One in three depressed doctors said they were more easily exasperated by patients; 32 percent said they were less engaged with their patients; and 29 percent acknowledged being less friendly,” Leslie Kane, Senior Director, Medscape Business of Medicine, said in an email to Reuters Health.

Hippocampal Neurogenesis Ends in Childhood?

In a blow to a long history of study of adult hippocampal neurogenesis in mammals, Sorrells et al (Nature, [LINK](#)) write:

In adult patients with epilepsy and healthy adults (18–77 years; n = 17 post-mortem samples from controls; n = 12 surgical resection samples from patients with epilepsy), young neurons were not detected in the dentate gyrus. In the monkey (*Macaca mulatta*) hippocampus, proliferation of neurons in the subgranular zone was found in early postnatal life, but this diminished during juvenile development as neurogenesis decreased. We conclude that recruitment of young neurons to the primate hippocampus decreases rapidly during the first years of life, and that neurogenesis in the dentate gyrus does not continue, or is extremely rare, in adult humans.

Or Does It?

A study of Paul hippocampi autopsy and individuals aged 14 to 79 (Boldrini et al., [LINK](#)) found similar numbers of intermediate neural progenitor and immature neurons in the dentate gyrus (DG), comparable numbers of glia and mature granule cells and comparable volume across ages. At the same time, older individuals have lower rates of angiogenesis and have less neuroplasticity and a smaller quiescent pool of progenitor cells in the anterior-mid DG with no changes in posterior DG.

Thus, healthy older subjects without cognitive impairment, neuropsychiatric disease, or treatment display preserved neurogenesis. It is possible that ongoing hippocampal neurogenesis sustains human-specific cognitive function throughout life and that declines may be linked to compromised cognitive-emotional resilience.

International Comparison of US Healthcare Spending and Outcomes:

In a widely publicized, debated and editorialized article published in JAMA ([LINK](#)), Papanicolas, Woskie and JHA concluded:

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The United States spent approximately twice as much as other high-income countries on medical care, yet utilization rates in the United States were largely similar to those in other nations. Prices of labor and goods, including pharmaceuticals, and administrative costs appeared to be the major drivers of the difference in overall cost between the United States and other high-income countries. As patients, physicians, policy makers, and legislators actively debate the future of the US health system, data such as these are needed to inform policy decisions.

CLINICAL PSYCHIATRY IN THE NEWS, IN BRIEF

Metabolic Syndrome and Treatment Resistant Depression:

According to research appearing in the Journal of the American Geriatrics Society (Mulvahill et al., [LINK](#)) late life depression may be exacerbated by metabolic syndrome. Using a greater than 12 week open label protocolized study of extended release venlafaxine in patients age 60 or older, authors found that those with metabolic syndrome had more severe depressive symptoms at the beginning of the study, greater chronicity to their depression throughout life, and poorer response to antidepressant.

Short Sleep Duration —> Repetitive Negative Thoughts:

According to research published in the Journal of Behavior Therapy and Experimental Psychiatry (Nota et al., [LINK](#)) “individuals who sleep less than the recommended 8 hours per night are more likely to have negative repetitive thoughts, similar to those seen in depression and anxiety”.

Written Exposure vs Cognitive Processing in PTSD:

Appearing in JAMA psychiatry (Sloan et al, [LINK](#)) a VAbased study of 5 session Written Exposure Therapy (WET) compared to Cognitive Processing Therapy (CPT) found it to be noninferior.

Participants assigned to CPT (n = 63) received 12 sessions and participants assigned to WET (n = 63) received 5 sessions. The CPT protocol that includes written accounts was delivered individually in 60-minute weekly sessions. The first WET session requires 60 minutes while the remaining 4 sessions require 40 minutes.

Among the 126 participants (60 women) improvements in PTSD symptoms among WET were noninferior to improvements in the CPT group and WET had significantly fewer dropouts.

FDA Breakthrough Designation for ASD Rx:

As reported in writers (Reuters staff, 1/29/2018, [LINK](#)) The FDA granted breakthrough therapy designation for Roche pharmaceutical’s Balovaptan, reported to target social deficits of autism spectrum disorders. The designation has the potential to accelerate the drug’s development and approval.

Fetal Alcohol Syndrome Prevalence of 1 to 5%?

Published in JAMA (May et al., [LINK](#)) this cross-sectional study of 13 146 first-grade children in 4 regions of the United States evaluated between 2010 to 2016, found the most conservative prevalence estimate for fetal alcohol spectrum disorders ranged from 11.3 to 50.0 per 1000 children. Using a weighted approach, the estimated prevalence was 31.1 to 98.5 per 1000 children.

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Mental Health Comorbidity Reduces Use of IVT in Stroke:

In an alarming study of the use of intravenous thrombolytics (IVT) in acute stroke admissions from 2009 to 2011, Bongiorno et al. (Stroke, [LINK](#)) found a marked reduction in use of IVT if the patient had comorbid depression, anxiety, bipolar illness or psychosis:

Of the 325,009 ischemic stroke cases meeting inclusion criteria, 12.8% had any of the specified psychiatric comorbidities. IVT was used in 3.6% of those with, and 4.4% of those without, psychiatric disease ($P < 0.001$). Presence of any psychiatric disease was associated with lower odds of receiving IVT (adjusted odds ratio, 0.80; 95% confidence interval, 0.76-0.85). When psychiatric diagnoses were analyzed separately individuals with schizophrenia or other psychoses, anxiety, or depression each had significantly lower odds of IVT compared to individuals without psychiatric disease.

Women Twice as Likely to be Depressed as Men:

Key Findings of a CDC National Center for Health Statistics report on depression (Brody et al., [LINK](#)):

During 2013–2016, 8.1% of American adults aged 20 and over had depression in a given 2-week period.

Women (10.4%) were almost twice as likely as were men (5.5%) to have had depression.

Depression was lower among non-Hispanic Asian adults, compared with Hispanic, non-Hispanic black, or non-Hispanic white adults.

The prevalence of depression decreased as family income levels increased.

About 80% of adults with depression reported at least some difficulty with work, home, and social activities because of their depression.

From 2007–2008 to 2015–2016, the percentage of American adults with depression did not change significantly over time.

Prazosin on PTSD Nightmares Likely Placebo:

In an article appearing in The New England Journal of Medicine, Raskind et al ([LINK](#)) randomized 304 military veterans diagnosed with PTSD to treatment with prazosin versus placebo. At 10 weeks, there were no significant differences between the prazosin group and the placebo group in the mean change from baseline in the Clinician-Administered PTSD Scale (CAPS) item B2 (“recurrent distressing dreams”).

Meta-Analysis of Antidepressants:

In a large meta-analysis of antidepressants published in The Lancet (Cipriani et al., [LINK](#)), concluding:

All antidepressants were more efficacious than placebo in adults with major depressive disorder. Smaller differences between active drugs were found when placebo-controlled trials were included in the analysis, whereas there was more variability in efficacy and acceptability in head-to-head trials. These results should serve evidence-based practice and inform patients, physicians, guideline developers, and policy makers on the relative merits of the different antidepressants.

Alcohol Use Disorder → Dementia?

In a nationwide retrospective cohort study of alcohol use disorders and dementia published in The Lancet Public Health, (Schwarzinger et al., [LINK](#)) authors found a greater than 3.3 hazard ratio for dementia in men with history of alcohol use disorder, suggesting this as the greatest modifiable risk factor for dementia.

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Of 31,624,156 adults discharged from French hospitals between 2008 and 2013, 1,109,343 were diagnosed with dementia and were included in the analyses. Of the 57,353 (5.2%) cases of early-onset dementia, most were either alcohol-related by definition (22,338 [38.9%]) or had an additional diagnosis of alcohol use disorders (10,115 [17.6%]). Alcohol use disorders were the strongest modifiable risk factor for dementia onset, with an adjusted hazard ratio of 3.34 (95% CI 3.28–3.41) for women and 3.36 (3.31–3.41) for men. Alcohol use disorders remained associated with dementia onset for both sexes (adjusted hazard ratios >1.7) in sensitivity analyses on dementia case definition (including Alzheimer's disease) or older study populations. Also, alcohol use disorders were significantly associated with all other risk factors for dementia onset (all $p < 0.0001$).

Medical Marijuana ≠ Increased Recreational Use:

A meta-analysis published in *Addiction* (Sarvet et al., [LINK](#)) found no increase in recreational marijuana use in states where medical marijuana was legalized in comparison to those where it was not.

Excessive Daytime Sleepiness → Increased β -Amyloid?

In a study of 283 elderly patients without dementia, Carvalho et al (*JAMA* [LINK](#)) found:

Baseline EDS [Excessive Daytime Sleepiness] was associated with increased longitudinal A β accumulation in elderly persons without dementia, suggesting that those with EDS may be more vulnerable to pathologic changes associated with Alzheimer disease. Further work is needed to elucidate whether EDS is a clinical marker of greater sleep instability, synaptic or network overload, or neurodegeneration of wakefulness-promoting centers. Early identification of patients with EDS and treatment of underlying sleep disorders could reduce A β accumulation in this vulnerable group.

Brief CBT Reduces Suicide Among Military:

Regardless of severity of symptoms, brief Cognitive Behavioral Therapy appears to reduce overall suicide rates among in a sample of 176 U.S. military personnel who reported active suicide ideation in the past week or a suicide attempt in the past month (Bryan, Peterson and Rudd, (Psychiatric Services, [LINK](#)).

Maternal Cannabis Abuse and Psychotic Symptoms in Offspring:

As reported in APA Communications:

[Medscape](#) (4/11, Davenport, Subscription Publication) reports, "Both mothers and fathers who use cannabis during pregnancy are more likely to have children who experience psychotic symptoms," researchers found after conducting "an analysis of more than 3500 families." Specifically, the study revealed that "maternal cannabis use was linked to a 38% increased risk for psychotic symptoms in offspring at 10 years of age; cannabis use among fathers was associated with a 44% increased risk." The findings were presented at the Schizophrenia International Research Society 2018 Biennial Meeting.

MENTAL HEALTH IN THE POPULAR PRESS

Money for Prescribing?

Appearing at CNN (Kessler, Cohen and Grise, 3/12/2018, [LINK](#)) a joint analysis conducted by CNN and researchers at Harvard concluded: "Doctors who write the most opioid prescriptions get paid the most money by pharmaceutical companies that make opioids".

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Blood Test for Autism?

As reported by The Guardian ([LINK](#) 2/18/2018) researchers at the University of Warwick, in collaborations with an Italian team in Bologna and Americans in Birmingham used artificial intelligence to develop a method of reviewing mutations of amino acid transporters in blood samples, successfully categorizing those with Autism Spectrum Disorder from neurotypicals.

Dementia Specific Advanced Directive:

As reported in APA Communications of 1/22/2018:

[The New York Times](#) (1/19, Span, Subscription Publication) “The New Old Age” blog reported that internist Barak Gaster, MD, FACP, of the University of Washington School of Medicine, has “spent three years working with specialists in geriatrics, neurology, palliative care and psychiatry to come up with a five-page document that he calls a dementia-specific [advance directive](#).” The directive “maps out the effects of mild, moderate and severe dementia, and asks patients to specify which medical interventions they would want – and not want – at each phase of the illness.”

Smartphones Tied to Teen Depression:

A recent study, as reported in The Washington Post (Bahrapour, 1/23/2017, [LINK](#)) found a link between the proliferation of smartphones and a decline in teenage happiness over the last decade.

[The report](#), “Decreases in Psychological Well-Being Among American Adolescents After 2012 and Links to Screen Time During the Rise of Smartphone Technology,” was published Monday in the journal *Emotion* using a large national survey of eighth, 10th and 12th graders conducted annually by the University of Michigan. After rising since the early 1990s, adolescent self-esteem, life satisfaction and happiness plunged after 2012, the year smartphone ownership reached the 50 percent mark in the United States, the report said. It also found that adolescents’ psychological well-being decreased the more hours a week they spent on screens, including with the Internet, social media, texting, gaming and video chats. The findings jibe with earlier studies linking frequent screen use to teenage depression and anxiety.

Depression and Anxiety High Among Grad Students:

According to research published in *Nature Biotechnology* (Evans et al., [LINK](#)) and publicized in *HealthDay* ([LINK](#)) a survey of 2300 Graduate students found that 41 percent had moderate to severe anxiety and 39 percent had moderate to severe depression (compared to 6% in the general population).

Antidepressant Withdrawal:

In a nearly 2700 page article appearing in the *New York Times* (4/7/3028, [LINK](#)) authors Carey and Gebeloff explore the challenges that patients often face in tapering off of antidepressants and how clinical trials of twelve weeks duration are not constructed in a manner to determine withdrawal symptoms and how they may be managed.

In Utero SSRI Exposure Changes Brain?

A highly publicized small cohort study of 98 infants (Lugo-Candace’s et al., *JAMA Pediatrics*, [LINK](#)) found that:

Significant gray matter volume expansion was noted in the amygdala and insula, as well as an increase in white matter structural connectivity between these same regions in selective

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serotonin reuptake inhibitor–exposed infants, compared with infants exposed to untreated prenatal maternal depression and healthy controls.

Firefighters and Police More Likely to Die by Suicide than by Line of Duty:

And work by the Ratterman family foundation, police officers and firefighters are more likely to die by suicide than by active duty ([LINK](#)) prompting the foundation to publicize the fact in an effort to reduce stigma and improve access to care.

MENTAL HEALTH POLICY

Trump Orders Improved Veteran Behavioral Health Access:

Many new sources wrote about President Trump’s executive order to improve veteran Mental Health (1/9 [LINK](#)). With an average 20 veteran suicides per day, the goal of the order is to provide seamless behavioral health access for suicide prevention.

SAMHSA Ends Evidence-Based Behavioral Health Treatment Database:

As reported in the AMA Morning Rounds:

[The Washington Post](#) (1/10, Sun, Eilperin) reports the Substance Abuse and Mental Health Services Administration announced that the contract for the database of the National Registry of Evidence-Based Programs and Practices has been discontinued.

[The Hill](#) (1/10, Hellmann) reports “the database will no longer be updated.” The database was “designed to provide information to the public about evidence-based mental health and substance use interventions and programs.”

[STAT](#) (1/10, Begley) reports that the program is “highly regarded” and helps “physicians, families, state and local government agencies, and others” distinguish between “evidence-based” treatments and “worthless interventions” for behavioral health and substance misuse problems.

California Bill for Voluntary Firearm Do-Not-Sell List:

A California bill ([LINK](#)) proposes development of an internet based registry for individuals to ask to be placed on a firearm do-not-sell list in order to be unable to purchase a firearm (ostensibly to avoid use for suicide). In reviewing the bill, individuals would also be able to voluntarily remove themselves from this list.

Banning Conversion Therapy:

The Maryland Senate votes to ban gay conversion therapy in minors the same the day the governor of Washington signed a bill banning the practice (Witte, AP, [LINK](#), 3/28/18)

Delaware House Bill Mandates Gun Seizure:

According to the AP (3/28/18, [LINK](#)) a bill in the Delaware house (passed unanimously) would require behavioral health professionals to report to police any “explicit or imminent threat” made by a patient to kill or injure someone, which in turn would result in temporary seizure of that individuals firearms.

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Marijuana Legalization and Reduction in Opioid Prescriptions:

As reported in the APA Communications of April 3, 2018:

The [Washington Post](#) (4/2, Ingraham) reports two studies published Monday in JAMA Internal Medicine conclude that the “availability of medical and recreational marijuana is linked to lower rates of opiate prescribing.” The Post says the two “studies are the latest in a long line of research showing that marijuana availability is associated with reductions in opiate use and misuse.” The first [study](#), by Hefei Wen of the University of Kentucky and Jason M. Hockenberry of Emory University, “found that the passage of medical and recreational marijuana laws were followed by reductions in Medicaid opiate prescription rates of 5.88 percent and 6.38 percent, respectively.” The second [study](#), from Ashley C. Bradford, W. David Bradford and Amanda Abraham of the University of Georgia, found “medical marijuana laws were associated with an 8.5 percent reduction in the number of daily opioid doses filled under Medicare Part D, relative to states without medical marijuana laws.”

The [AP](#) (4/2, Ritter) reports that the “new studies don’t directly assess the effect of legalizing marijuana on opioid addiction and overdose deaths,” rather, “they find evidence that legalization may reduce the prescribing of opioids.”

Senators Pressing for True Mental Health Parity:

Appearing in The Hill (J. Hellman, 4/17/2018, [LINK](#)):

Top Republicans and Democrats on the Senate Health Committee are pressing the Trump administration to implement mental health parity requirements passed by Congress in 2016.