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AMERICAN PSYCHIATRIC ASSOCIATION

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AP Photo/David Goldman

SEE STORY ON PAGE 5

Dianna and Lynn Wood look out over their flooded property as the Little River continues to rise in the aftermath of Hurricane Florence in Linden, N.C., in September. The psychiatric response to the disaster came quickly because the local district branches had disaster-preparedness plans already in place.

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Most states are failing to enforce mental health parity.

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APA files an amicus brief in a capital case of a man with vascular dementia.

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Sleep is an important ingredient to preventing problems in youth.

APA Announces Candidate Changes for President-Elect

BY CATHERINE BROWN

There has been a change in the lineup of candidates running for president-elect in APA's 2019 election. Philip Muskin, M.D., M.A., APA's current secretary, has withdrawn his candidacy. Appearing on the ballot for that race will be Jeffrey Geller, M.D., M.P.H., of Worcester, Mass., and Theresa Miskimen, M.D., of Piscataway, N.J.

Geller is a professor at UMASS Medical School and medical director of a 290-bed public psychiatric hospital. He has served in the Assembly and on components for 26 years and on the Board of Trustees for 11 years. He has been an on-site consultant to 26 states. He's received the Human Rights Award and Profiles in Courage Award from APA. He sees inpatients and outpatients daily.

The candidates for APA president-elect in the 2019 election are Jeffrey Geller, M.D., M.P.H., and Theresa Miskimen, M.D.

Miskimen, a professor at Robert Wood Johnson Medical School, is vice president at Rutgers UBHC, one of the largest providers of mental health and addiction services in the country. An APA member for nearly three decades, she has served the organization, Assembly, and Board of Trustees in many positions including DB president and speaker of the Assembly and received various recognitions including the Women's Advocate Award.

see **Candidates** *on page 10*

PERIODICALS: TIME SENSITIVE MATERIALS

AACP Offers Certification Exam In Community Psychiatry

Taking the exam, offered through APA's Learning Center on the APA website, should enhance the value a psychiatrist brings to any practice setting and may lead to increased salary and promotion.

BY MARK MORAN

Community psychiatrists can now be certified for their expertise in working in public systems serving underserved populations through an exam offered by the American Association of Community Psychiatrists (AACP).

The certification exam is offered through APA's Learning Center on the APA website and costs $250 for AACP members and $400 for nonmembers.

see **AACP** *on page 24*

PSYCHIATRIC NEWS

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AMERICAN PSYCHIATRIC ASSOCIATION

FROM THE PRESIDENT

Part II: Psychiatrists as Healers, Teachers, Leaders, and Influencers

BY ALTHA STEWART, M.D.

In the last issue, I introduced you to my young colleague, Dr. Vasilis Pozios, who joins me again in this issue to continue the discussion of psychiatrists as more than healers and educators—we must also be "influencers" if we are to fully realize the "stigma-free and care-accessible" world that we envision and advocate for. Essential to being a psychiatric influencer is the ability to effectively communicate so that public perceptions of psychiatry and people with mental illnesses evolve in a positive direction.

Anthropologist Edward T. Hall wrote, "Culture is communication and communication is culture." Culture—especially popular culture—is mediated more than ever by the entertainment industry, news media, and social media. Eliminating mental health stigma and raising the profile of organized psychiatry can occur only if psychiatrists engage in popular culture and directly interface with the entertainment industry, news media, and social media. However, how do we psychiatrists accomplish this goal, which is for many of us very far removed from our training foundation? Dr. Pozios recommends that, as a start, we create a multi-step action plan to begin making this significant paradigm shift in the profession's approach to becoming "influencers":

- **Work for the removal of barriers that prevent psychiatrists from more effectively interfacing with the entertainment industry, news media, and social media:** Broadly, these barriers include apprehension due to inadequate media-related skills and training, failure to recognize the importance of working with the media, and prejudice of proposed efforts due to some unprofessional "talking heads" who are currently in the media. This article is part of that effort. The APA Annual Meeting and other academic conferences can play a significant role in moving the needle in this area by including media-related topics in continuing education programs. APA publications, including journals and textbooks, should likewise prioritize such topics.

- **Interact directly with the news media and entertainment industry:** We need to create curricula and workshops to proactively educate journalists, writers, producers, and directors about the portrayal of matters related to mental health that are accurate and less stigmatizing. To do so, APA should not hesitate to utilize the services of members who have expertise in this area.

- **Use APA's high-profile power and its resources:** The unparalleled depth and breadth of experience of our membership positions APA to become the leader in the mental

see **From the President** *on page 22*

I wish to thank Dr. Pozios for his assistance in preparing this article. He is a forensic psychiatrist with Corizon Health in Ann Arbor, Mich.; a co-founder of Broadcast Thought, where he provides expert consultation to the entertainment industry on mental health issues; and a member of APA's Council on Communications.

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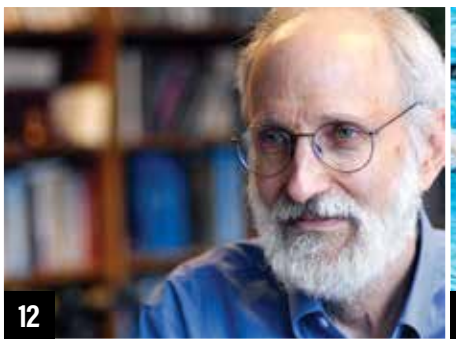
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DEPARTMENTS

Get Ready for San Francisco!

APA's 2019 Annual Meeting combines a fabulous location with the celebration of a major APA milestone: its 175th anniversary (see ad on page 4). Make your hotel reservations now at psychiatry.org/annualmeeting. The meeting will be held from **May 18** to **22.**

MH Parity Remains Elusive As States Fail to Enforce Law

Although responsibility for enforcing mental health parity falls mostly to the states, the vast majority received a failing grade on their parity statutes, and only seven states received a grade of C or better. **BY LINDA M. RICHMOND**

On the 10th anniversary of the signing of the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act, a technical report evaluating each state on its statutory compliance with the law found that just seven states earned a score of average or better, and 32 states received a failing grade, according to the Kennedy Forum, which published the study.

The 2008 federal law prohibits insurers from imposing limitations on mental illness and substance abuse benefits not applied to medical/surgical benefits. In 2010, the Affordable Care Act (ACA) strengthened the parity mandate by making behavioral health care "an essential benefit" in all individual and small-group health plans.

The report follows the Trump administration's move last August to expand the sale of so-called "skimpy" individual plans that are not required to provide the ACA's essential benefits, which advocates are concerned rolls back the clock on mental health parity.

David Hathcox

Glenda Wrenn, M.D., explains that common gaps in existing state parity laws include how mental health and substance use disorders are defined, how they are covered, and how compliance is monitored and enforced.

While the responsibility for enforcing mental health parity is shared by the federal government and states, in practice most parity compliance monitoring falls to states, since they oversee a larger share of the insurance market, including fully insured group plans, individual plans, and smaller employer-funded plans.

For the study, attorneys studied parity laws in each state, using a quantitative and systematic coding methodology that assigned points based on inclusion of specific statutory language, with a maximum possible score of 100. The seven states that received a grade of C or better included Illinois (A, 100 points), followed by Tennessee (C, 79), Maine (C, 76), Alabama (C, 74), Virginia (C, 71), New Hampshire (C, 71), and Colorado (C, 70). The report was issued along with one-page report cards for each state and a separate consumer guide.

Authors praised the comprehensive parity-reporting law in Illinois signed by its governor in August. The law requires Illinois insurers to submit detailed reports to state regulators demonstrating compliance with parity laws, particularly with regard to provider network adequacy, prescription drug formularies, and step-therapy protocols, all known as nonquantitative treatment limits (NQTLs). The law also requires the creation of a website that will provide reports to Illinois consumers on insurers' compliance with parity. Insurers will also need to provide expanded access to medication-assisted treatment (MAT) for substance use disorder, and public school districts will now be required to offer behavioral health coverage in their employee health plans.

Common gaps in existing state parity laws included how mental health and substance use disorders (MH/SUD) are defined, how they are covered, and how compliance is monitored and enforced, explained Glenda Wrenn, M.D. She co-wrote the report and pre-

see **Parity** *on page 19*

APA Works to Advance Parity, State by State

Bolstered by the efforts of APA's district branches, several states recently enacted mental health parity reporting laws, which require insurance companies to report on their compliance with key provisions. The states include Illinois, which was the only state to receive an A score in a recent Kennedy Forum report on state compliance, as well as Colorado, Delaware, and Tennessee. New York passed similar legislation, but it has not yet been signed by the governor. (To view the *Psychiatric News* article on recent state action on parity reporting, visit https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2018.8b8).

APA also drafted model legislation for each state that would require insurers to report to state regulators how they design and apply their managed care tactics. APA's model legislation reflects each state's existing laws, terminology, and legislative formats.

Of particular concern when drafting such legislation is insurers' managed care practices or their handling of prescription drug formulary design, step-therapy requirements, prior-authorization rules, network adequacy and physician network admittance policies, and reimbursement rates—all known as nonquantitative treatment limits.

"Unfortunately, many insurers are still not in full compliance with the law, particularly in how they create and apply their managed care practices like prior authorization, step-down therapy, and establishing a full continuum of care in their provider networks," said APA President Altha Stewart, M.D. "APA was a driving force in enacting the federal parity law in 2008 and remains committed to full parity implementation."

"There has been significant progress toward parity in the last decade, but there is still much work to be done," agreed APA CEO and Medical Director Saul Levin, M.D., M.P.A. "Through our model parity legislation, APA hopes to work with all 50 states to close the gaps and ensure that everyone living with mental illness or substance use disorder is able to access the care they need."

APA's model parity legislation is posted at https://www.psychiatry.org/psychiatrists/advocacy/state-affairs/model-parity-legislation. More information on the parity law, including a poster to inform patients of their rights, can be downloaded from psychiatry.org/parity. The poster can be placed in areas where patients can see it, such as physicians' offices or clinics.

Executing Inmate With Dementia Is Unconstitutional, Says APA

APA filed an amicus brief in Madison v. Alabama *that draws on two Supreme Court decisions ruling against executing an individual unable to understand why he is being executed.*

BY MARK MORAN

iStock/Dmitry Vinogradov

Capital punishment of an individual with vascular dementia who cannot recall the crime for which he is being punished violates the Eighth Amendment prohibition against cruel and unusual punishment.

So said APA in an amicus curiae brief submitted to the U.S. Supreme Court, which heard arguments in the case *Madison v. Alabama* last month. Supreme Court decisions are typically rendered in the spring, but it is possible the court could decide sooner.

APA was joined in the brief by the American Psychological Association.

Vernon Madison was imprisoned for the murder of a Mobile, Ala., police officer in 1985. After several mistrials, he was convicted in 1994. The jury recommended life in prison rather than capital punishment based on evidence presented at the trial that he had severe mental illness, but an Alabama circuit judge overrode the jury and imposed a death sentence.

Madison was originally scheduled to be executed in May 2016, and he challenged his competency in state court. The court denied his claim, and Madison then sought relief in federal court. The Court of Appeals for the 11th Circuit found that he was incompetent to be executed.

In November 2017, the Supreme Court reversed that decision on the basis of criteria in the Antiterrorism and Effective Death Penalty Act of 1996 (AEDPA). Madison was rescheduled for execution in January 2018 but again petitioned state court for relief, this time with new evidence that the court-appointed expert upon whose testimony the prior courts relied had been suspended from the practice of psychology.

The court again denied his petition, finding Madison competent to be executed. Madison then asked the Supreme Court to consider the constitutional issues underlying his claim, rather than the AEDPA ones it ruled on earlier.

The amicus brief draws on two Supreme Court decisions—the 1986 case *Ford v. Wainwright* and the 2007 case *Panetti v. Quarterman*—to argue that executing Madison would violate the Eighth Amendment. "[B]ased on the common law and this Court's precedent, it is cruel and unusual punishment to execute an individual with severe vascular dementia—a disease for which there is no cure and which often causes debilitating cognitive impairments of the type that afflict Mr. Madison."

"In both cases, the Court looked to the common law and the underlying humanitarian concerns implicated in executing an individual whose mental illness precludes a rational understanding of his punishment," the brief continues. In *Ford*, for example, the court ruled that executing an insane person "simply offends humanity"; that doing so "provides no example to others and thus contributes nothing to whatever deterrence value is intended to be served by capital punishment"; and that it is "uncharitable to dispatch an offender into another

see **Unconstitutional** *on page 20*

NOAA

Preparedness Helps MH Professionals Cope With Hurricane Florence

No one waited for the slow-moving storm and its heavy rainfall to arrive before taking action to help patients with mental illness. ***BY AARON LEVIN***

The mental health response in the Carolinas to Hurricane Florence began long before the storm hit the Atlantic shore on September 14 and then dumped up to 36 inches of rain inland.

A series of hurricanes has struck North and South Carolina in recent decades, and disaster officials in the region have learned a lot from the experience. Being ready is critical. Hurricane Matthew's $1.6 billion devastation in 2016 simply spurred an existing trend toward advance preparation rather than merely reacting after each disaster.

Even so, Florence's effects in North Carolina were particularly complex, said Allan Chrisman, M.D., an emeritus associate professor of psychiatry at Duke University in Durham and disaster chair of the North Carolina Psychiatric Association (NCPA) since 2010.

"The immediate impact on the coast came from wind, rain, and the storm surge on the coast," said Chrisman in an interview. "Then the storm moved inland, and heavy rains flooded rivers and hog waste lagoons, which washed downstream, bringing chemical and bacterial contamination."

North Carolina is considered a well-prepared state for natural disasters, and Chrisman participates in a disaster mental health response network managed by the local affiliate of the American Psychological Association. The group also includes social workers, marriage and family counselors, Red Cross mental health representatives, and state disaster officials. They all take part in regular training sessions under a state master plan, while local mental health managed care organizations also conduct training.

"Those organizations also did a terrific job of recruiting local providers to work in shelters," said Chrisman.

NCPA Acted on Pre-Storm Plan

The NCPA also did its part before the storm, placing links to a variety of hurricane resources on its website. Topics included postdisaster mental health, psychological first aid, local emergency contacts, and Medicaid response and recovery. NCPA members in the hurricane's path were sent text messages, reminding them of the association's availability to help.

"Now, we want to upgrade our member database to be sure we have cell phone numbers and then rationalize our text-messaging communications," said NCPA Executive Director Robin Huffman, after the storm.

> "Hurricane Matthew reminded us of two things: the need for good communications and maintaining access to resources." —Allan Chrisman, M.D.

Joshua Morganstein, M.D., chair of APA's Committee on the Psychiatric Dimensions of Disaster and an associate professor of psychiatry at the Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Md., sent a link to a webpage produced by USUHS's Center for the Study of Traumatic Stress. The site offered "brief, actionable information on important disaster mental health issues related to this hurricane."

"Hurricane Matthew reminded us of two things: the need for good communications and maintaining access to resources," said Chrisman in an interview.

Before and after Florence, for instance, the mental health managed care organizations and Assertive Community Treatment (ACT) teams worked together to check on the availability of medication supplies.

ACT teams in Wilmington, N.C., where the storm hit hardest, prepared special hurricane plans for each patient, including a list of shelters and emergency phone numbers, along with a checklist of recommended supplies, reported Christopher Myers, M.D., in an email to NCPA headquarters. "For this particular storm, we made sure each patient had two weeks of medications in blister packs and checked with those not receiving blister packs to ensure they had at least two weeks of medications."

Sometimes that required alerting pharmacies and Medicaid officials for the need to override usual rules and grant an additional 72-hour supply of naloxone and other medications to patients. The recent increase in use of long-lasting injectable medications in psychiatry meant that those drugs needed to be provided in shelters. NCPA members working in shelters often used their general medical skills to triage patients for appropriate care.

Technological improvements over the years have helped as well, said Kaye McGinty, M.D., a professor of psychiatry at East Carolina University in Greenville. She recalled Hurricane Floyd in 1999, which also produced heavy flooding.

"That was before electronic health records and before Medicaid was computerized in the state," said McGinty. Some mental health centers were flooded, and records were lost.

"We were operating out of a trailer and begging for medication samples," she said. "It was chaos. This time, the systems were really ready, helped by the availability of online medical records."

McGinty also works with children in state schools for the visually impaired and the deaf. Dealing with a storm is more challenging for students with mild intellectual disabilities, because they know something is happening but may not know what to do. She spent the Monday before the storm educating students about how to remain safe. For many, that meant returning home. "In any case, be with others, not alone," she told students. "Know your physical surroundings by getting help exploring new settings, like shelters."

Similar Response in South Carolina

South Carolina was not hit as severely, but the South Carolina Psychiatric Association (SCPA) quickly sent out preparedness information to its members. That included providing resources to use with patients plus some self-care guidance for responders and caregivers, while encouraging members to plan for themselves and their families.

"We shared some online resources with our membership and asked for updates from those impacted or involved in helping others," said SCPA President Jeffery Raynor, M.D. "Psychiatrists are spread rather thin in our state, with concentrations in places that ended up being less affected by the storm and subsequent flooding in other places like Greenville, Columbia, and Charleston."

"Part of the recovery process is helping colleagues and trainees understand that preparation and team standby are critical, even when we wound up with virtually nothing in Charleston," said Edward Kantor, M.D., an associate professor and the residency director for psychiatry at the Medical University of South Carolina and the SCPA's chair for disaster psychiatry. "Rescues and supporting displaced people are the early priorities. For the district branch, one of our early recovery efforts is to try to see if members are safe and if they or their practices were affected."

As in every disaster, the psychological effects on storm victims are held at bay for a time by the need to focus on more immediate needs.

"We're just at the beginning of this," said NCPA's Huffman. "Once the roads are cleared and the TV reporters leave, that's when the real work begins. The longer-term adverse effects will be the problem." **PN**

North Carolina Psychiatric Association's disaster resource center website is https://www.ncpsychiatry.org/disaster-resource-center. The Red Cross Eligibility Criteria for Disaster Mental Health Workers are posted at https://www.redcross.org/volunteer/volunteer-opportunities/disaster-health-mental-health-volunteer.html.

Community Programs Recognized For Filling Unmet Needs at Local Level

This year's Psychiatric Services Achievement Award winners provide care to survivors of domestic violence, community-based support services to people with serious mental illness in Baltimore, and peer-to-peer telephone support to anyone experiencing a mental health crisis.

BY MARK MORAN

Representatives of this year's Psychiatric Services Achievement Award winners are (from left) Andre Sturkey, life skills coordinator at Chesapeake Connections; Cherie Castellano, director of Reciprocal Peer Support; and Elizabeth Fitelson, M.D., co-director of the Domestic Violence Initiative at Columbia University Medical Center.

Three programs that provide services for people dealing with stressful life events or mental illness were honored at APA's IPS: The Mental Health Services Conference in Chicago in October. APA awarded two Gold Awards (one for a community-based program and one for an institutionally based program) and a Silver Award.

- **Gold Achievement Award for Academically or Institutionally Sponsored Programs:** *Domestic Violence Initiative at Columbia University Medical Center Department of Psychiatry*

The Domestic Violence Initiative started small, but it has quickly gained traction as a model for providing integrated psychiatric treatment for survivors of domestic violence. Established with a grant from the Chapman Perelman Foundation, the program provides on-site psychiatric treatment at the Bronx Family Justice Center for clients with a history of intimate partner violence. The co-directors are Elizabeth Fitelson, M.D., and Catherine Monk, Ph.D.

Clients are eligible to receive immediate access to a full range of psychiatric services conveniently located in the same place where they receive legal assistance on immigration and family court matters, meet with prosecutors, access shelter, and get help in applying for housing and financial assistance. Children aged 3 and up can play in a safe and supervised children's room while their parents receive services. No appointments are necessary, and all are welcome regardless of age, gender, sexual orientation, language, income, and immigration status. Treatment is provided by an L.C.S.W. psychotherapist and a psychiatry fellow at Columbia University Medical School, which launched the program in 2014 through a partnership with the Mayor's Office to Combat Domestic Violence. In 2015, Mayor de Blasio announced plans to replicate the program at family justice centers in all five boroughs.

- **Gold Achievement Award for Community-Based Care:** *Chesapeake Connections, a program of Mosaic Community Services at Sheppard Pratt Health System*

This Baltimore program, directed by Denise Chatham, has made significant progress in reducing the psychiatric hospitalization of people with serious mental illness by surrounding them with all the supports necessary to remain in the community. Key offerings include intensive case management, life skills training, housing assistance, money management, individual and group therapy, and general medical care.

Membership in the program is extended to individuals with only the most severe and persistent mental illnesses. Intensive case management is provided by three clinical teams, each consisting of a coordinator; a team leader; five case managers who help members develop and implement a treatment plan; two team assistants who help members with medical appointments, shopping, and other day-to-day activities; and a licensed practical nurse and a half-time prescriber (either the program's psychiatric nurse practitioner or psychiatrist) to manage health care. Each case manager is assigned to work with eight or nine members, with assistance from the team.

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Levin Honored During LGBT History Month

Levin was one of 31 individuals profiled on a website dedicated to honoring lesbian, gay, bisexual, and transexual leaders during LGBT History Month.

Equality Forum

APA CEO and Medical Director Saul Levin, M.D., M.P.A., was featured last month as an icon in LGBT history by Equality Forum, an organization based in Philadelphia. The organization's mission is to advance national and international lesbian, gay, bisexual, and transgender civil rights (LGBT) with an educational focus.

During LGBT History Month, which occurs in October, Equality Forum featured the profiles of 31 LGBT individuals for achievements in their field or for significant contributions to LGBT civil rights. The profile is posted on the website LGBTHistoryMonth.com.

"Dr. Levin is an inspiring role model and, as the first openly gay APA CEO, a workplace pioneer," said Malcolm Lazin, executive director of Equality Forum. "Saul is not only out, he's outstanding."

A biography on the website states, "In 2013 Levin was hired as the CEO and medical director of APA, the world's leading psychiatric association. His position as the organization's top medical executive marks an LGBT milestone. Until 1973 homosexuality was listed in APA's *Diagnostic and Statistical Manual (DSM) of Mental Disorders.* Treatments for the 'disease' included lobotomy, electric shock treatment, chemical castration, and other catastrophic therapies."

The biography further states: "In 2018 Levin addressed the audience after a performance of '217 Boxes of Dr. Henry Anonymous,' an Off-Broadway play about APA member John E. Fryer, M.D., and his role in the declassification of homosexuality as a mental illness. Levin praised Dr. Fryer and spoke about the APA's commitment to LGBT inclusion and equality" (*Psychiatric News*, http://apapsy.ch/Fryer).

"It is wonderful to see our CEO and medical director being recognized as a groundbreaker in psychiatry and an icon in the LGBT community," said APA President Altha Stewart, M.D. "The American Psychiatric Association is dedicated to increasing diversity in our field and training psychiatrists to work with diverse populations. Mental health affects people of all sexual orientations, races, religions, and genders—that's why it's so important that our patients can see themselves reflected in the field of psychiatry."

The video and webpage on Levin can be accessed at https://lgbthistorymonth.com/saul-levin.

Oregon Integrated Care Organization Uses Data To Drive Targeted, Innovative Services

Just 7 percent of Cascadia's patient population accounted for 55 percent of emergency department utilization. Services targeted at this group may improve health and lower overall costs of care. **BY MARK MORAN**

Mark Moran

Jeffrey Eisen, M.D., M.B.A., says that data on a wide range of variables regarding Cascadia's patients, including social determinants of health, provide powerful information to bring to payers.

Data about physical health, mental health, and substance use disorders as well as social determinants of health can drive improvements in care for behavioral health patients.

That's the principle behind a research project at Cascadia Behavioral Healthcare in Portland, Ore., a community-based provider of integrated care as well as social services including supportive housing.

This year, Cascadia partnered with Health Share of Oregon (HSO), the largest accountable care organization in the state, and CareOregon (CO), the largest Medicaid payer in the state, to build a "warehouse" of data on a wide range of variables affecting Cascadia's patient population—general medical conditions, mental health and substance use disorders, emergency department (ED) and hospital utilization, housing and employment status, and other social determinants of health.

Analysis of those data has revealed important facts about the patient population—for instance, who the highest utilizers of expensive services are and the relationship of certain physical and mental health conditions to ED use.

"It's a project that has allowed us to understand the needs of our population better than we ever did before, in a way that can really drive changes in how we deliver care," said Jeffrey Eisen, M.D., M.B.A., chief medical officer at Cascadia and an assistant clinical professor of psychiatry at Oregon Health Sciences University. Eisen described the project during presentations at IPS: The Mental Health Services Conference in Chicago in October.

It's a high-tech, data-driven version of "health care hotspotting"—a term coined by Jeffrey Brenner, M.D., of the Camden Coalition of Healthcare Providers. Hotspotting is based on the principle that a small minority of patients in a given population are the highest utilizers of expensive health services. Brenner sought out the highest utilizers of health care in Camden, N.J., for the purpose of targeting them for primary care and preventive interventions.

At Cascadia, Eisen said that the data collaboration revealed a startling fact: just 7 percent of Cascadia's patients accounted for 55 percent of ED visits.

"The ED is not a place to receive quality, continuing care," Eisen said. "These data provide us with insight into individuals for whom we can design better programs."

Eisen explained that Cascadia's population health project was paid for by federal funding Cascadia received as a Certified Community Behavioral Health Center (CCBHC), a designation created by the 2014 Excellence in Mental Health Act. Oregon was selected as one of eight demonstration states, and three of Cascadia's clinics were chosen as demonstration sites to provide integrated health and mental health care to patients in the community.

Among the core activities of a CCBHC, as defined by the Excellence in Mental Health Act, is "collecting, recording, and analyzing" data to drive population health research and innovation. Working with Health Share, Eisen and colleagues formulated three research questions:

- How are psychiatric and other medical diagnoses linked in a shared client population?

- How do Cascadia psychiatric diagnoses predict nonpsychiatric ED visits, nonpsychiatric inpatient admissions, and overall costs in a shared client population?

- How do HSO/CO medical diagnoses predict nonpsychiatric ED visits, nonpsychiatric inpatient admissions, and overall costs in a shared client population?

"Among our findings, one of the most revealing is that individuals with trauma-related disorders were significantly more likely to be diagnosed with a number of general medical conditions and to utilize expensive health services, including emergency department visits," Eisen said.

Even when controlling for age, gender, and psychiatric risk factors, patients with a diagnosis of a trauma-related disorder were

- 53 percent more likely to be diagnosed with hypertension;

- 62 percent more likely to be diagnosed with asthma;

- 49 percent more likely to be diagnosed with low back pain; and

- 76 percent more likely to be diagnosed with COPD.

A second crucial finding is that chronic pain—especially low back pain—was associated with increased ED visits, inpatient admissions, and overall costs of care. PTSD, major depressive disorder, and generalized anxiety disorder were all highly correlated with chronic pain.

"Chronic pain can be viewed as an indicator of the intersection of mental and physical health," Eisen said.

Based on these findings, Cascadia initiated a pilot project targeting 100 individuals with chronic pain that includes group and individual psychotherapy, gentle exercise and yoga, massage, care coordination, and medication reviews based on best practices for pain management.

"Assessments will be tracked rigorously to demonstrate efficacy," Eisen said. "We hope to achieve a significant reduction in the cost of care, emergency department utilization, and inpatient admissions across the course of the program."

Eisen says a rich source of data such as Cascadia's collaboration with Health Share gives psychiatrists and community mental health centers leverage with potential partners and payers.

"Some of what we are finding has been intuitively understood for a long time, but having data to back it up is very powerful," he said. "We are able to take these data to Medicaid payers and to affiliated collaborative care organizations, and it really helps us in talking to legislators at the statehouse in Salem. Most importantly, this kind of data allows us to design targtoeted programs to help our patient live healthier lives." **PN**

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- **Silver Achievement Award:** *Reciprocal Peer Support at Rutgers University Behavioral Health Care in Piscataway, N.J.*

This program connects people who are experiencing a mental health crisis with a peer from a similar background—police officers talk to other police officers in the COP2COP peer support program, veterans talk to veterans in Vet2Vet, and mothers of children with special needs talk to each other in Mom2Mom. The program director is Cherie Castellano.

Located in a large call center at Rutgers University Behavioral Health Care, Reciprocal Peer Support oversees hotlines for 14 unique peer-support programs. Callers are immediately put in touch with a trained peer supporter who gathers information while assessing suicide risk. Clinical professionals are available to conduct telephone assessment of depression, anxiety, and family and marital issues.

The "cultural connection" between callers and peer supporters is the key to the program's success. Not only does it help overcome stigma, but it also forms the foundation on which to build a relationship. "These days, everyone can search the Web for referral options and access to information," said Castellano. "Our callers are looking for something more," she said. "They need to know that they are not alone and that seeking help is a viable option." **PN**

Full descriptions of the award-winning programs are posted at https://ps.psychiatryonline.org/doi/10.1176/appi.ps.691007.

Residents Lead Drive to Include Structural Competency in Medical Training

Members of UCLA's psychiatry residency program discuss the importance of including programs related to structural determinants of health in the curriculum. **BY NICK ZAGORSKI**

Psychiatry residents at the University of California, Los Angeles (UCLA), took center stage during a session at IPS: The Mental Health Services Conference last month, where they discussed their successful effort to integrate structural competency training into the UCLA residency program.

Structural competency is an emerging concept in medical training that focuses on the structural determinants of health and illness; these include social and demographic factors but also the infrastructure in a community, such as the quality of housing and education (*Psychiatric News*, http://apapsy.ch/StructuralCompetency). To promote mental and physical health in patients, proponents of structural competency say physicians need to both understand these structures and collaborate with the people who oversee them.

Structural competency is an outgrowth of culturally competent care, in which physicians take a patient's background and culture into account when providing care, session chair Helena Hansen, M.D., Ph.D., told attendees. Hansen is an associate professor of psychiatry at New York University and vice chair of APA's Council on Minority Mental Health and Health Disparities.

Another speaker, Nichole Goodsmith, M.D., was a third-year psychiatry resident in 2017, when she approached Enrico Castillo, M.D., the associate director of residency education, with ideas about expanding opportunities for residents with an interest in community psychiatry and structurally based care.

Enrico Castillo, M.D., tells IPS attendees that incorporating structural determinants of health into a residency curriculum can benefit residents as well as patients as structural competency also teaches important core competencies of medicine.

Earlier that year, Goodsmith had organized a monthly lunchtime seminar series for psychiatry residents, where psychiatrists who worked in community settings spoke about their careers. According to Goodsmith, the lunchtime sessions helped spur more interest in community psychiatry, and they decided to try to establish more activities that would let residents interact with people in the the surrounding communities.

Castillo was already developing some new educational modules on community psychiatry topics for the existing residency lectures. "Then the residents came to me with all these ideas for events and I saw they wanted to take this to another level," he told IPS attendees.

Over the next year, the residents, with the help of Castillo and other faculty with interests in community psychiatry and the social determinants of health, helped organize a range of activities for residents who wanted to learn more. In addition to the monthly career seminars, the group organized site visits to jails and supportive housing centers, as well as a quarterly series where residents discuss case studies in which structural and/or social issues contribute significantly to the diagnosis.

The residents have also established a recurring dinner series called "Policy and Change," where they discuss a relevant national or local policy topic that affects community structure—such as the recent separations of migrant children from their parents at the U.S. border—and brainstorm ways they can advocate for policy changes.

The university now offers first-year psychiatry residents the option to take introductory courses on community psychiatry and the structural determinants of health, said Isabella Morton, M.D., a third-year UCLA resident, who

continued on next page

WHY I ASPIRED TO BE A PSYCHIATRIST

Merging East and West

BY FRANCIS G. LU, M.D.

At APA's Annual Meeting in Atlanta in May 2016, President Renée Binder awarded me a Special Presidential Commendation "for extraordinary leadership and outstanding contributions to the field of cultural psychiatry." I am grateful to *Psychiatric News* and former APA President Anita Everett, M.D. (who created this column), for giving me the opportunity to share some of the story of my journey in becoming a cultural psychiatrist.

Francis G. Lu, M.D., is the Luke and Grace Kim Professor in Cultural Psychiatry, Emeritus, at the University of California, Davis. He is a corresponding member of APA's Council on Minority Mental Health and Health Disparities and chaired the council from 2003 to 2008. He is on the Executive Committee of the Caucus on Religion, Spirituality, and Psychiatry.

My parents came from Shanghai and Canton in the late 1940s as graduate students, but they decided to stay in the United States after the Chinese revolution. They married in San Francisco, where I was born in 1949. During the 1950s, I grew up in the suburbs of Baltimore and New York City in essentially white communities where I occasionally encountered racial slurs. My father and mother perceived racial discrimination in their workplaces, but it was hard for me to fully grasp these issues at the time. I matriculated to Columbia College and experienced the tumultuous campus takeover of 1968, which, along with the other events of 1968, graphically opened my eyes to the possibility of political change.

Between my sophomore and junior years at Columbia, I went to Dartmouth to take summer school courses in introductory psychology and sociology, which focused on group dynamics in a "T-group," or training group. It was during the intense experience of learning about myself and my relationships with others in the training group that I was inspired me to enter psychiatry.

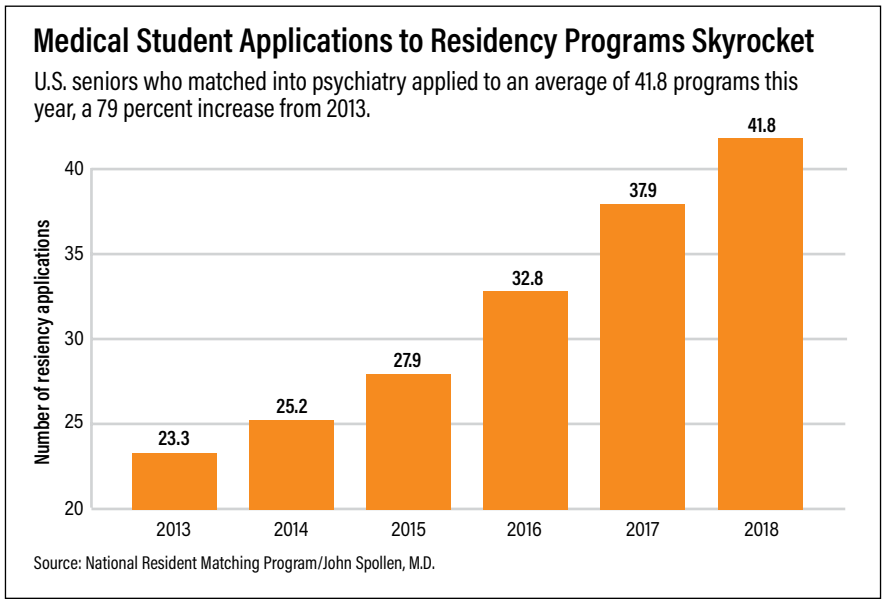
During my medical school years at Dartmouth Medical School (DMS), I had a strong mentorship relationship with Bernard J. Bergin, Ph.D., a longtime professor of psychiatry at DMS and a professor of sociology at Dartmouth College. We had extraordinary conversations on a regular basis on existentialism and the importance of imagination in one's life. I was also fortunate to participate in an MS-2 small group course on psychiatry interviewing taught by Gary Tucker, M.D., who went on to become department chair at the University of Washington in Seattle. Furthermore, my MS-3 psychiatry clerkship was taught by Jerrold Maxmen, M.D., a charismatic and personable teacher. Finally, I took an elective in psychoanalysis in which I viewed sessions through a one-way mirror taught by Raymond Sobel, M.D. All of these experiences with teachers and mentors during medical school reinforced my decision to enter psychiatry. Sadly, they have all passed away over the years. I never forgot the importance of their teaching and mentorship, which I have carried forward in my career with medical students, residents, and junior faculty.

During my general psychiatry residency at Mount Sinai Medical School in New York City, I received psychoanalytically oriented training that was directed by Edward Joseph, M.D., a world-renowned psychoanalyst. While I am grateful for this training, cultural issues were hardly acknowledged or discussed, which was on par for the times. I kept thinking that something was missing. In my last year, I was supervised by Gerald Epstein, M.D., who opened my eyes to "waking dream work" and transpersonal psychology. After graduation, I decided to move to San Francisco to work at UCSF/San Francisco General Hospital and to explore transpersonal psychology.

In May 1977, I attended a five-day seminar at Esalen Institute in Big Sur, Calif., titled "Hinduism and Buddhism in Oriental Art" taught by the mythology scholar Joseph Campbell. It was a life-transforming event in that after the seminar, while still at Esalen in the sunlight on the deck, I experienced a very powerful physical epiphany that my purpose in life was to bring together the East and the West. I did not know what that meant at that time, but in looking back over the past 41 years, I see that my work as a cultural psychiatrist began at that point. I have also led or co-led 35 film seminars at Esalen Institute, 28 with Brother David Steindl-Rast, a Benedictine monk from Austria. Where else but in California would a Chinese-American psychiatrist born in San Francisco and a Benedictine monk born in Austria come together to co-lead film seminars! **PN**

NRMP Data: Is Psychiatry's Popularity Rising Among U.S. Med School Seniors?

It is possible that the new generation of medical students is attracted to a psychiatry that is now better integrated with the rest of medicine and that offers work-life balance. **BY MARK MORAN**



The popularity of psychiatry as a specialty choice among medical school seniors—and competitiveness for residency slots—may be increasing, according to recent data from the National Resident Matching Program (NRMP).

Between 2014 and 2018, psychiatry residency programs saw a 65 percent increase in applications from U.S. seniors, said John Spollen, M.D., a professor of psychiatry at the University of Arkansas Medical School, who presented an analysis of the NRMP data at the September meeting of the Association for Academic Psychiatry in Milwaukee. Spollen's analysis was part of a workshop at the meeting on "Evidence-based Recruitment and Advising for Future Psychiatrists."

Meanwhile, the increase of senior applicants during the same period was just 8 percent. Moreover, in 2018 a total of 254 U.S. medical school seniors who applied to psychiatry did not match into any program.

"This year the rate for psychiatry [of unmatched applicants] was 13.7 percent, which was the highest among any specialty in medicine," Spollen told *Psychiatric News* in an interview.

U.S. medical school seniors today are often applying to more than one specialty, and some applicants may have been applying to psychiatry as a backup. But Spollen also pointed out that of the 254 U.S. medical school seniors applying to psychiatry in 2018 who did not match into psychiatry, 146 had chosen only psychiatry.

Moreover, of the 1,236 U.S. senior applicants to psychiatry last year, only 87 had ranked psychiatry as a backup to another specialty, Spollen said.

The specialties with the next highest numbers of unmatched applicants who had applied to only one specialty were orthopedics (103 unmatched), obstetrics-gynecology (96 unmatched), emergency medicine (77 unmatched), and surgery (60 unmatched).

Like other specialties, psychiatry has experienced a dramatic increase in the number of programs to which medical students are applying. This year, students matching into psychiatry applied to an average of 41.8 programs—a stunning amount for senior psychiatrists who recall applying to only a handful of programs.

Spollen said it is possible that the heightened competitiveness of the match overall has simply spilled over into psychiatry, with medical school seniors with weaker applications being encouraged to choose between specialties historically regarded as easier to get into. It is also possible, however, that the new generation of medical school students is genuinely attracted to a psychiatry that is now more integrated into general medicine.

"Stigma of mental illness, and maybe of psychiatry as well, could be less among this generation of medical students," Spollen suggested.

He added that "millennial" students value work-life balance and regard psychiatry as attractive on that score. In a report published last year in the *American Journal of Psychiatry*, Spollen and Mathew Goldenberg, M.D., found that among medical school students who hadn't intended to go into psychiatry but decided to do so during medical school, the variable most highly associated with the switch was work-life balance.

"Recruitment efforts that emphasize psychiatrists' high satisfaction with work-life balance and low rates of burnout may increase interest among those not initially considering psychiatry," they wrote. "Discussing the regular work hours and reasonable on-call responsibilities that most practicing psychiatrists enjoy may help attract millennial students, whose values may differ from those of previous generations of physicians."

The rising number of U.S. medical school seniors applying to psychiatry—if it continues—means psychiatry is becoming especially competitive for international medical graduates (IMGs) who have traditionally filled many of the U.S. residency slots. "Coincident with this surge in U.S. seniors matching into psychiatry is a 32 percent decrease in the numbers of IMGs matched into psychiatry over the same time period," Spollen said. "My interpretation is that U.S. seniors are essentially pushing IMGs out of the psychiatry match. D.O. applicants matching into psychiatry also increased by 63 percent since 2014, and they likely next year will be a larger portion of the match than IMGs for the first time ever."

Mark Rapaport, M.D., chair of the APA Council on Medical Education and Lifelong Learning, views the data suggesting increased popularity of psychiatry somewhat more cautiously.

"I'd really like to see this trend continue over a number of years," he told *Psychiatric News*. "It's quite possible that the profession really is more popular and will continue to be so. We have more effective psychotherapies, pharmacotherapies, and somatic therapies that we are able to give our patients. And the more we get away from fee-for-service payment arrangements, the greater respect we get within an organization or health system. I think if we see these numbers continue over a number of years, it might indicate a significant sea change."

Spollen said he believes medical students and advisors should be aware that the profession is at least somewhat more competitive than before.

But applying to more programs is not necessarily the answer; rather, students should be advised to choose the programs they apply to more carefully based on their aptitudes and interests. "Students are going to have to be smarter about where they apply. The numbers of applications are less important than the types of programs a student applies to." **PN**

"Stability of and Factors Related to Medical Student Specialty Choice of Psychiatry" is posted at https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2017.17020159.

"This year the rate for psychiatry [of unmatched applicants] was 13.7 percent, which was the highest among any specialty in medicine."

—John Spollen, M.D.

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also helped launch these initiatives. Second- and third-year residents have the option to take short, focused modules on mental health and the justice system, global mental health, homelessness, and peer support services, she said.

Residents who participate in these and other courses are eligible to graduate with a concentration in community psychiatry or global psychiatry. (Goodsmith and Morton are the current co-chief residents of community and global psychiatry at UCLA.)

"Launching that concentration really was the capstone of this first year," said Castillo. "It mainstreamed all of the residents' efforts."

Castillo added that even residents who do not want to specialize in community psychiatry can benefit from taking some of these modules or participating in the various activities.

"Every patient interaction involves structural and social influences," he told the audience. "Structural competency teaches residents core competencies of good medicine," including interprofessional teamwork, how to work effectively in different health settings, and how to advocate for quality care.

"It has been so gratifying to see what we have done in this short time," said Goodsmith, who along with the other panelists hoped their story would encourage early career psychiatrists at other institutions to try a grassroots approach to foster change. "It takes time and energy … but do not be afraid to take ownership of your institution," she advised. **PN**

As Psychiatry Confronts AI, Human Connection Still Prime

Artificial intelligence offers both promises and challenges as it becomes increasingly prevalent.

BY RICHARD KAREL

The accelerating embrace of diagnostic algorithms and artificial intelligence (AI) in psychiatry offers both promise and peril, highlighting the need for psychiatrists to stay patient focused and not let technology displace the human element.

An algorithm is a set of rules or instructions given to an AI program or other machine to help it learn on its own. While all algorithms are not AI, all AI requires the use of algorithms, the primary distinction being that AI points to the ability of a system to learn in response to data. AI is what enables "machine learning"—that is, the ability of a machine to learn from experience—in contrast to simply responding to a specific, static program (*Psychiatric News,* http://apapsy.ch/AI).

The possibility that AI systems may someday supersede the ability of psychiatrists in diagnosis and treatment recommendations poses a real challenge to the field, remarked John Luo, M.D. Luo is a clinical professor of psychiatry and director of the psychiatry residency training program at the University of California, Riverside, and an expert in medical informatics.

"We as a field must remain advocates for our patients and maintain the human connection," he said. "We need to embrace technology but also treat it with a critical assessment in terms of risks and benefits for our patients, just as we do with medications or psychotherapy."

John Torous, M.D., is a psychiatry instructor at Harvard Medical School and director of the Digital Psychiatry Division at Beth Israel Deaconess Medical Center. Torous sits on the Ethics Committee of the Society for Behavioral Medicine and is co-chair of the APA Ad Hoc Work Group on Access Through Innovation in Psychiatric Care.

TECH TIME

"AI is only as powerful as the data behind it and people using it."
—John Torous, M.D.

"AI is only as powerful as the data behind it and people using it," said Torous. The risk, he continued, is that if no thought is given to how these systems are being trained, biases may be amplified. Torous gave an alarming example of how Tay, an online Microsoft AI chatbot, developed a racist and xenophobic personality based on user input.

It is critical that psychiatry not minimize the importance of the therapeutic alliance, said Torous. "We know that the therapeutic alliance—the bond between a psychiatrist and a patient—is one of the strongest predictors of successful treatment outcomes." But at this time, little is known about how a digital therapeutic alliance may work when there is no direct patient-psychiatrist interaction. While technology can increase access to mental health tools, we need to determine how well they work and for whom, said Torous.

Despite such concerns, it is critical that the field "be curious and have an open mind," said Torous. "We need to ask the same questions and hold AI to the same standards as any other medical tool—how do we know that it is safe, effective, and useful and makes a meaningful difference?"

Arshya Vahabzadeh, M.D., is former chair of the APA Council on Communications and is involved in the commercialization of assistive technologies as chief medical officer for Brain Power LLC, which develops and markets computerized glasses for people with autism and other brain-related challenges.

As psychiatrists increasingly confront AI diagnostic systems, they must be aware that the quality of data determines the accuracy of the outcome, he noted. "If you are analyzing things without context and have algorithms that have some intrinsic bias in them and don't appreciate culture, that could really impact your findings," he warned. When he hears about amazing new algorithms, he is skeptical. "As physicians, we have to be extra cautious and extra mindful about what our patients can use and the potential risks to their mental health. As physicians, our first duty is not to do any harm."

There is no doubt that "the technology is going to continue to advance, computing power is going to get better, we're going to have improved software, and we're going to have larger datasets," he said. Given this reality, psychiatrists will need to determine how they can be more involved in determining the appropriate role of AI systems in clinical care, he said.

Jamie Feusner, M.D., is a psychiatry professor at the Semel Institute for Neuroscience and Human Behavior at the University of California, Los Angeles, and senior author of a study on combining algorithms and brain imaging to predict treatment response in obsessive-compulsive disorder.

Feusner is optimistic about the "upside potential" for AI algorithms in mental health and thinks the downsides "can be managed and are probably a bit overblown."

AI algorithms can "cast a very wide net and identify people who may be at risk" so they can be evaluated and diagnosed properly, he said. The risk, he continued, is the public's overreliance on such tools without recognizing that they are just signposts pointing to whether or not in-person clinical expertise is needed. **PN**

Candidates

continued from page 1

In comments to *Psychiatric News,* Muskin said that the reason for his withdrawal is that he came to realize, as APA's secretary, that serving the Association as an elected officer is a major time and service commitment. After experiencing the loss of a beloved sister and the birth of his first grandchild, he said that his most important priority at this time is his family.

"Working with APA has been one of the most rewarding experiences of my professional life. Much of the work I have done over the past years has been via conference calls, emails, and work by me alone. A trustee must be at meetings as the responsibilities are different. When my sister Alies was in home hospice, I had the freedom to change times with patients and be with her during her final months. Were I to win the election, I realized that freedom to be the grandfather I want to be would be lost. I have an agenda that I believe will make significant changes for our field, but I cannot ignore that a commitment to APA would prevent me from fulfilling my responsibilities as a grandfather for the first years of her life.

"I hope my colleagues understand this decision, and I apologize for any disruption in the APA election process. I plan to remain active in APA as our organization depends upon the commitment of the membership to achieve our goals."

Candidates for Other Races

The position of secretary, which has a two-year term, is up for election this cycle. Vying for the post are Jeffrey Akaka, M.D., of Honolulu; Sandra DeJong, M.D., M.Sc., of Needham Heights, Mass.; and Ramaswamy Viswanathan, M.D., D.M.Sc., of Brooklyn, N.Y.

Facing off in the race for M/UR trustee are Rahn Bailey, M.D., of League City, Tex., and Robert Cabaj, M.D., of San Francisco. This position is for a three-year term.

Two of APA's seven geographic Areas will vote for a trustee in this cycle. Only members within each Area may vote for their respective Area trustee. Area trustees hold three-year terms.

There are three candidates in the race for Area 3 trustee: Kenneth Certa, M.D., of Philadelphia; Barry Herman, M.D., M.M.M., of Philadelphia; and Roger Peele, M.D., of Rockville, Md.

Competing for Area 6 trustee are Barbara Weissman, M.D., of San Mateo, Calif., and Melinda Young, M.D., of Lafayette, Calif.

The candidates for resident-fellow trustee-elect are Lisa Harding, M.D., a PGY-3 resident at the University of Kansas School of Medicine-Wichita; Daniel Hart, M.D., a PGY-3 resident at Walter Reed National Military Medical Center; and Michael Mensah, M.D., M.P.H., a PGY-2 resident at the UCLA David Geffen School of Medicine/UCLA Medical Center Program.

The nominations were put forth by APA's Nominating Committee, chaired by Immediate Past President Anita Everett, M.D., and announced last month. While the slate is considered public, it is not official until the Board of Trustees approves it at its meeting next month. All of the winning candidates will take office at the close of the 2019 APA Annual Meeting in May in San Francisco.

All members for whom APA has a valid email address on file will receive an electronic ballot. Other members will receive a paper ballot along with instructions on how to vote online. All candidates as well as their supporters are strongly urged to review APA's recently updated Election Guidelines.

Voting will begin on January 2, 2019, at 5 a.m. ET and end on January 31, 2019, at 12:59 p.m. ET. **PN**

Additional election information and a link to APA's Election Guidelines can be accessed at psychiatry.org/election.

Environmental Pollutants Are Pervasive, Persistent in Their Damage

Poor and minority communities are often exposed to a disproportionately high level of environmental pollutants, which can cause DNA mutations, alter the regulation of genes, and kill brain cells. **BY NICK ZAGORSKI**

iStock/Mark's Photo

People living in disadvantaged communities are often exposed to a range of factors that contribute to health problems, such as limited access to healthy foods and health services. During a session at IPS: The Mental Health Services Conference in Chicago in October, researchers sought to educate psychiatrists about the role the environment plays in health disparities.

Studies show that poor and minority children are often exposed to more indoor lead, outdoor pollution, and chemical-containing processed foods, among others. Some of this exposure comes when the children are still in utero and their rapidly developing brains are extremely sensitive to adverse chemicals.

These pollutants are hard to avoid, Frederica Perera, Ph.D., a professor of Environmental Health Sciences at Columbia University and director of Columbia's Center for Children's Environmental Health (CCCEH), told the audience.

"America has had a love affair with chemicals since World War II," she said. While about 80,000 chemicals are currently licensed for industrial use, she said it is hard to know how many of these chemicals pose developmental risks, since only a small fraction have been tested for neurodevelopmental toxicity.

Studies of blood and urine samples taken as part of the Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey have shown that individuals of lower socioeconomic status on average have higher levels of harmful pollutants in their bodies compared with those of higher socioeconomic status, said Irva Hertz-Picciotto, Ph.D., a professor of epidemiology at the University of California, Davis.

These pollutants include well-known biological toxins such as lead and pesticides, but also items that many people may not think about, such as dental fillings, said Mark Mitchell, M.D., M.P.H., an associate professor of Climate Change, Energy, and Environmental Health Equity at George Mason University. Older dental fillings were typically made out of amalgam, a metallic mixture that contains mercury—which is known to damage the nervous system. (The FDA lists amalgam as a Class II device denoting moderate health risk, but Mitchell said that the research into amalgam is outdated, and it may pose more risks than once believed if a filling cracks or breaks.)

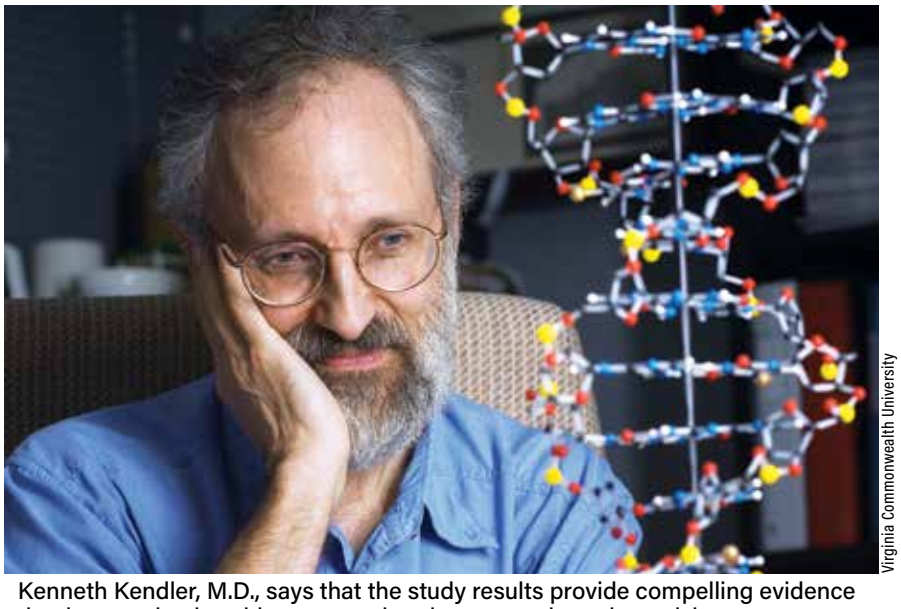
Amalgam is being phased out at many dental practices due to the availability of better and safer materials such as resin, but some dentists still use amalgam regularly. According to

see **Pollutants** *on page 20*

Low Academic Achievement in High School Tied to Long-Term Drug Abuse Risk

A study of more than 900,000 ninth graders in Sweden followed for an average of 19 years finds that boosting their academic achievement cuts drug abuse risk by 45 percent.

BY LINDA M. RICHMOND



Virginia Commonwealth University

Kenneth Kendler, M.D., says that the study results provide compelling evidence that low academic achievement raises long-term drug abuse risk.

Poor academic achievement as a teen can increase risk for drug abuse and its criminal and medical repercussions over the long term, according to a study posted September 5 in *JAMA Psychiatry*. The study suggests that interventions to help youth improve their schoolwork may be a cost-effective solution for substance use prevention.

The study involved more than 900,000 ninth graders in Sweden who were followed on average 19 years. Researchers aimed to determine whether poor academic achievement as a teen is merely associated with drug abuse, as many studies have already shown, or whether it actually *causes* it.

Previous studies showed that various individual and school-based interventions that improved academic achievement also lowered drug use, but the studies were short, making it hard to draw conclusions about long-term effects, explained Kenneth Kendler, M.D., director of Virginia Commonwealth University's Institute for Psychiatric and Behavioral Genetics, and colleagues. The results are of particular importance as the nation grapples to find cost-effective ways of preventing and treating people with substance use disorder in light of steadily increasing drug overdoses: 72,000 deaths last year, a nearly 10 percent increase.

The study involved two separate analyses, each relying on differing statistical methods and both tapping into Swedish population data. For the first study, researchers obtained the date of birth and grade point average for all ninth graders (mostly 16-year-olds) across the entire population of Sweden for four consecutive years and converted their grades to a scale from 1 to 5 (with 5 indicating the highest achievement). A separate, complementary analysis involved nearly 400,000 closely related Swedish ninth graders who were cousins, siblings, or identical twins.

Participants were followed for an average of 19 years, with researchers searching for a "registration" of what they termed drug abuse, either prescription or illicit, in Swedish medical/mortality records or criminal justice/traffic records. (Researchers did not examine alcohol or nicotine use and tallied only drug use that resulted in criminal or medical problems.) Researchers found that 3.6 percent of participants were registered for drug abuse within an average of five years.

Although the two analyses used very different approaches, they produced similar results: that boosting academic achievement at 16 years old by 1 standard deviation cuts long-term risk of drug abuse by 45 percent. This suggests that a substantial proportion of the observed association between low academic achievement and subsequent risk of drug abuse may be causal, Kendler told *Psychiatric News*.

Furthermore, individuals with lower academic achievement at age 16 were more than twice as likely to later be registered as drug abusers over the next 20 years. The results support the idea that providing services to students to improve their academic achievement is an effective means of preventing drug abuse, the researcher wrote. The idea is that students who succeed academically will tend to develop strong positive attachments to school and their teachers and other authority figures, facilitating their commitment to "pro-social" lifestyles, which in turn reduce their risk of drug abuse and other "deviant" behaviors.

"Most of these programs are now designed for younger children, primarily elementary and middle schoolers, and our results suggest that interventions should be developed and tested for high school students, too," Kendler said. Programs such as chess clubs, debate clubs, and after-school homework assistance can be helpful as well, he said. "Whenever students' emotional involvement to school goes up, their grades go up, their attachment to teachers and the community improves, and their risk of drug abuse goes down."

"Schools are an optimal setting for delivering such programs, given their natural focus on academic achievement and their ability to reach most adolescents," the authors concluded. "Such interventions may target individual students with academic services or may be comprehensive interventions that change school policies, organization, or climate to provide a more positive learning environment, thereby increasing the student-school emotional bond."

"We are pursuing several additional projects with the assistance of Swedish researchers to further understand a range of risk factors for the development of drug abuse," Kendler said. "None of this work would have been possible without my Swedish colleagues, Jan Sundquist, M.D., Ph.D., Kristina Sundquist, M.D., Ph.D., and Henrik Ohlsson, Ph.D. This project has been collaborative international science at its best."

The study was funded by the National Institute on Drug Abuse, the Swedish Research Council, and Medical Training and Research Agreement funding from Region Skane. **PN**

"Academic Achievement and Drug Abuse Risk Assessed Using Instrumental Variable Analysis and Co-relative Designs" is posted at https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2697855.

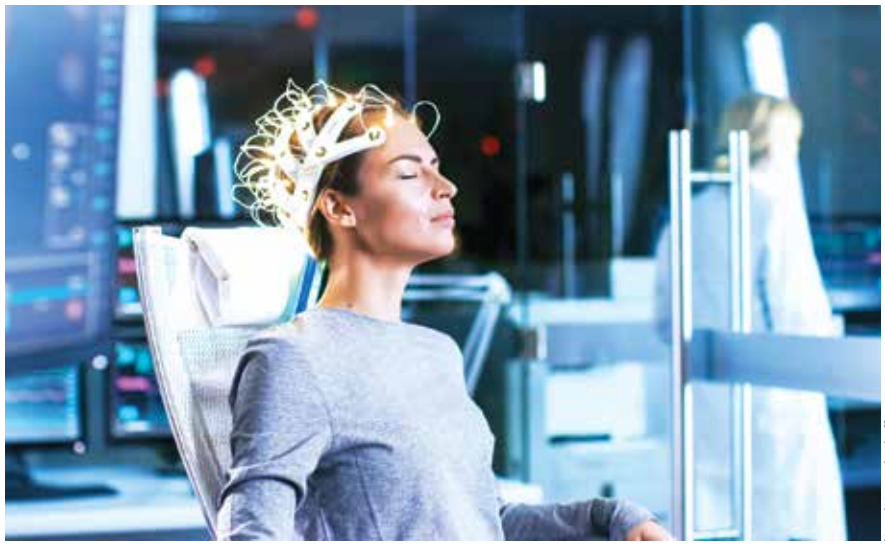
Residents Honored for Research on Tardive Dyskinesia

Stanley Caroff, M.D. (left), and Leslie Lundt, M.D. (right), pose with one of the winning residents of the 2018 Promising Scholars Award Program for original papers on tardive dyskinesia, Gopalkumar Rakesh, M.D., a research fellow at Duke University. The other winner was Haitham Salem, M.D., a PGY-2 psychiatry resident at the University of Texas at Houston. The residents were honored at IPS: The Mental Health Services Conference, held last month in Chicago.

Caroff is an emeritus professor of psychiatry at the University of Pennsylvania and director of the Neuroleptic Malignant Syndrome Information Service (NMSIS), and Lundt is medical director of Neurocrine Biosciences, the manufacturer of Ingrezza (valbenazine). Both NMSIS and Neurocrine sponsored the competition. Submissions were evaluated on the basis of their relevance to tardive dyskinesia, originality, scientific rigor, clinical significance, and other factors.

EEG Recordings Not Recommended for Determining Depression-Treatment Response

A meta-analysis of 76 studies involving EEG to predict treatment response in patients with depression finds the method is not ready for routine clinical use. **BY NICK ZAGORSKI**


iStock/gorodenkoff

Electroencephalography (EEG)—a procedure that measures electrical activity in the brain—has been marketed as a promising tool to help psychiatrists identify the right treatment for patients with depression. A comprehensive analysis of EEG studies published October 3 in *AJP in Advance* suggests that such claims about EEG exceed the reality.

"Our findings indicate that QEEG [quantitative EEG], as studied and published to date, is not well supported as a predictive biomarker for treatment response in depression," wrote Alik S. Widge, M.D., Ph.D., an assistant professor of psychiatry at the University of Minnesota, and colleagues.

The analysis is the latest from the APA Task Force for Novel Biomarkers and Treatments, a panel of clinical and research experts that has undertaken the task of critically reviewing the latest trends in psychiatric practice.

"Right now, psychiatry is staring at a lot of technical innovation that is also preceded by a lot of hype," said Widge, a member of the APA task force. "It is important to get through all the promotion and commercialization to see if these advances actually work."

It is easy to see the appeal of EEG as a diagnostic tool for depression care, he said. Unlike blood biomarkers or genetic polymorphisms, EEG directly measures brain activity. EEG tests are also cheaper and easier to administer than other tools that look at brain activity such as MRI or PET scans.

Numerous research studies, often led by companies that design EEG diagnostics, suggest measurements such as the loudness dependence of auditory evoked potentials (LDAEP) or theta wave oscillatory power can help psychiatrists identify the optimal depression treatment.

Widge and colleagues conducted a thorough review of 76 studies involving EEG to predict treatment response in patients with depression. The studies, which were published between January 2000 and November 2017, explored a wide range of both EEG biomarkers (81 in total) and treatments (various antidepressants were tested as well as transcranial magnetic stimulation and electrical brain stimulation).

Overall, EEG-based biomarkers could identify if a patient would respond to a given treatment with about 76 percent accuracy. There were no significant differences between the specific biomarker that was used or in the treatment types (medication, TMS, other), which suggests the biomarkers are similarly reliable at predicting treatment response.

Widge told *Psychiatric News* that he suspects the 76 percent accuracy rating is likely an overestimate due to underreporting of negative results and insufficient external validation of positive findings from labs that developed the EEG biomarkers examined.

In addition, he said, it can be difficult to broadly interpret the findings of these EEG biomarker studies. He noted that while major depression is an incredibly heterogenous disorder, the EEG studies lumped patients with depression into one category. "Some studies even grouped together patients with unipolar depression and bipolar depression," he said.

Given all these factors, the members on the task force concluded that at this time the "[u]se of commercial or research-grade [EEG] methods in routine clinical practice would not be a wise use of health care dollars."

Widge emphasized that these conclusions do not imply that there is no value in EEG research. "There is very real and serious science underlying these studies," he said. "We have strong evidence that EEG captures important aspects on how the brain processes information. It just can't tell you which pill to put in your mouth."

This analysis was supported in part by grants from the Brain and Behavior Research Foundation, the Harvard Brain Science Initiative, and National Institute of Mental Health. **PN**

"Electroencephalographic Biomarkers for Treatment Response Prediction in Major Depressive Illness: A Meta-Analysis" is posted at https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2018.17121358.

FROM THE EXPERTS

Guidance on Treating Patients With Borderline Personality Disorder and Substance Use Disorders

BY JONATHAN AVERY, M.D., AND JOHN BARNHILL, M.D.

Jonathan Avery, M.D., is director of addiction psychiatry, assistant professor of clinical psychiatry, and assistant dean of student affairs at Weill Cornell Medicine and New York Presbyterian Hospital. John Barnhill, M.D., is the DeWitt Wallace Senior Scholar, professor of clinical psychiatry, and vice chair for consultation-liaison psychiatry at Weill Cornell Medicine and New York Presbyterian Hospital. They are the co-editors of *Co-occurring Mental Illness and Substance Use Disorders: A Guide to Diagnosis and Treatment* from APA Publishing. APA members can purchase the book at a discount at https://www.appi.org/Co-occurring_Mental_Illness_and_Substance_Use_Disorder.

The identification and treatment of co-occurring borderline personality disorder (BPD) and substance use disorders (SUDs) can be challenging. The treatment of SUDs requires a strong alliance between the psychiatrist and patient, and the alliance will likely be undercut if the psychiatrist does not understand and take into consideration the patient's personality style. Moreover, people with co-occurring BPD and SUDs often fare poorly in treatment, but there is evidence for the efficacy of simultaneous treatment.

One reason that treatment of these patients is challenging is that an individual who uses one substance of abuse can appear wildly different when seen during withdrawal, acute intoxication, and persistent abuse. That same patient looks quite different while using a different substance or while using multiple substances. And that same patient thinks, feels, and behaves differently after an extended period of sobriety. Since personality is defined as an enduring pattern of cognition, emotion, motivation, and behavior—and all of these are affected by substances—it can seem difficult to assess and potentially treat personality disorder patients with SUDs.

To diagnose a personality disorder in a patient who is misusing substances, it is often helpful for psychiatrists to try to clarify personality disorders that might have existed prior to the onset of the substance use. This is complicated by the fact that substance use often starts during adolescence, when personality is still in formation, and by the reality that such data are retrospective and liable to error, even if collateral information is available.

Once BPD and a co-occurring SUD have been diagnosed, there are several treatment options. Psychotherapy is generally considered the first-line treatment for patients with BPD, with or without a co-occurring SUD. Dialectical behavior therapy (DBT) has the most evidence for efficacy. This therapy involves individual and group modalities that combine standard cognitive-behavioral approaches with mindfulness, distress tolerance, and acceptance. Both regularly practiced DBT and modified DBT treatments that also explicitly address substance use have been shown to be helpful. DBT groups

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Experts Weigh Risks, Benefits of Sports For Youth With ADHD

Many studies show that sports can lead to functional improvements in children with ADHD, but these youth are also more likely to experience sports-related injuries. **BY NICK ZAGORSKI**

Sooner or later, many parents are faced with a decision about how best to introduce a child to the world of sports. While there are physical and emotional benefits of sports participation for youth, there are also some risks.

For parents of children with attention-deficit/hyperactivity disorder (ADHD) who have an interest sports, the risk-benefit analysis may take on greater significance. Research has shown that in addition to providing an opportunity for youth to release energy, participation in sports can improve focus and attention. At the same time, there is ample evidence that youth with ADHD have higher risks of sports-related injuries, including concussions.

There's no right or wrong answer for whether children with ADHD should participate in team sports, as every child's situation is different, David Conant-Norville, M.D., a child and adolescent psychiatrist and sports psychiatrist at Mind Matters P.C. in Hillsboro, Ore., told *Psychiatric News*. Still, given the solid research showing that sports can lead to functional improvements in children with ADHD, he said that he believes some degree of athletic participation—even just playing friendly games with neighborhood kids—is useful.

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"Sports provide children with focused and experiential learning that you cannot get in a classroom," Conant-Norville said. "Children can learn how to set short-term goals and long-term goals and how to pace themselves, and learn about winning and losing."

Conant-Norville has surveyed other sports psychiatrists and found that many believe that individual sports such as swimming or cycling are best for youth with ADHD. These activities are centered around rhythmic, repetitive movements, which are great for developing focus.

In his own practice at Mind Matters, Conant-Norville has developed an ADHD group therapy that incorporates elements of tae kwon do. He chose this activity because it couples an emphasis on discipline and concentration with a reward structure—passing tests to advance in rank and earn a belt in a new color—to keep the kids motivated.

Team sports offer the advantage of camaraderie, which can help children with ADHD develop social skills. On the flip side, there is also the chance of getting yelled at and ostracized by teammates when a child gets distracted and commits a blunder like missing a tackle or dropping an easy fly ball.

Another significant risk posed by many team sports, particularly football and soccer, are concussions. Numerous studies have shown that children with ADHD are more likely to get a sports-related concussion, and when they do, they take longer to recover.

"What has been overlooked in concussion literature, however, is the mental health consequences of these head injuries," said Robert Davis Moore, Ph.D., an assistant professor of exercise science at the University of South Carolina (USC), who studies concussion recovery.

Moore recently conducted an analysis of nearly 1,000 USC athletes with and without ADHD. He found that athletes with ADHD who experienced a concussion reported much higher scores on depression and anxiety assessments than those who had no history of concussion and athletes without ADHD. This was not a transient phenomenon, as all the interviewed athletes were assessed at least six months after a concussion.

Moore told *Psychiatric News* that his study could not explain whether the concussion damage was the trigger for depression and anxiety; it is possible

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PSYCHIATRY & PSYCHOTHERAPY

Therapist Anonymity: Being a Blank Screen in a Touch Screen World

BY RANDON S. WELTON, M.D.

In "Recommendations to Physicians Practicing Psychoanalysis," Freud cautioned against the temptation of bringing the psychoanalyst's individuality and personal life into the analysis. Freud thought that self-disclosure "achieves nothing toward the uncovering of what is unconscious" and makes the patient "even more incapable of overcoming his deeper resistances." His solution was that "the doctor should be opaque to his patients and, like a mirror, should show them nothing but what is shown to him." This guidance, encapsulated as Therapist Anonymity, joined Therapist Neutrality and Abstinence as cornerstones of psychodynamic psychotherapy. The aspirational goal of the therapist as a "blank screen" was born. The place of Therapist Anonymity in modern psychotherapy, however, is less certain.

Randon S. Welton, M.D., is an associate professor of psychiatry and director of the psychiatry residency program at Wright State University School of Medicine. He is also a member of the Committee on Psychotherapy of the Group for the Advancement of Psychiatry (GAP). This column is coordinated by GAP's Committee on Psychotherapy.

First, we must acknowledge that Freud did not always practice what he preached. There are numerous examples in Freud's own writing of his interacting freely and personally with his analysands. As his reputation grew, patients sought him because of what they already knew about him. They did not come to see a blank screen; they came to see the famous Dr. Freud. Nevertheless, Freud's patients developed pronounced transferences. Since Freud's time, theorists have wondered if transference might not inevitably develop within the therapy relationship no matter what the patient knows about the therapist.

Second, complete Therapist Anonymity has always been a bit of a chimera. Patients learn about their therapist with each interaction. The decoration of the office, the books on the shelf, and the state of the therapist's desk all give indications to the therapist's habits and interests. The plaques and awards on the wall tell of the therapist's training and expertise. The questions that are asked, or not asked, give indications as to what the therapist considers important.

Third, Freudian concepts are no longer the only game in town. Other therapy approaches utilize the interpersonal interactions and real relationship between therapist and patient. Interpersonal and relational analysts discuss what the patient knows or believes about the therapist. Rather than consider these as adulterants to the therapy, they are valued as vital to the therapy process. Therapies that do not emphasize the development and understanding of transference, such as cognitive-behavioral therapy, also downplay the significance of anonymity.

Further challenges arise in less-populated communities and may increase the likelihood of encountering a patient outside of the office. These communities exist in smaller towns but can also arise within larger metropolitan areas. Health care systems might segregate populations (such as the military) by permitting members to see a restricted number of health care professionals. Individuals may seek out psychiatrists from their religious, ethnic, or cultural backgrounds, and therapists specializing in a specific population may find themselves in a shrinking pool of social and professional interactions. The children of the psychiatrist and the patient may interact at school or other activities such as sports or scouts. That indirect contact can lead to direct extra-therapeutic contact as both patient and psychiatrist support their children's activities.

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Mother's Inflammation May Affect Developing Brain

One study found that higher levels of the pro-inflammatory cytokine interleukin-6 during pregnancy were associated with poorer memory outcomes in children at age 2. **BY AARON LEVIN**

Researchers have long believed that exposure to inflammation in the womb increases the risk of neuropsychiatric disorders and other health problems in offspring.

Now recent studies of pregnant women and their children suggest that variations in levels of interleukin-6 (IL-6, a pro-inflammatory cytokine) during pregnancy may influence brain development and function in children.

"The results provide strong evidence linking maternal inflammation during pregnancy with newborn brain organization and future executive function," Damien Fair, Ph.D., Claudia Buss, Ph.D., and colleagues wrote in *Nature Neuroscience*. Fair is an associate professor of behavioral neuroscience and psychiatry in the School of Medicine at Oregon Health and Science University (OHSU). Buss is a professor of medical psychology at Charité University Medicine and an associate professor in the Development, Health, and Disease Research Program at the University of California, Irvine.

While the studies do not directly address the development of psychiatric disorders, they do touch on processes with a connection to mental illness. For instance, networks used in working memory are disrupted in schizophrenia, and the work by Fair, Buss, and colleagues indicates that higher levels of IL-6 during pregnancy are associated with more negative effects on those systems in offspring.

The researchers took blood samples from 84 pregnant women at 12, 20, and 30 weeks of gestation and measured serum levels of IL-6. When the newborns of these women were about four weeks old, they underwent resting state functional connectivity magnetic resonance imaging (MRI) brain scans. Two years later, the toddlers were given psychological tests designed to assess cognitive and emotional functioning.

"By examining brain function shortly after birth, we increase the capacity to distinguish between the influences of prenatal (such as maternal inflammation during pregnancy) and postnatal environmental factors on functional brain development," wrote Buss, Fair, and lead author Marc D. Rudolph, now a Ph.D. candidate at the University of North Carolina at Chapel Hill.

The researchers focused on functional connections within or between 10 functional brain networks. After adjusting for possible confounders including gestational age at birth, age at MRI scan and at working memory assessment, and maternal age, they found the functional connectivity patterns of the infants differed as a function of the mother's IL-6 levels during pregnancy. The authors also found that IL-6 levels during pregnancy were associated with poorer memory in toddlers.

"This work is a significant step forward because it fills in some of the blanks explaining just how inflammation in pregnancy affects the trajectories of brain development, especially as it affects certain neurocircuits and brain structures implicated in psychiatric illness," said Alan S. Brown, M.D., M.P.H., a professor of psychiatry and epidemiology at Columbia University Medical Center and director of the Program in Birth Cohort Studies at the New York State Psychiatric Institute. Brown's research has also focused on inflammation and psychiatric outcomes, but he was not involved with the current studies.

A second article, in *Biological Psychiatry*, examined the effects of maternal IL-6 on the brains of newborns. Greater IL-6 concentration during pregnancy was prospectively associated with larger right amygdala volume in the newborns, wrote lead author Alice Graham, Ph.D., a postdoctoral fellow at OHSU, and colleagues. "Larger newborn right amygdala volume and stronger left amygdala connectivity were in turn associated with lower impulse control at 24 months of age and mediated the association between higher maternal interleukin-6 concentrations and lower impulse control," they wrote. Lower impulse control in toddlers has been linked with elevated risk for emotional and behavioral problems in childhood.

A third article, published in *NeuroImage*, showed that high maternal IL-6 levels were associated with changes in brain development that predicted poorer cognitive performance at 12 months of age. "[T]his study provides a clinically relevant basis for an improved understanding of the developmental origins of psychiatric disease, early identification of at-risk pregnancies, and thereby targets for the primary prevention of disease risk," wrote lead author Jerod Rasmussen, Ph.D., a staff research associate at University of California, Irvine, and colleagues.

The researchers will continue to explore the effects of exposure to maternal inflammation on the children as they grow older.

"These participants will be examined and scanned again in childhood at about age 6," Fair told *Psychiatric News*. He and his colleagues are also collecting a new cohort of mother-infant pairs that they plan to follow through development.

"We now have new funding to get a full complement of inflammatory cytokines and chemokines in this same sample to examine large-scale patterns of inflammatory responses during pregnancy and longer-term outcomes in the infants," said Fair. The researchers are also looking at the interactions between immune- and stress-related biomarkers, given their known close relationship.

This area of research reflects a step forward in the integration of methodology and multiple disciplines, wrote Monica Rosenberg, Ph.D., a postdoctoral associate in the Department of Psychology at Yale University, in a commentary appearing in *Nature Neuroscience*.

Such research "highlight[s] the power of combining experimental and analytical techniques—bridging fields

see **Mother's Inflammation** *on page 21*

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Psychiatrists treating medical professionals may find themselves working in the same medical settings or serving on committees with patients. The psychiatrist's spouse may unknowingly interact with patients or with patients' spouses. Patients may not initially associate the spouse with their psychiatrist, especially if they do not share a last name, but in smaller communities, these relationships will become evident.

The internet and social media present the greatest modern challenge to Therapist Anonymity. Patients can easily check PubMed for their therapist's academic output. They may go to university websites and read about their therapist's training and clinical or research interests. If therapists are not careful with their social media settings, patients can obtain a frank glimpse of the therapist's personal life.

In light of these challenges, several recommendations can be made:

- Psychiatrists should always discuss the potential for out-of-office encounters with patients. They can preemptively discuss appropriate interactions in those settings.

- When a patient approaches the psychiatrist outside of the office, any ensuing conversations should be focused exclusively on the current surroundings. Therapeutic material should never be discussed.

- Encounters outside the office should be discussed in therapy in a neutral fashion. The therapist can explore what was said, what was observed, what the patient felt, what the patient imagined, and what they might do differently the next time it happens.

- Psychiatrists should assiduously guard their social media presence. They should repeatedly check their privacy settings and consider the information they are putting on the internet.

Therapist Anonymity is never complete, and out-of-office contacts cannot be totally eliminated, but foresight and preparation can ensure that beneficial psychotherapy continues in the modern era. **PN**

Brexanolone Passes Phase 3 Hurdle

Positive outcomes from a pair of large clinical trials have led to a favorable review of this postpartum depression medication by FDA advisory committees. **BY NICK ZAGORSKI**

Postpartum depression (PPD) is a common and serious complication following childbirth, affecting up to 20 percent of women by some estimates. Studies show that PPD negatively affects not only mothers, but also their children and families.

While conventional antidepressants can be effective at treating women with PPD, a therapeutic effect can take several weeks, and, as with other forms of depression, not every woman will respond to these medications. Additionally, some women may be hesitant to take antidepressants while breastfeeding, even though studies have suggested risks to a baby are minimal.

Women with PPD may soon have another treatment option: brexanolone, an intravenous formulation of the steroid hormone allopregnanolone. Earlier this month, a pair of U.S. Food and Drug Administration (FDA) advisory committees voted 17-1 that brexanolone (which is being developed by Sage Therapeutics) shows a favorable benefit-risk profile for the treatment of PPD. This affirmation comes on the heels of two large, phase 3 clinical studies that found that a single, 60-hour infusion of brexanolone provides rapid and sustained mood improvement in women with PPD without significant adverse effects. The results of these studies were published September 22 in the *Lancet*.

Jennifer Robertson

Going through a three-day infusion procedure can be difficult for many women, but Samantha Meltzer-Brody, M.D., M.P.H., believes that the possibility of rapid and sustained improvements for women with postpartum depression makes the procedure worthwhile.

"As the lead academic investigator who has been involved with brexanolone since the first open-label pilot study, the strong, compelling, and peer-reviewed phase 3 data gave me a reason to be optimistic," said Samantha Meltzer-Brody, M.D., M.P.H., director of the Perinatal Psychiatry Program at the University of North Carolina, in reflecting on this positive announcement. The remaining hurdle is the final decision from the FDA, which Meltzer-Brody told *Psychiatric News* might be reached before the end of the year.

As Meltzer-Brody and colleagues described in the *Lancet*, the two multisite trials enrolled 246 women who had developed depression within the first six months following childbirth. One trial included 138 women with severe PPD (scores of 26 or higher on the Hamilton Depression rating scale, or HAM-D); the other included 108 women with moderate PPD (HAM-D scores of 20 to 25). All participants were randomized to receive either a 60-hour infusion of brexanolone or placebo.

In both trials, the women receiving brexanolone showed greater improvements in their depressive symptoms than placebo after 60 hours. The effects of brexanolone were evident as early as 24 hours into the infusion protocol, and the symptom improvements were maintained for up to 30 days.

Brexanolone was well tolerated by the women; the rates of adverse side effects were the same in the brexanolone and placebo infusions (50 percent), with headache, dizziness, and drowsiness reported as the most common side effects. Between both studies, only three women had to stop brexanolone infusions because of side effects (one woman in the placebo group also discontinued).

"The rapid onset of symptom improvement is especially encouraging," noted Kristina Deligiannidis, M.D., an associate professor at the Feinstein Institute for Medical Research in Manhasset, N.Y., who was also involved in these trials. "With conventional antidepressants, we usually see our first small signal of improvement after two weeks, and then more robust effects after four, six, or eight weeks, depending on how fast we can titrate the medication to the optimal dose."

The delay in response to antidepressants is particularly pertinent for postpartum depression, as any delays in treatment adversely impact a mother's ability to care for her infant during a critical developmental period.

"I think this is exciting to see the first medication specifically addressing the problem of postpartum depression," said Kimberly Yonkers, M.D., director of the Center for Wellbeing of Women and Mothers at Yale University. Yonkers was

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not involved with this trial. "Hopefully, we will see it developed in an oral form and at a price point that makes it affordable for a wide range of women. The current formulation is a bit constraining."

"The treatment protocol is something we need to figure out," Deligiannidis said, acknowledging that many new mothers may not have the time or resources to spend three days in a hospital receiving a brexanolone infusion, potentially every month (since long-term data are not yet available). "It's possible that after an initial course of brexanolone, most women will have improved to the point we can switch them to oral antidepressants. That will minimize the number of prolonged infusion sessions."

Another possibility, Deligiannidis said, is that women might be able to receive brexanolone in an outpatient setting, similar to existing infusion centers for dialysis or chemotherapy, or even treatment at home. "Postpartum women already receive visiting nurse services in some situations," she noted.

While Meltzer-Brody agreed that the long intravenous delivery of brexanolone is a hurdle, she feels the benefits outweigh the potential challenges of a few days in the hospital.

"So many women with postpartum depression have chronic symptoms that don't respond well to current therapies," she said. "If you were to tell them, 'You have to give up three days but then you might be in remission,' I think most would take that chance."

These phase 3 trials were funded by Sage. Both Meltzer-Brody and Deligiannidis received support from Sage via grants to their respective academic

institutions. Neither has received personal fees from the company or owns any stock options. **PN**

A press release about the FDA commitee approval is posted at http://apapsy.ch/brexanolone. "Brexanolone Injection in Post-Partum Depression: Two Multicentre, Double-Blind, Randomised, Placebo-Controlled, Phase 3 Trials is posted at https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31551-4/fulltext.

Parity

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sented the findings at a Kennedy Forum event held in the U.S. Senate on October 3, the 10th anniversary of the signing of the parity law. Wrenn called for states to use the best available evidence when defining what mental health/substance use disorders should be covered by requiring coverage of all disorders listed in *DSM*-5, with no random exclusions of conditions.

State laws should also mandate behavioral health coverage to prevent insurers from taking advantage of a federal parity law loophole by not offering a mental health benefit at all, Wrenn added. However, the real issues are with the implementation of the law and its enforcement, she added. States should require their monitoring agencies and insurers to periodically report on claims actions to ensure parity compliance and give consumers needed transparency.

For parity to be achieved, state legislatures must do their part by enacting legislation that establishes clear pathways for parity monitoring, reporting, and enforcement activities, according to the report. Every state in the nation—except Wyoming—has adopted one or more laws supporting mental health parity. Despite this progress, the promise of parity remains elusive for many.

The authors found that 32 state statutes received a failing grade of F for mental health parity, with the seven lowest scoring states as follows: Wyoming (F, 10), Arizona (F, 26), Idaho (F, 36), Indiana (F, 38), Alaska (F,43), and Nebraska (F, 43).

One limitation of the report is that the scores for each state were derived solely from their parity laws; however, the report also discusses the importance of state regulatory and enforcement actions, which were not factored into state scores. "In fact, among the many states assessed with a low score … policymakers and advocates have leveraged regulatory and enforcement tools to help advance parity."

For example, the authors gave New York a score of only 53 for its parity laws but pointed out that its state attorney general has optimized enforcement of parity by investigating insurers' behavioral health claims processing and by levying more than $3 million in fines against insurers. In other actions, the state ordered two insurance companies to stop violating the parity law with regard to medication-assisted opioid treatment (*Psychiatric News,* http://apapsy.ch/Cigna and http://apapsy.ch/Anthem).

"Conversely, some states for which the statute was assessed as having a higher score are experiencing a high rate of parity violations, lack of enforcement by regulators, and poor access to care," the report added.

"Particularly with the concurrent alcohol, opioid, and suicide epidemics ravaging states across the country, states must make parity enforcement a priority in order to increase access to critically needed treatment," the report concluded.

"Robust state parity enforcement will not only save lives but also benefit state budgets by encouraging commercial insurers to pay for treatment to which beneficiaries are entitled, reducing costly late interventions and cost shifts to payers such as Medicaid." **PN**

"Evaluating State Mental Health and Addiction Parity Statutes: A Technical Report" and the accompanying consumer guide can be accessed at www.ParityTrack.org/Anniversary.

Short Sleep Duration Increases Adolescent Suicide Risk

CDC survey data on high school students show that multiple risk-taking behaviors are associated with insufficient sleep.

BY LYNNE LAMBERG

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On a typical school night, high school students who averaged less than six hours of sleep a night reported thinking of and attempting suicide far more often than their longer-sleeping peers, according to nationwide survey data. That finding has major public health repercussions since the data also indicated that more than 70 percent of high school students get less than the 8 to 10 hours of sleep they need for optimal mental and physical health.

Matthew Weaver, Ph.D., an associate epidemiologist at Brigham and Women's Hospital in Boston, and colleagues analyzed data provided by 67,615 U.S. high school students who responded to Youth Risk Behavior Surveys (YRBS) of the Centers for Disease Control and Prevention (CDC) between February 2007 and May 2015. Respondents comprised a nationally representative sample of students enrolled in ninth to 12th grades in U.S. public and private schools. Nearly all were age 14 years or older. The students completed the anonymous surveys in their classrooms.

Weaver's team categorized sleep duration on an average school night as 8 hours or more, 7 hours, 6 hours, or less than 6 hours. They then examined a variety of personal safety risk-taking behaviors individually and as composite categories. Their findings were published in the October *JAMA Pediatrics.*

They found shorter sleep duration was associated with increased odds of risk-taking behaviors in a dose-dependent manner. The fewer hours students said they slept on an average school night, the more likely they were to report having engaged in unsafe behaviors.

When compared with high school students who reported they averaged 8 hours or more of sleep a night, those who said they typically slept less than 6 hours were about twice as likely to say they used tobacco, alcohol, marijuana, or other drugs and had driven after drinking alcohol. They were nearly twice as likely to report they carried a gun or other weapon and had been involved in a physical fight. They also had higher rates of risky sexual activity, including sexual intercourse with four or more individuals and not using a method of birth control.

The strongest associations between short sleep duration and risk-taking behaviors involved mood and self-harm. Some 11,912 students—17.6 percent of the total survey respondents—reported averaging less than 6 hours of sleep on a typical school night. These students were more than three times as likely as those who slept 8 hours or more to report feeling sad and hopeless, seriously considering suicide, having made a plan to attempt suicide, or having attempted suicide. They were more than four times as likely to report having made a suicide attempt that required treatment.

Overall, more than 23,000 students—more than one-third of all respondents—reported they had experienced depressed moods and seriously considered or attempted suicide.

Among U.S. adolescents, suicide is second only to unintentional injury (chiefly involving motor vehicles) as the leading cause of death. In 2016, the most recent year for which the CDC provides statistics, 2,553 youths aged 10 to 19 years died of suicide in this country.

The cross-sectional design of the YRBS surveys "precludes examination of a bidirectional association, which may exist for some behaviors," the researchers noted.

Weaver urges psychiatrists to ask adolescent patients about their sleep habits. Both insufficient and poor quality sleep are common in this age group, Weaver told *Psychiatric News.* "Educating adolescents about the importance of sleep and how to optimize sleep," he said, "may benefit multiple aspects of their health."

Weaver conducted the data analysis with colleagues at Harvard Medical School, the College of Nursing at New York University, and the School of Nursing at the University of Wisconsin-Madison.

The researchers plan to continue mining the YRBS data, Weaver said, to better understand the association between sleep, mood, and risk-taking behaviors. **PN**

An abstract of "Dose-Dependent Associations Between Sleep Duration and Unsafe Behaviors Among US High School Students" is posted at https://jamanetwork.com/journals/jamapediatrics/fullarticle/2703913.

Pollutants

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Mitchell, patients who receive amalgam fillings are more likely to be low income.

Mitchell added that because children from low-income families may have poorer nutrition, they may get more cavities on average and thus have more amalgam in their mouths. Additionally, in the event some mercury leaches out of the fillings, these children are at greater risk of damage since they deal with greater psychosocial stressors, and stress hinders the body's defenses, including the immune system, he said.

Together, the inequities faced by disadvantaged children create a vicious cycle that affects normal development.

"This is a case of environmental justice," Mitchell told the audience. "No group should have to bear an undue burden from the effects of industrial or other pollutants."

When a chemical is banned from use—as occurred with DDT and other pesticides in the 1970s—it is usually just replaced with another chemical. "This is a whack-a-mole problem," Perera said. Meanwhile, because many chemicals have long half-lives, the older compounds remain present in the environment.

She continued, "Environmental pollutants are especially harmful because they have so many ways to damage the brain." Studies show these molecules can cause DNA mutations, alter the regulation of genes, and even directly kill brain cells. "The damage they cause can have lifelong effects that have even been shown to be transgenerational."

Perera highlighted a large, multinational cohort study that the CCCEH has been conducting in New York, Poland, and China to assess the effects of exposure to phthalates (chemicals that make plastics flexible). In this diverse racial and geographical population, phthalate exposure among mothers was consistently associated with lower IQ in children. Previous studies have found that children whose mothers were exposed to lead also had lower IQs than those who were not exposed to the chemical.

Perera noted that while exposure to one chemical may pose some neurodevelopmental risks such as reduced IQ, research shows that a clinically relevant outcome such as autism often occurs only when a person is exposed to a combination of pollutants. "We therefore do not have to tackle all the causal agents [at once], just a few key ones."

The good news is that the right policies—such as pollution reforms and sustainable energy initiatives—can make a difference, she said. Perera said that a coal plant in one of the China study regions had recently closed, and recent data show that health outcomes in the area are improving. **PN**

Unconstitutional

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world, when he is not of a capacity to fit himself for it."

In *Panetti,* the court questioned "the retributive value of executing a person who has no comprehension of why he has been singled out and stripped of his fundamental right to life" and cited "the natural abhorrence civilized societies feel at killing one who has no capacity to come to grips with his own conscience or deity."

The brief also explained that mental health experts can "assist courts in identifying prisoners with severe dementia through the use of modern brain imaging, standardized clinical assessments, and instruments to detect malingering." **PN**

APA's friend-of-the-court briefs can be accessed at https://www.psychiatry.org/psychiatrists/search-directories-databases/library-and-archive/amicus-briefs.

Treating Adults With ADHD Requires Special Considerations

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While stimulants are the first medications of choice for adults with ADHD, comorbidities such as substance use disorder, bipolar disorder, and psychosis may affect prescribing decisions.

BY DAVID OSSER, M.D., AND BUSHRA AWIDI, M.D.

Many people commonly think of attention-deficit/hyperactivity disorder (ADHD) as a pediatric disorder, but symptoms often persist into adulthood. Estimates suggest that about 4 percent of adults have ADHD.

Fortunately, good medication options are available, but there are several considerations specific to adults with ADHD that you should keep in mind before prescribing medications.

To help you navigate the potential risks of medications commonly used to treat ADHD, my colleagues and I have developed a step-by-step algorithm on adult ADHD pharmacology. However, it is a work in progress and has not yet gone through peer review. Indeed, important new research published in the fall has led to one change in recommendations. We are looking for feedback.

As is the case when treating patients with pediatric ADHD, stimulants such as methylphenidate or amphetamines are considered frontline treatments for adults with ADHD. These medications are well tolerated and effective, and they can easily be used alongside most other psychotropic medications. Atomoxetine—a norepinephrine reuptake inhibitor—can also be used, should a psychiatrist or patient have concerns about stimulant use. Currently, there are not sufficient data to make firm recommendations for prescribing any other medications commonly used to treat patients with pediatric ADHD (bupropion, clonidine, guanfacine, or modafinil) for adults with the disorder.

Before prescribing a stimulant or atomoxetine to an adult with ADHD, make sure the patient does not have angle closure glaucoma. If they have another type of glaucoma or pheochromocytoma (a tumor of the adrenal glands), treatment with stimulants and atomoxetine is possible but only after effective treatment and clearance by the specialists treating those disorders.

David Osser, M.D., is an associate professor of psychiatry at VA Boston, Brockton Division, Harvard Medical School. Bushra Awidi, M.D., is a clinical fellow in psychiatry at Massachusetts General Hospital in Boston and Harvard Medical School.

Psychiatrists are also advised to hold off initiating stimulants or atomoxetine in patients with hypertension, angina, or a history of cardiovascular defects until receiving medical clearance. Psychiatrists treating women with ADHD who are pregnant, thinking about becoming pregnant, or breastfeeding should make medication decisions based upon the severity and impairment of the patient's symptoms.

You should next assess for certain comorbidities that could require deviation from the standard algorithm. If the patient has a history of psychosis, psychiatrists should typically avoid stimulants or atomoxetine because of the risk of exacerbating the psychosis. The use of stimulants in patients with uncontrolled (or undiagnosed) bipolar disorder poses significant risks of emergent mania if the patient is not already stabilized on an appropriate mood stabilizer such as lithium; the risk of mania could be increased by sixfold or sevenfold compared with bipolar patients not given stimulants.

For patients who do not have comorbid psychosis or bipolar disorder, clinicians can choose between a methylphenidate product or an amphetamine product. A recent meta-analysis considering efficacy and tolerability of stimulants in adults found (based on a small number of studies) that amphetamine products appear to be preferred. Whatever stimulant is chosen should be initially prescribed in an immediate-release formulation, as effectiveness and side effects can be quickly identified, and dosage adjusted most efficiently, as needed. Titrate the medication for up to several weeks, if needed, to find an optimal profile of symptom improvements versus side effects, and then switch to an extended-release formulation if necessary, depending on the patient's needs for the optimal timing of the benefits.

Adults can often require doses as high as 1 mg/kg to 1.3 mg/kg per day for methylphenidate or 0.5 mg/kg to 0.65 mg/kg per day for amphetamine before optimal symptom improvements are seen. If after a reasonable trial, the results are unsatisfactory, switch patients to the other class of stimulant and titrate again in the same manner.

If neither stimulant class results in symptom improvement, one can consider trying atomoxetine, typically starting with 40 mg per day and increasing to 40 mg twice daily in a week. A clinically meaningful difference from placebo with atomoxetine is very slow to develop compared with stimulants, and can take four to six weeks, and the maximal response (which appears smaller than the response to stimulants) may take several more weeks after that. This makes atomoxetine impractical as a first-line agent compared with stimulants, which work within hours when you have an effective dose. In considering it as a third-line agent, as we do, it is important to note that we have no evidence that atomoxetine can be effective after one or two stimulants have failed.

If misuse or diversion occurs during either stimulant trial, consider trying extended-release formulations, which are much less prone to abuse or diversion. If it occurs again even with these formulations, consider atomoxetine.

The presence of comorbid substance use disorders (SUDs) may require modification of the algorithm. To avoid the high risks of abuse and diversion in these patients, psychiatrists should initiate treatment with an extended-release stimulant formulation even though it takes longer to observe effects. Psychiatrists should also try to treat patients simultaneously for both their ADHD and substance use. If the substance use is severe, treat the SUD first and achieve a period of sobriety before considering medications for ADHD.

Patients with cocaine use disorder have shown both an improvement in ADHD symptoms and a reduction in cocaine use with extended-release amphetamine treatment, so this specific stimulant class is a recommended choice. For people with methamphetamine use disorder, amphetamines should be avoided, but methylphenidate has been shown to be effective at reducing symptoms of ADHD and reducing drug use as well. For patients with ADHD and co-occurring alcohol use disorder, atomoxetine can be given first, as there are some data to suggest atomoxetine can reduce heavy drinking days gradually over time. For opioid use disorder, more study is needed, but you could consider an extended-release stimulant first.

Much more research is needed to understand adult ADHD and its treatment. There are more data relevant to what works when treating children with ADHD. **PN**

A flowchart of the latest version of the algorithm for adults with ADHD is posted on the website of the Psychopharmacology Algorithm Project of the Harvard South Shore Psychiatry Program at http://psychopharm.mobi/algo_live/.

Mother's Inflammation

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such as immunology, obstetrics, neuroscience, and psychology; testing model-informed hypotheses with data-driven approaches; pairing longitudinal, dyadic samples with predictive modeling methods—for understanding what shapes the developing brain and mind to make us who we are," she wrote. **PN**

"Maternal IL-6 During Pregnancy Can Be Estimated From Newborn Brain Connectivity and Predicts Future Working Memory in Offspring" is posted at https://www.nature.com/articles/s41593-018-0128-y. "Maternal Systemic Interleukin-6 During Pregnancy Is Associated With Newborn Amygdala Phenotypes and Subsequent Behavior at 2 Years of Age" is posted at https://www.biologicalpsychiatryjournal.com/article/S0006-3223(17)31670-0/fulltext. "Maternal Interleukin-6 Concentration During Pregnancy Is Associated With Variation in Frontolimbic White Matter and Cognitive Development in Early Life" is posted at https://www.sciencedirect.com/science/article/pii/S1053811918303161?via%3Dihub.

JOURNAL DIGEST

BY NICK ZAGORSKI

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Methylphenidate May Be Associated With Low BMI In Some ADHD Patients

While methylphenidate is known to be effective at improving symptoms of attention-deficit/hyperactivity disorder (ADHD) in children, some evidence suggests that the medication may have adverse effects on children's height, weight, and blood pressure.

An analysis published in *BMC Psychiatry* suggests that in some boys with ADHD, methylphenidate use is associated with low body mass index (BMI).

Researchers from the University of Cork in Ireland and colleagues assessed health data from boys aged 6 to 15 who took part in the German KiGGS study. Of the 4,244 boys in the study, 65 took methylphenidate for ADHD for less than 12 months, 53 boys took methylphenidate for one year or more, 320 boys had ADHD but were not taking medication, and 3,806 boys did not have ADHD.

The researchers found that boys aged 6 to 10 who took methylphenidate for less than 12 months were about 4.5 times as likely to be underweight (BMI in the bottom third percentile) as those of similar age who were in the control group. Boys aged 11 to 15 who took methylphenidate for a year or more were 3.5 times as likely as controls to be underweight.

Boys taking methylphenidate were not found to be at significantly higher risk of having low height or increased blood pressure.

Physicians "should discuss with all patients and their parents the potential effects [of methylphenidate] on growth and balance theses effects with the outcomes of not treating ADHD symptoms," the authors wrote.

McCarthy S, Neubert A, Man KKC, et al. Effects of Long-Term Methylphenidate Use on Growth and Blood Pressure: Results of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS). *BMC Psychiatry*. 2018; 18(1):327. https://bmcpsychiatry.biomedcentral.com/articles/10.1186/s12888-018-1884-7

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Facebook Language May Offer Clues About Future Depression

Language in Facebook posts may offer clues about users' risk of depression, suggests a study in *PNAS*.

Researchers at the University of Pennsylvania analyzed data from patients who had visited the emergency department (ED) and agreed to share data from their electronic health records as well as Facebook. Of the 683 patients included in the study, 114 were diagnosed with depression.

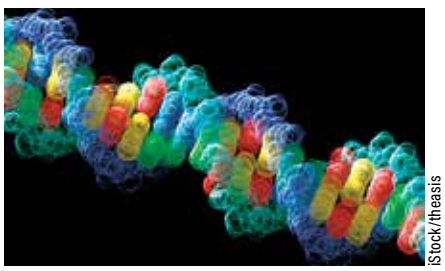
The researchers scanned the relative frequency with which the participants used various words and two-word phrases. They identified a set of language markers that, when used frequently over the six-month period immediately preceding the ED visit, could identify depressed patients with about 72 percent accuracy. When assessing the language patterns of the participants three months earlier (looking at Facebook activity three to nine months prior to the ED visit), the language software had an accuracy of about 62 percent.

Other Facebook-posting measurements, such as average length of posts, frequency of posts, or time/day of posts, did not improve the researchers' ability to predict depression, suggesting language content is the key predictor.

"The profile of depression-associated language markers is nuanced, covering emotional (sadness, depressed mood), interpersonal (hostility, loneliness), and cognitive (self-focus, rumination) processes, which previous research has established as congruent with the determinants and consequences of depression," the authors wrote.

"The growth of social media and continuous improvement of machine-learning algorithms suggest that social media–based screening methods for depression may become increasingly feasible and more accurate," they continued.

Eichstaedt JC, Smith RJ, Merchant RM, et al. Facebook Language Predicts Depression in Medical Records. *Proc Natl Acad Sci USA*. October 15, 2018. [Epub ahead of print] http://www.pnas.org/content/early/2018/10/09/1802331115.long



iStock/theasis

People With ADHD Found at Higher Risk for Borderline Personality Disorder

The inability to regulate emotions is a symptom commonly reported in patients with attention-deficit/hyperactivity disorder (ADHD) and borderline personality disorder (BPD). A study in *Molecular Psychiatry* now suggests that people with ADHD are at a higher risk of BPD than those without the disorder.

Researchers at the Karolinska Institutet in Stockholm analyzed Swedish medical registry data and found that individuals with an ADHD diagnosis were almost 20 times as likely to also have a BPD diagnosis than individuals not diagnosed with ADHD. The strength of the association between ADHD and BPD was similar regardless of sex.

Having a relative with ADHD also increased the risk of BPD. The more similar the genes between relatives with ADHD, the greater the likelihood of BPD.

"Clinicians should be aware of increased risks for BPD in individuals with ADHD and their relatives, and vice versa," the authors wrote.

Kuja-Halkola R, Lind Juto K, Skoglund C, et al. Do Borderline Personality Disorder and Attention-Deficit/Hyperactivity Disorder Co-aggregate in Families? A Population-Based Study of 2 Million Swedes. *Mol Psychiatry*. October 15, 2018. [Epub ahead of print] https://www.nature.com/articles/s41380-018-0248-5

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Smartphone Intervention May Reduce OCD Symptoms

A smartphone-based intervention using principles of cognitive flexibility might help reduce obsessive-compulsive symptoms, such as repetitive hand-washing behaviors, suggests a study in *Scientific Reports*.

"One of the most common types of OCD … is characterized by severe contamination fears and excessive washing behaviors," researchers at the University of Cambridge in the United Kingdom and colleagues wrote.

The study included 93 healthy adults who had obsessive-like contamination fears. The participants were assigned to watch one of three 30-second videos (31 participants per group) on their smartphones, four times a day, for one week. The first group watched a brief video of themselves engaging in handwashing, the second group watched themselves repeatedly touch a "disgust-inducing" object, and the third group (control group) watched themselves performing sequential hand movements.

The idea behind the videos was that vicarious viewing of obsessive behav-

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From the President

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health and media area. Our 38,000 members should feel capable and equipped to work in this space, educating the media and the community if they so choose.

- **Encourage collaboration and reinforcement of the above with subspecialty psychiatry and key stakeholder organizations:** These include patient advocacy organizations and relevant corporate sponsors to further extend and reinforce our efforts.

- **Consider funding fellowships to embed residents, fellows, and early career psychiatrists in the entertainment industry and news media:** The resulting relationships will foster an ongoing collaboration between APA and media and entertainment outlets.

Some might say these objectives are beyond APA's scope; however, as discussed in the last issue, APA's ethical principles remind us of our responsibility to advance mental health through education of the public. And it is in large part the media that drives the public's perception of mental illness and psychiatrists. Being active at this interface will allow us to reduce stigma and influence legislative policy, funding, judicial actions, and the general public ethos surrounding mental illness and mental health.

As psychiatrists, we cannot remain insular and inward looking if we want to be influencers and in the forefront of the public's mind on matters related to mental illness and its treatment. Let's begin to face outward for the overall good of society, our patients, and the profession! **PN**

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iors might help desensitize the participants to the stimuli that trigger handwashing. Having each person watch their own hands instead of the same set of hands helped to control for the idiosyncrasies of repetitive behaviors.

The researchers assessed participants' contamination fears, OCD symptoms, and mood before and after the intervention, as well as their performance on a task-switching game that measures cognitive flexibility.

Compared with participants in the control group, those in the active intervention groups (who watched videos of washing and touching) experienced a greater reduction in symptom scores and errors on the task-switching game after one week.

Jalal B, Brühl A, O'Callaghan C, et al. Novel Smartphone Interventions Improve Cognitive Flexibility and Obsessive-Compulsive Disorder Symptoms in Individuals With Contamination Fears. *Sci Rep.* 2018; 8(1):14923. https://www.nature.com/articles/s41598-018-33142-2

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Animal Study Examines How Social Interactions Inform Drug Seeking

An animal study published in *Nature Neuroscience* finds that social interactions can have a profound effect on limiting addictive behaviors. This study, conducted by investigators at the National Institute on Drug Abuse, reinforces the idea that social support is an important factor in how the brain responds to drug-associated cues.

The investigators developed rat models of both methamphetamine and heroin dependence and then placed them in environments where they could pull levers to receive the drug or interact with other rats. They observed that regardless of the dependent drug, length of the animal's dependency, or how long the animal had been without the drug, the rats chose social interaction over drug self-administration. Even rats housed in a social setting preferred social contact when given the choice. However, the researchers could attenuate the preference of social interaction if they delayed the opportunity for social contact or coupled it to an aversive stimulus (for example, electric shock).

The researchers also noted that rats that repeatedly chose social contact over drug did not show signs of craving or withdrawal.

"These findings highlight the need for incorporating social factors into neuroscience-based addiction research and support the wider implantation of socially based addiction treatments," the researchers wrote. **PN**

Venniro M, Zhang M, Caprioli D, et al. Volitional Social Interaction Prevents Drug Addiction in Rat Models. *Nat Neurosci.* October 15, 2018. [Epub ahead of print] https://www.nature.com/articles/s41593-018-0246-6

Sports

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that athletes with ADHD feel a stronger connection with their sport and being sidelined due to an injury creates more psychological distress. He is doing some follow-up research now with USC athletes comparing the effects of concussions and orthopedic injuries on depression and anxiety risk.

Moore noted that his study was limited to collegiate athletes, so more research is needed to understand the effects of concussions might be on the mental health of younger athletes. "But if anything, a Division I college athlete is a highly fit and resilient person, so the outcomes might be worse in younger individuals," he said. "Doctors and psychiatrists who treat athletes at any age should be aware of these mental health risks in ADHD athletes."

Despite some risks, Moore noted he doesn't want his data to scare parents from letting children with ADHD play team sports. "I think the outcomes of sports and physical activity are overwhelmingly positive."

Conant-Norville said that sports can serve as a way for psychiatrists to connect with young patients. "Any psychiatrist seeing children with ADHD should ask them about sports and take an interest in their activities," he said. "It builds a good rapport, and you can use sports terminology as metaphors in therapy." Psychiatrists may also able to help children maximize their chance of success in a sport, since they are familiar with their strengths and areas that need improvement.

Psychiatrists should also work with parents to help families make realistic decisions and make sure sports do not become too important. If parents place too great an emphasis on sports, "then the children become demoralized if they don't live up to the expectations.," he said.

If the right balance is achieved, though, Conant-Norville has seen children thrive. "What I've found is that when children are doing something they are really passionate about—and this goes beyond sports—their ADHD does not exist in that moment." **PN**

AACP

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"For psychiatrists who wish to distinguish themselves as having developed a broad knowledge of community psychiatry, the AACP training and certification present a great opportunity to highlight a psychiatrist's knowledge and skills," said APA Director of Education Tristan Gorrindo, M.D. "This program is an important addition to the diverse trainings offered through the APA Learning Center."

Tony Carino, M.D., an assistant clinical professor of psychiatry at Columbia University and director of psychiatry at Janian Medical Care in New York City, has been a leader in helping to develop the certification exam. In an interview with *Psychiatric News,* he explained there are three pathways to eligibility for the exam, what he called the "three Es":

- **Education:** Psychiatrists must have completed training in one of the approximately two dozen community fellowship training programs in the United States.

- **Experience:** Psychiatrists must have worked at least 20 hours a week for five years in a public or community setting after completing psychiatry residency training.

- **Early career experience:** Psychiatrists must have worked full time (at least 35 hours a week) for two years in public or community settings after completing psychiatry residency training.

Psychiatrists interested in taking the exam should contact AACP Administrative Director Frances Bell and complete a form testifying that they are eligible through one of the three pathways. Candidates will then be given an access code to take the exam on the APA Learning Center.

AACP President Michael Flaum, M.D., said that certification can enhance the value a psychiatrist brings to any system where he or she is employed and may reap benefits in salary and promotion.

"We believe there is a real set of skills and areas of expertise not traditionally covered in many psychiatry residency programs," he told *Psychiatric News.* "The world of public and community psychiatry has matured over the last decade as evidenced by the proliferation of community psychiatry fellowship programs. There are thousands of APA members who are working in these community settings—including in jails and prisons, addiction treatment facilities, homeless outreach centers, and state institutions. We think they should be recognized and ideally compensated for their distinct knowledge and skills, and we hope that this type of certification will facilitate that."

Mary Taylor

Tony Carino, M.D., counsels individuals during a mental health outreach event at a soup kitchen in New York City.

Carino told *Psychiatric News* that the idea behind certification had its genesis in 2009 when he was completing community fellowship training at Columbia.

"As I was going through my training, I heard a lot of people talk about community psychiatry as a job or a role that people fell into by chance," he said. "But what I realized is that there are lots of extraordinary psychiatrists working in public settings who didn't fall into it by chance but actively chose it and who want to work with underserved populations in public and community settings.

"I felt strongly that this is a career path that psychiatrists should be proud of and that there are a knowledge base and skill set that is specific to what we do," he continued. "A lot of other fellows I talked to were wondering why there

was no formal certification for community psychiatry."

In 2010, Carino and members of the AACP board and other leaders in community psychiatry began a process to validate the subject areas of community psychiatry, soliciting input from AACP members through a listserve and consulting with directors of community fellowship programs. Carino cited Jules Ranz, M.D., of Columbia; Wes Sowers, M.D., of the University of Pittsburgh; and the now-deceased Richard Christiansen, M.D., of the University of Florida College of Medicine, as crucial leaders in the effort.

The group was able to identify a set of domains of knowledge specific to community psychiatry and began the process of writing an exam, using the guidelines for question writing employed for other board-certifying exams. In 2013, they pilot tested an exam with a group of experts with long experience in community psychiatry, a group of early career psychiatrists practicing in public settings, and a group of PGY-4 residents.

The pilot test validated the exam—all of the experts passed the exam, while 67 percent of ECPs and just one-third of PGY-4 residents passed it—and helped to distinguish the knowledge base specific to expertise in public psychiatry. Through several more pilot tests, Carino and colleagues were able to statistically identify 135 items that indicate expertise in community psychiatry and make up the current exam.

"A lot of psychiatrists today want to work in public systems that serve underserved populations providing recovery-oriented care and have a real passion for this work," Carino said. "We believe the certification exam really advances the field, and the process of developing it has helped to crystallize and define what this field is about." **PN**

Psychiatrists interested in taking the exam can contact AACP Administrative Director Frances Bell at francesrotonbell@gmail.com. Further information about the certification process, as well as recommended readings to prepare for the exam, can be found through the AACP website at www.communitypsychiatry.org.

Guidance

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are now a component of most substance use treatment facilities.

Other psychotherapies for BPD, including psychodynamic psychotherapy, cognitive-behavioral therapy (CBT), and schema therapy have been studied using evidence-based manuals. For people with co-occurring BPD and SUD, two of the best-studied therapies are dynamic deconstructive psychotherapy (DDP) and dual-focused schema therapy (DFST). DDP is a modified, manualized weekly psychodynamic psychotherapy. It has been shown, like DBT, to decrease suicidal behavior and other core symptoms of BPD, as well as substance use. DFST works on maladaptive schemas, such as negative beliefs about oneself, coping skills, and relapse prevention.

There are limited data on the effectiveness of 12-step groups or other peer-led interventions for individuals with BPD and SUDs. There is concern, at times, that an individual with BPD may disrupt the 12-step group. At the same time, such groups may help individuals with BPD find a crucial sense of community and meaning.

Patients with BPD often end up taking many medications targeted at their different symptoms. There are limited data, however, indicating that these pharmacologic interventions can help with the emptiness, identity disturbance, and abandonment that form the core symptoms of BPD. Affective or impulsive symptoms may improve with second-generation antipsychotics, mood stabilizers, and dietary supplementation with omega-3 fatty acids, but these gains tend to be modest. Among these medications, topiramate is increasingly being used in the treatment of individuals with BPD and SUDs, as it has been shown to help in the treatment of both conditions. Benzodiazepines, while frequently prescribed for BPD, can lead to misuse and may actually be disinhibiting rather than calming. Evidence-based medications for SUDs, such as buprenorphine, methadone, and naltrexone for opioid use disorder and naltrexone, acamprosate, and disulfiram for alcohol use disorder, should be used as well.

Our strongest central recommendation for patients with BPD and SUDs and for all patients with co-occurring disorders is simple: people should be tactfully but persistently evaluated for a broad range of co-occurring disorders, and then each of these disorders should be given clinical attention. At times, treatment for a particular disorder can be deferred, but, for most co-occurring disorders, therapeutic success is much more likely when treatment is integrated, based on evidence, and focused on all relevant diagnoses. **PN**