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PSYCHIATRIC NEWS

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Senator's Proposal On Antipsychotics Generates AMA Opposition

The AMA debate on resolutions relating to financing of Medicare and Medicaid and the reimbursement of physicians took place in the shadow of congressional deliberations over how to reduce the federal debt.

BY MARK MORAN

The AMA opposes a proposal requiring physicians who use atypical antipsychotics and other medications with black-box warnings for off-label purposes to certify in writing that the use meets certain government requirements.

At the Interim Meeting of the AMA's House of Delegates last month in New Orleans, delegates approved a resolution opposing the proposal by Sen. Charles Grassley (R-Iowa) requiring physicians to certify that the drug they are prescribing meets minimum criteria for coverage and reimbursement by virtue of being listed in one of the authorized drug compendia used by Medicare.

That resolution was part of a larger one calling on the AMA to collaborate with appropriate national medical specialty societies to create educa-

please see ***AMA*** *on page 28*

Professional News

Mood Stabilizers Offer Hope For Huntington's Treatment

Although a large clinical trial has yet to be conducted to see whether lithium and valproate can help Huntington's disease patients, mouse research suggests a promising future.

Clinical & Research News

BY JOAN AREHART-TREICHEL

Two mood stabilizers with a long history of safe use in humans—lithium and valproate—may hold important therapeutic potential for patients with the devastating and ultimately fatal neurodegenerative disorder Huntington's disease.

This message, based on results from two transgenic mouse models of Huntington's, was reported in the November *Neuropsychopharmacology* and at the annual meeting of the American College of Neuropsychopharmacology in Hawaii in December.

The senior investigator was De-Maw Chuang, Ph.D., chief of the Section on Molecular Neurobiology at the National Institute of Mental Health.

Although lithium has been a standard treatment for bipolar disorder for more than half a century, and although valproate is also effective in treating bipolar disorder, the precise mechanisms of how these drugs work are still poorly understood. Yet emerging evidence suggests that both drugs promote cell proliferation and neurogenesis in the central nervous system. Thus both drugs might be capable of preventing neuronal cell death in Huntington's, Chuang and his colleagues reasoned.

Another reason why they believed that this might be the case is that the two drugs promote cell proliferation and neurogenesis by inhibiting certain enzymes—glycogen synthase kinase 3 and histone deacetylases—and levels of these enzymes decrease in the brains of mouse models of Huntington's around the time that behavioral deficits resulting from the disease become apparent.

Chuang and his group thus decided to see whether giving a combination of lithium and valproate in the diet to two widely used transgenic mouse models of Hun-

please see ***Huntington's*** *on page 28*

Association News

New APA Benefit For MITs

Members-in-training (MITs) now have access to a free online subscription to *Psychiatric Services*. To activate your account, visit <ps.psychiatryonline.org> and create a username and password. You will then have full-text access to all of the content of APA's highly ranked, peer-reviewed monthly journal focusing on service delivery in organized systems of care, evolving best practices, and federal and state policies that affect the care of people with mental illnesses.

This is just one of the educational benefits that APA offers you. Another valuable benefit is free access to the *American Journal of Psychiatry's Residents' Journal*. Current and past issues can be accessed at <http://ajp.psychiatryonline.org.residents_journal.aspx>.

More Quality Measures To Be Added to ACO Rule

CMS adopts an APA recommendation to the ACO final rule that people with mental illness, including substance abuse, be included in the definition of "at-risk" beneficiaries.

BY MARK MORAN

The federal government has adopted a number of changes recommended by APA to its final rule on accountable care organizations (ACOs)—changes that are aimed at reducing the risks inherent in starting an ACO as well as easing burdensome reporting measures and allowing ACOs to keep a greater share in the money saved.

As part of the new health reform law—the Patient Protection and Affordable Care Act—ACOs are designed to encourage more integrated care for Medicare beneficiaries and to improve care while reducing costs. In response to a proposed rule issued by the Centers for Medicare and Medicaid Services (CMS) in March outlining rules for ACOs, APA provided the agency with detailed analyses and recommendations.

In its final rule issued in October, CMS adopted APA's recommendation that people with mental illness, including substance use disorders, be included in what are defined as "at risk" beneficiaries who must be protected against discrimination and assured access to high-quality health care. In addition, CMS acknowledged the need for more mental health and substance abuse quality measures and will work on developing them with input from interested parties.

The agency also adopted recommendations aimed at making it easier for physicians—especially those in small group practices—to participate. "When CMS released its proposed ACO rule in March, ACO participation seemed nearly unachievable to many physicians, including those who work for large multispecialty practices and health systems," Julie Clements, deputy director for regulatory affairs in APA's Department of Government Relations, told *Psychiatric News*. "Our assessment is that the revised rule, published in the *Federal Register* on October 20, provides a better opportunity for physicians, including those working in smaller practices, to participate in the ACO Medicare Shared Savings Program."

Here are highlights of the final rule:

- The standard financial model for ACOs will still be shared savings, and the program will function essentially as a pay-for-performance program.
- There are specific provisions supporting participation by physician-owned organizations and rural providers.
- There will no longer be requirements to withhold shared savings payments to cover potential future cost increases.
- ACOs will be allowed to share in savings beginning with the first dollar of savings earned.
- There will be 33 quality measures instead of the 65 originally proposed. In the first year, ACOs will be required to report only that they have recorded the quality measures ("pay for reporting"); in the second year they will be required to report savings ("pay for performance").
- ACOs will have more advanced knowledge of what kind of beneficiaries make up their pool than under the old rule.
- The requirement that at least 50 percent of an ACO's primary care physicians be "meaningful users" of electronic health records was eliminated.
- There will be a rolling application process. The 2012 start-up date for ACOs has been pushed back from January 1 to either April 1 or December 1.

The final ACO rule is posted at <www.ofr.gov/OFRUpload/OFRData/2011-27461_PI.pdf>. APA's comments on the proposed rule are posted at <www.psych.org/MainMenu/AdvocacyGovernmentRelations/GovernmentRelations/Memo-ACO-Final-Rule.aspx?FT=.pdf>. ■

Abstracts Invited

Eliot Sorel, M.D., invites APA members to submit abstracts to the World Psychiatric Association's Regional Congress for Eurasia and Southeast Europe, to be held in Bucharest, Romania, April 10 to 13, 2013. The theme of the meeting, whose scientific program Sorel cochairs, is "Integrating Primary Care and Mental Health."
More information is posted at <www.wpa2013bucharest.org>.

It Takes a Borderline Village

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BY JOHN M. OLDHAM, M.D.

Since its introduction in *DSM-III* in 1980, a great deal of progress has been made in our understanding of borderline personality disorder (BPD), but this did not occur without enormous effort. Even almost 10 years later, APA convened a task force on BPD, and the consensus in the 1989 report of that task force was discouraging: treatment was difficult, severe countertransference problems were common, and treatment outcome was variable. But only two years later, the *American Journal of Psychiatry (AJP)* published the Practice Guideline for the Treatment of Patients With Borderline Personality Disorder, which recommended psychotherapy as the core, evidence-based treatment for BPD, accompanied by symptom-targeted adjunctive pharmacotherapy when indicated.

The evidence base for this practice guideline consisted primarily of studies by Linehan and colleagues on the use of dialectical behavior therapy (DBT) and the work of Bateman and Fonagy on mentalization-based therapy (MBT). Since then, randomized, controlled trials have been published by other research groups, reporting the effectiveness of a number of different types of psychotherapy for the treatment of patients with BPD.

The growing literature on treatment of BPD has been matched by great progress in research on the neurobiology, genetic risk factors, and long-term course of BPD, and this new knowledge informs our treatment and greatly facilitates efforts to destigmatize BPD. As I wrote in a 2009 editorial in *AJP*, the behavior of patients with BPD was too often "seen as willfully oppositional, and borderline personality patients were spoken of as dreaded pariahs." But we now know, for example, that mistrustful behavior is likely to be illness driven, related to heritable emotional hyperreactivity and inadequate cortico-limbic capacity to downregulate emotions, greatly compromising the ability to develop stable interpersonal relationships. (This biological vulnerability is all too often accompanied by real experiences of neglect or trauma in early development, but not invariably so.) We have also learned from studies like the 15-year NIMH-funded Collaborative Longitudinal Personality Disorder Study that BPD does not represent a "life sentence," but, rather, that patients with this disorder get better over time.

Steadily working to get this more optimistic message out are advocacy groups and family groups that provide invaluable psychoeducation and patient and family support, such as the National Education Alliance for BPD (NEABPD) and the Treatment and Research Advancements National Association for Personality Disorder. (Check out their Web sites for rich resources for patients and families.) The National Alliance on Mental Illness (NAMI) has designated BPD as a high-priority condition, and through the efforts of NAMI and NEABPD, the House of Representatives unanimously passed House Resolution 1005 in April 2008 designating May as Borderline Personality Disorder Awareness Month "as a means of educating our Nation about this disorder, the needs of those suffering from it, and its consequences. . . ."

While there is much work still to be done, the cumulative efforts of clinicians, researchers, advocates, families, and, of course, patients themselves are paying off. I had the pleasure of making a presentation at an educational event on BPD in October in New York sponsored by NEABPD; other presenters included former APA President Herb Pardes, New York State Commissioner of Mental Health Mike Hogan, NIMH researcher Bruce Cuthbert, and Columbia University researcher Barbara Stanley, along with Amanda Wang, a remarkable individual who spoke about her own struggles with BPD and her road to recovery. And just a few weeks later, in November, the Substance Abuse and Mental Health Services Administration (SAMHSA) held an all-day meeting cosponsored by NAMI and NEABPD and titled "Federal Partners Meeting on the Borderline Personality Disorder." This milestone event included presentations by Pam Hyde, administrator of SAMHSA; Kathryn Power, director of the Center for Mental Health Services; Mike Fitzpatrick, executive director of NAMI; and Perry Hoffman, president of NEABPD. Other speakers included John Gunderson, Marsha Linehan, Ken Duckworth (medical director of NAMI), Blaise Aguirre (medical director of the Adolescent DBT Center at McLean Hospital); Jim Breiling (NIMH), and me; the afternoon "Federal Partners Think Tank on BPD" was cochaired by Tom Insel, director of NIMH, and Kathryn Power. As Power stated in her remarks earlier in the day, "It truly 'takes a village' to transform individuals' lives. When SAMHSA submitted its 'Report to Congress on Borderline Personality Disorder' last May, it reflected our commitment to work closely with the NEABPD and NAMI, our federal partners, individuals in recovery, and our champions in Congress. . . . Together, we share a commitment to increase knowledge about borderline personality disorder, provide education to individuals and families, expand the availability of evidence-based treatments, and promote resilience and recovery."

Kathryn Power raised the following question about patients with BPD: "Are they isolated because they are suffering, or are they suffering because they have been isolated. . . ?" I would say it's both, and our collective challenge is to intensify the good momentum of progress now in motion. More clinicians need to be trained to provide evidence-based treatment, more research needs to be funded, and more

please see ***From the President*** *on page 8*

Treating Agitation in ER Requires Delicate Balancing Act

A new guide from the American Association for Emergency Psychiatry calls for verbal deescalation first when evaluating and treating patients with agitation.

Place the photo (at 100% pix size) aligned with the eighth paragraph of body text

BY AARON LEVIN

More than 1.7 million episodes of agitation occur annually in U.S. emergency departments and are a leading cause of patient suffering and staff injuries.

Avoiding harm to all parties requires a complex juggling act on the part of psychiatrists and others, Garland Holloman, M.D., director of Psychiatric Emergency Services at the University of Mississippi Medical Center in Jackson, told an audience at APA's Institute on Psychiatric Services in San Francisco in October.

"Emergency department staff need to use techniques of verbal deescalation while simultaneously managing physical medical diagnosis and treatment," said Holloman. "The goal is to help the patient regain control."

Holloman led a 30-person panel of the American Association for Emergency Psychiatry in developing new guidelines called "Best Practices in Evaluation and Treatment of Agitation." The full guidelines will appear in the February 2012 issue of the *Western Journal of Emergency Medicine*.

Existing guidelines focus mainly on pharmacological strategies or seclusion and restraint to deal with agitated patients, he said. But there are better alternatives.

"Verbal deescalation takes less time than seclusion and restraint," said Holloman. The latter usually means calling in a team, taking down the patient, putting the patient in restraints, risking injury, doing paperwork, and monitoring the patient afterward.

Credit: Ellen Dallager

Agitation should be considered medical unless determined otherwise, says Kimberly Nordstrom, M.D., J.D., an emergency psychiatrist at the Denver Health Medical Center. The first step in the emergency department is to exclude life-threatening causes for it.

Using less-physical means to regain control will increase patient trust and cooperation both in the emergency room and afterward, as treatment continues, he said.

Agitation is an acute behavior emergency requiring an immediate intervention, said panelist Kimberly Nordstrom, M.D., J.D., an emergency psychiatrist at the Denver Health Medical Center. The first thing to do is to exclude life-threatening conditions.

"Agitation should be considered medical unless determined otherwise," said Lindstrom. "The one exception is an agitated person with a known psychiatric dis-

please see ***Agitation*** *on page 32*

Annual Meeting News

Register and Reserve Your Room Now!

Early-bird registration Ends January 3

Save on fees by registering, enrolling in courses, and reserving your hotel room now for APA's 2012 annual meeting, which is being held in Philadelphia from May 5 to 9. Registration information is posted at <www.psych.org/MainMenu/EducationCareerDevelopment/Meetings/2012-Annual-Meeting.aspx>. A list of staff who can answer your annual meeting questions is posted at <www.psych.org/MainMenu/EducationCareerDevelopment/Meetings/APA-Staff-Contact-List.aspx?FT=.pdf>. And to get a head start on planning your time in the City of Brotherly Love, visit this Web site that was created just for meeting goers: <www.philadelphiausa.travel/apa>.

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Computerized Brain Training Aids Cognition in Schizophrenia

Training the brains of patients in lower-level perceptual and attentional learning processes can have effects on multiple neural systems resulting in higher level cognitive improvements and enhanced quality of life.

BY MARK MORAN

Rigorous and intensive computer-based training of people with schizophrenia using principles of neural plasticity to master lower-level perceptual and attentional auditory and verbal learning processes is possible. The technique appears to translate into improvements in higher-level cognitive functions and possibly even enhanced quality of life.

At APA's 2011 Institute on Psychiatric Services in San Francisco, Sophia Vinogradov, M.D., described research showing that computerized games aimed at training patients in very specific tasks can have effects on multiple interacting brain systems, resulting in changes in global cognitive functioning.

Vinogradov said the approach to brain training marks a significant new direction in what has been termed "cognitive remediation," a field of decades-old research that has been stymied by repeated observations that while patients may improve in the short term on various cognitive tasks, the improvements are often not sustained and do not typically translate into widespread and enduring improvements in cognition or quality of life.

Credit: Ellen Dallager

Sophia Vinogradov, M.D.: "I would like to argue that the brain is not immutably fixed, and that even in people with schizophrenia these neural systems show a high degree of plasticity and can change."

Vinogradov is professor in residence and interim associate chief of staff for mental health at San Francisco VA Medical Center and interim vice chair of the Department of Psychiatry at the University of California, San Francisco. At the institute, Vinogradov, received APA's Alexander Gralnick Award for Research from past APA President and current APA American Psychiatric Foundation Treasurer Richard Harding, M.D.

Vinogradov said emerging research on cognitive training marks a departure from an older neuropsychological model, derived from studies of brain injury in the early part of the 20th century, which posited that schizophrenia and other brain disorders were marked by impairments in discrete and independent functions. "Implicit in this model is that the brain is permanently impaired and that the best you can hope for is a compensatory or work-around solution," she said.

"I would argue that what has emerged in the last 10 or 15 years is really a 'systems neuroscience model' of impaired cognition in schizophrenia, one in which complex distributed neural systems are constantly interacting with each other," Vinogradov explained, "and that what had been thought to be discrete, independent functions—such as attention or working memory or perception—are in fact intimately tied to each other and constantly interacting."

Vinogradov said the new emerging model is based on the notion that, during successful learning, the brain represents relevant perceptual and cognitive-affective inputs with disproportionately larger and more coordinated populations of neurons that are distributed—and always interacting—across multiple levels of processing and throughout multiple brain regions.

In this way, she said, intensive training of lower-level functions—such as how the brain processes auditory or visual information or matches emotions to facial expressions—can drive changes throughout the interactive, distributed neural networks of the brain, resulting in improvements in higher-level cognitive functions and, ultimately, in real-world functioning and quality of life.

Vinogradov said this new model has less to do with "remediation"—with its implication of building compensatory mechanisms for a broken brain—and is more similar to physical fitness training:

please see ***Brain Training*** *on page 33*

Key Points

Note: "Key Point" is a medium sidebar. Place after 3rd paragraph.

- Intensive, computer-based training of lower-level perceptual and auditory/verbal working memory processes can drive improvements in higher-order cognitive functions that are associated with enhanced quality of life at six-month follow-up.
- Training must be rigorous, intensive, keyed to individual ability, and provide sufficient reward to keep patients engaged and motivated.
- The new model marks a departure from an older neuropsychological model that conceptualizes brain dysfunction as the result of impairments in discreet independent processes, and instead draws on a "systems neuroscience model" of constantly interacting distributed neural systems.
- Results may be especially promising for patients very early in the disease process.
- A more elaborate form of these exercises, embedded in an engaging game, will be studied in an NIMH-funded multisite randomized controlled trial next year. If successful, this will lead to widespread dissemination of this form of cognitive training for schizophrenia patients.

States Slash Over $1.6 Billion From Mental Health Care

Huge cuts in state mental health budgets are leaving those in need without access to critical services, with many states funneling funds to Medicaid in an effort to increase their federal match.

BY JONATHAN WOLFE

Over the past three years, 28 states and the District of Columbia have cut a combined total of more than $1.6 billion in funding for mental health services, according to a new report from the National Alliance on Mental Illness (NAMI).

To make matters worse, these sizeable budget cuts have occurred at a time during which demand for mental health services has increased significantly, the report says.

Released November 10, "State Mental Health Cuts: The Continuing Crisis" evaluates the state mental health agency budgets approved by legislatures across the country from Fiscal 2009 to Fiscal 2012. In comparing individual states' funding outlays for the three-year period, NAMI considered the proportion of each state's cuts relative to overall budgets for mental health services (see chart).

While some states have made modest increases in their mental health appropriations for Fiscal 2012, the report notes that such gains are undercut by a reduction in federal Medicaid support during the past year. According to NAMI, the expiration in June 2011 of a temporary increase in the federal match for Medicaid resulted in the loss of an estimated $14 billion for state Medicaid programs.

This massive decline in funding has led some states to shift resources to Medicaid services as a means of securing an increased federal match—an approach that has proven problematic for Medicaid nonbeneficiaries in need of mental health services but unable to afford them.

"It is important to meet the needs of Medicaid enrollees, but not at the expense of uninsured or underinsured individuals living with serious mental illness," said NAMI Executive Director Mike Fitzpatrick in a press release in conjunction with the new report.

In July 2010, Arizona eliminated virtually all services for 12,000 mentally ill individuals who did not qualify for Medicaid, according to the report. And Ohio added millions of dollars to services for Medicaid recipients from Fiscal 2011 to Fiscal 2012, while slashing millions in support of services for those not on Medicaid.

Among the report's key policy recommendations are protecting and strengthening state mental health services, restoring spending cuts, and preserving access to acute and long-term-care services.

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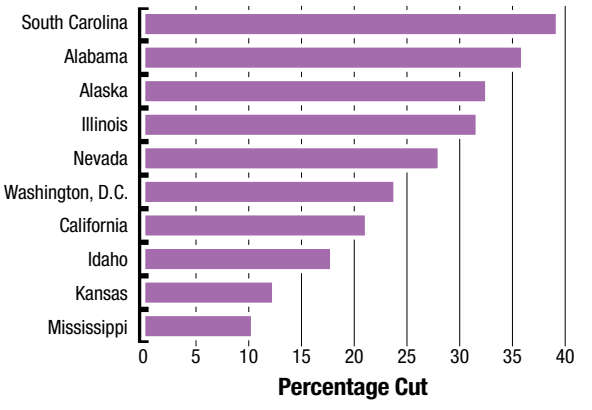
State Budget Cuts Affect Many With Mental Illness

The majority of states have made significant cuts in funding for mental health services between Fiscal 2009 and Fiscal 2012. Of the 10 states with the largest proportion of cuts, four have slashed their budgets by more than 30 percent.



Source: NAMI, "State Mental Health Cuts: The Continuing Crisis," November 2011

NAMI also recommends improving data collection and outcomes measurement for mental health services.

"In a time of diminishing resources, pressures are increasing on mental health providers to demonstrate that their services are helping people living with mental illness to recover and avoid adverse outcomes, such as hospitalizations, arrests, and suicides," the report states.

NAMI noted that the data contained in the report are limited to general fund appropriations for state mental health agencies and do not include mental health funds that are under the control of other state agencies, such as state Medicaid agencies, housing authorities, or child and family authorities.

"State Mental Health Cuts: The Continuing Crisis" is posted at <www.nami.org/Template.cfm?Section=state_budget_cuts_report>. ■

AMA Says Intellectual Disability Warrants 'Underserved' Designation

The "underserved" designation is expected to improve access to and quality of care for a vulnerable population by making federal dollars available for training, research, and treatment.

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BY MARK MORAN

The AMA is putting its weight behind an effort to designate individuals with intellectual disabilities as a medically underserved group.

At last month's Interim Meeting of the AMA House of Delegates in New Orleans, delegates approved unanimously a report by the Council on Medical Services calling on the AMA to support a simplified process for designating individuals with intellectual disabilities as a medically underserved group. The Health Resources and Services Administration (HRSA) has been pursuing that designation, but—as the council report noted—the process has been slow.

The Patient Protection and Affordable Care Act requires HRSA to revamp and simplify its process for designating groups as medically underserved, and the agency has proposed a simplified process that has yet to be finalized.

Approval of the report lends the AMA's support to establishing that simplified process. And it also requires existing AMA policy to replace the term "mentally retarded" with "intellectually disabled."

The outcome of the house vote is largely the fruit of one activist psychiatrist's efforts and is an example of how a motivated physician can influence AMA policy.

Psychiatrist Vijaya Appareddy, M.D., dates her interest in serving the intellectually disabled from her days in child and adolescent psychiatry training at Mount Sinai Medical Center. She was appointed by President George W. Bush to the President's Committee on Intellectual Disabilities and served as vice chair from 2003 to 2006.

Credit: Mark Moran

Vijaya Appareddy, M.D.

Appareddy, who is a delegate from the American Association of Physicians of Indian Origin as well as chair-elect of the AMA's International Medical Graduate Governing Council, brought a resolution to the house at last year's Interim Meeting in San Diego seeking support for designation of the intellectually disabled as medically underserved. After debate in reference committee hearings (where all resolutions and reports are aired prior to being submitted to the house for a final vote), the resolution was referred to the Council on Medical Services.

She said that the designation will serve to enhance access to and quality of health care services for the intellectually disabled by making federal dollars available for research and for training medical students and residents, for increasing payment to clinicians working with this population, and for enhancing family and community services.

"The AMA's support carries a lot of weight because people pay attention to what the AMA endorses and supports," she told *Psychiatric News*. "And it is important symbolically because every specialty and subspecialty is speaking with a unified voice, through the AMA, for increased services for this population."

Appareddy also believes replacing the term "mentally retarded" with "intellectually disabled" in AMA policy is substantive, reflecting a challenge that can be overcome, rather than "something regressive that cannot be changed." She noted that the name of the presidential advisory committee was changed by President Bush when he reauthorized the committee in 2003.

That committee originated under President John F. Kennedy and has been reauthorized by every president since then to advise the government about how to enhance services for the intellectually disabled. For Appareddy, service on the committee—which included members with disabilities—was transformative.

"Listening to what these individuals had to overcome to reach their goals was inspiring," she told *Psychiatric News*. "Unless you treat these individuals and interact with them, it is hard to comprehend that they can be very productive and can contribute to society. They don't have to be on the sidelines."

The text of the house's action on the council report is posted at <www.ama-assn.org/assets/meeting/2011i/i11-ref-comm-j-annotated.pdf>. A video of an interview with Appareddy is posted at <www.youtube.com/watch?v=7Y5B9oOKMbA&feature=feedu>. ■

AMA Members: Take Note

The digital age has come to the AMA's House of Delegates.

Last month's Interim Meeting of the AMA in New Orleans was the first to use "virtual reference committee hearings" to air debate about topics brought before the house. In the weeks leading up to the meeting, AMA members could go online and submit comments about the reports and resolutions. These virtual reference committee hearings served as an extension of the live reference committee hearings that are held at every policymaking meeting of the House of Delegates; reference committee hearings allow any AMA member and some invited guests—regardless of whether they are delegates—to offer opinions about items being considered by the house.

The virtual hearings were hosted on the AMA's Web site and were intended to promote participation of AMA members who could not be present at the live meeting, while also expediting business at the live meeting.

Psychiatrists who are AMA members are encouraged to participate in the virtual hearings prior to the next meeting of the AMA House of Delegates in June 2012. As that meeting approaches, *Psychiatric News* will provide information about how to do just that. Stay tuned.

AMA: Medication Shortages Are Public-Health Emergency

An AMA report urges companies to alert the FDA to impending shortages so that industry can compensate by producing similar or identical medications in time to avert inadequate supplies.

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BY MARK MORAN

Prescription-medicine shortages are a national public-health emergency, the AMA declared at its Interim Meeting last month in New Orleans. AMA delegates approved a report by the Council on Science and Public Health addressing a prescription-drug shortage that many physicians at the meeting termed an urgent public health emergency.

Credit: Mark Moran

Louis Kraus, M.D.

The report calls on the AMA to support the recommendations of the 2010 Drug Shortage Summit convened by the American Society of Health System Pharmacists (ASHP), American Society of Anesthesiologists, American Society of Clinical Oncologists, and the Institute for Safe Medication Practices and work in a collaborative fashion with these and other stakeholders to advocate that the Food and Drug Administration (FDA) work with manufacturers to establish a plan for continuity of supply of vital medications and vaccines to avoid production shortages whenever possible.

"Compared with 2005, twice as many drug shortages were identified in 2008, and in 2010 almost 180 shortages of medically necessary drugs were identified by the FDA, triple the amount from 2005," according to the report. "Sterile injectables comprise the most common type of shortage, with 74 percent of the shortages in 2010 involving such preparations, including many older off-patent formulations and critical products for use in the acute-care setting. The problem has continued to escalate with ASHP reporting more than 200 shortages as of September 15. The most prominent causes include manufacturing difficulties and regulatory compliance issues; corporate decisions leading to product discontinuation; consolidation of the pharmaceutical industry; and raw, bulk, or active pharmaceutical ingredient shortage."

Delegates were unanimous in their support of the report and its recommendations, and the urgency of the issue was reflected in delegates' adding a resolution that the AMA declare the problem a national public-health emergency.

"The paper discusses periodic medication shortages across disciplines, some of which can cause morbidities and even mortality," child psychiatrist Louis Kraus, M.D., a member of the Section Council on Psychiatry, told *Psychiatric News*. "The key recommendations are that when companies first realize there is going to be a shortage—which will likely be before a shortage actually exists—they must alert the FDA so that other companies can potentially increase production of similar or even identical medications."

Texts of items approved by the House of Delegates are posted at <www.ama-assn.org/ama/pub/meeting/reports-resolutions-listing.shtml>. Information about drug shortages is posted at <www.fda.gov/Drugs/DrugSafety/DrugShortages/ucm050792.htm> and <www.ashp.org/shortages>. ■

from the president

continued from page 6

people need to have opportunities to learn about the far more informed and optimistic state of our knowledge about BPD. One such opportunity will be at our 2012 annual meeting in Philadelphia, where a number of sessions on BPD will be on the program, including an invited symposium chaired by Andy Skodol titled "Integrated Approaches to the Care of Patients With Borderline Personality Disorder" and a Frontiers of Science presentation on BPD by Marsha Linehan. Plan to attend and spread the word!

The Web site of the National Education Alliance for BPD can be accessed at <www.borderlinepersonalitydisorder.com/>, and the Web site of the Treatment and Research Advancements Association for Personality Disorders can be accessed at <www.tara4bpd.org/tara.html>. ■

Suicide Monitoring Urged For Certain Meth Users

Injection drug users who inject methamphetamine have a greater risk of suicide than noninjection methamphetamine users, a risk that increases with their frequency of use.

BY LESLIE SINCLAIR

In a study funded by the National Institutes of Health and the Canadian Institutes of Health Research, researchers from the Columbia University Mailman School of Public Health and the University of British Columbia examined the relationship between injecting methamphetamine and suicidal behavior.

Their results, published in the December 1 *Drug and Alcohol Dependence*, indicate that injection drug users (IDUs) who inject methamphetamine should be monitored closely for signs of suicidal behavior.

The study was conducted in Vancouver, British Columbia, as part of an ongoing research project associated with the Urban Health Research Initiative (UHRI), a program based on a network of studies developed to help identify and understand the many factors that affect the health of urban populations, with a focus on substance use, infectious diseases, the urban environment, and homelessness.

The bulk of UHRI's work is done in Vancouver, described as the "epicenter of a longstanding illicit drug use epidemic." According to UHRI, Vancouver experienced in 1997 an explosive outbreak of HIV infection that remains one of the fastest spreading HIV epidemics documented in the developed world, and overdose fatalities and drug-related gun violence are highly prevalent.

Their study subjects were participants in the Vancouver Injection Drug Users Study, which began in 1996. They were recruited through word of mouth, street outreach, and referrals. At baseline and at each six-month visit thereafter, participants completed an interviewer-administered questionnaire that elicited information pertaining to sociodemographic characteristics, drug use, treatment utilization, and HIV risk behaviors.

During those visits, nurses also assessed participants for various health conditions,

please see ***Meth Users*** *on page 33*

Parental Behavior Training Reduces ADHD Symptoms

While studies show the effectiveness of stimulant medication in treating some preschoolers with behavioral problems, a new analysis suggests that parent behavior training offers a "no-risk" solution to reducing ADHD symptoms.

BY JONATHAN WOLFE

Formal training in parental discipline strategies has proven effective in improving the behavior of young children at risk for developing attention-deficit/hyperactivity disorder (ADHD), according to a new report from the U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality (AHRQ).

The 366-page report, a comparative effectiveness review prepared for AHRQ's Effective Health Care Program by the McMaster Evidence-Based Practice Center in Hamilton, Ontario, sought to answer three key questions:

- Among children younger than age 6 with ADHD or disruptive behavior disorder, what are the effectiveness and adverse-event outcomes following treatment?
- Among those aged 6 or older with ADHD, what are the effectiveness and adverse-event outcomes following 12 months or more of follow-up treatment?
- How do underlying prevalence of ADHD and rates of diagnosis and treatment for ADHD vary by geography, time period, provider type, and sociodemographic characteristics?

In investigating the treatment of children under age 6 with disruptive behavior disorders, a team of researchers led by Alice Charach, M.D., M.Sc., of the University of Toronto's Hospital for Sick Children pooled results from eight "good-quality" studies of parent behavior training (PBT) with a combined total of 424 participants.

The researchers found a high level of evidence supporting the effectiveness of such interventions in limiting the disruptive behavior of preschoolers, including those with symptoms of ADHD.

The analysis further suggested that the benefits of PBT carry little to no risk and are often maintained for a period of up to two years. However, a high paren-

tal dropout rate from PBT programs was observed in the studies analyzed, which the researchers suggested may prove a significant barrier to the success of PBT.

According to the authors, there are primarily four standardized PBT programs that have been developed over the past 25 years—the Positive Parenting Program (Triple P), the Incredible Years parenting program, Parent-Child Interaction Therapy, and the New Forest Parenting Program. These programs are designed to help parents manage their child's problem behavior with rewards-based discipline strategies rather than punishment.

The researchers identified only one "good-quality" study on the use of methylphenidate in improving the behavior of children under age 6. Analysis of the Preschool ADHD Treatment Study involving 114 preschoolers showed that while methylphenidate is effective and generally safe in the treatment of ADHD symptoms, there has been no long-term follow-up of the study subjects.

Louis Kraus, M.D., chief of child and adolescent psychiatry at Rush University Medical Center in Chicago, told *Psychiatric News* that the first prong of this research supports current practice for the treatment of ADHD in preschoolers.

"Whether with preschool children or older, we will almost always begin treatment by attempting behavioral interventions," said Kraus. "Not uncommonly, treatment will require a combination of behavioral management in association with stimulant or nonstimulant pharmacologic interventions. ADHD often has a comorbid diagnosis too. As such, treatment can often become much more complex."

In evaluating the effectiveness of medication in treating the ADHD symptoms of those older than age 6, the researchers encountered a similar dearth of what they called "good-quality" studies that included untreated controls and were not largely funded by industry. And while both methylphenidate and atomoxetine (sold as Strattera) were found to be generally safe and effective for improving behavior based on the analysis of one study per each medication, the researchers noted that their effects beyond 12 to 24 months have yet to be well studied.

Additional investigations revealed that both medication alone and the combination of medication and behavioral treatment are more effective in treating symptoms of ADHD and oppositional defiant disorder than psychosocial or behavioral interventions alone, particularly during the first two years of treatment of boys aged 7 to 9 with the combined type of ADHD.

Analysis addressing the researchers' third key question demonstrated that the underlying prevalence of ADHD is less variable than the rates of diagnosis and treatment of the mental illness. Among

please see ***ADHD*** *on page 33*

Psychiatrist Finds Mission In Hard-to-Treat Patients

Outreach and a variety of services help an early career psychiatrist define the mission of a new community mental health center.

BY AARON LEVIN

Maybe he was just lucky, but Ryan Bell, M.D., J.D., found what he called the "perfect job" right out of residency two years ago, running a publicly funded outpatient clinic in Rochester, N.Y., for hard-to-treat patients.

"It's easier if you know what you want to do," Bell told listeners, most of them residents, at APA's Institute on Psychiatric Services in San Francisco in October.

And what Bell wants to do is psychotherapy along with the administrative work.

"You feel like you've got some control over what's going on in your clinic," he said.

The Steve Schwarzkopf Community Mental Health Center takes on patients with serious mental illness and at least two other major challenges to daily living. Many have been rejected by other clinics because they have had difficulty remaining connected with clinical services.

"We treat patients who can't be treated elsewhere," he noted.

Patients under restraining orders or who have trouble showing up for appointments or who have just left one of New York's state psychiatric hospitals are welcomed in the clinic.

Bell's wraparound approach to these patients uses a variety of services as "hooks" for patients not initially interested in mental health services. At the moment,

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Credit: Ellen Dallager

Ryan Bell, M.D., J.D.: "Our promise is to walk beside them, wherever that may lead."

he is the only psychiatrist at the center but he has the OK to hire another. His staff also includes a part-time psychiatric nurse practitioner, an occupational therapist, social workers, and an educational specialist. The team tackles whatever problems the patients face.

If patients have been evicted, the staff finds housing. If they've been arrested, the staff looks into the possibility of mental health court involvement. Team members may arrange for care of general medical problems or enroll the patient in the food-stamp program.

Addressing those concrete needs clears out obstacles and makes the patient more likely to remain in care. "Our mission is to engage people not previously engaged in treatment, keep them engaged, and deliver better care with concrete, measurable outcomes," said Bell.

The key to the clinic's approach is outreach.

Bell and his staff are frequently on the road, going to where their patients reside or hang out. The street work lets the staff see how patients live and learn where the gaps and barriers to services lie.

"Sometimes our services happen in the clinic, but more than half the time they occur in the community," he said in an interview with *Psychiatric News*. "We have drawn blood at kitchen tables, given injections in living rooms, done family counseling in unheated apartments in the dead of winter, tracked clients down sleeping in dumpsters or hanging out in the parking lot of Dunkin' Donuts, and followed them into hospice care. Our promise is to walk beside them, wherever that may lead."

His own meetings with patients, wherever they occur, aren't just 15-minute med checks. He spends a minimum of 30 minutes, in or out of the clinic, doing psychotherapy.

Most of the clinic's patients are covered by a managed-care Medicaid plan that provides quarterly capitated payments and allows for greater flexibility in care than fee-for-service systems.

He knows the state bureaucrats in Albany want hard numbers, so he set up the clinic to provide them. He wants to show that the clinic's services can reduce hospitalizations and arrests, improve metabolic outcomes, and maybe even increase life expectancy for a statistically short-lived population.

He has tried to set up a co-located general medical clinic, but so far without success. To make that point in the future, he documents how many of his patients go to area emergency rooms for nonpsychiatric medical visits. So far, the clinic's approach has cut emergency visits by 27 percent, he said.

He cited as an example one patient diagnosed with Type 1 diabetes who because of his schizophrenia refused to control his diet or stick to his insulin regimen. Psychiatric treatment for such patients could directly affect their ability to manage their

please see ***Psychiatrist*** *on page 16*

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Penn State Scandal Draws Attention to Child Sexual Abuse

In the wake of allegations made against a former Penn State University football coach, psychiatrists discuss child sexual abuse and its treatment.

BY AARON LEVIN

Credit: AP Photo/The Patriot-News, Andy Colwell

Former Penn State football coach Gerald Sandusky (center) arrives in handcuffs at the office of a Centre County Magisterial District judge. He is charged with sexually abusing eight young men.

Just when you thought that the worst things about college football were arrogant coaches, recruiting violations, sneaky sports agents, unscrupulous boosters, exploited "student athletes," bloated television contracts, and shady deals for the quarterback's parents, along comes Penn State.

By now, the charges revealed in a Pennsylvania grand jury presentment are well known even to people who can't tell a linebacker from a ballerina.

In brief, retired Pennsylvania State University assistant football coach Jerry Sandusky is charged with 40 counts of sexually abusing young boys over a decade and a half, sometimes in the shower room of the university football team. He was allegedly observed in the act there at least twice, once in 2000 by a janitor and again 2002 by a graduate assistant. Information about the cases is coming out piecemeal, but so far campus police say they have no record that they were notified in either of those instances.

Meantime, Joe Paterno, Penn State's revered, 84-year-old head coach for life was fired, the university president (Graham Spanier) dismissed, and two other administrators indicted for perjury for lying to the grand jury.

Rumors about Sandusky's behavior had circulated for years within the athletic department and possibly beyond, but it appears that nothing was done or even revealed, according to several sources.

Today, still more heads are likely to roll, and a major university lies stunned, its reputation tarred by the accusations and by the alleged failure of those concerned to do more than pass the buck or suppress information. Former FBI Director Louis Freeh has been named to head an investigation of the whole matter.

Patterns of Abuse

In a televised phone interview shortly after the grand jury's findings were made public by Pennsylvania Attorney General Linda Kelly, Sandusky said he was "just horsing around."

"I've heard that before," said Judith Cohen, M.D., a professor of psychiatry at Temple University and medical director of the Center for Traumatic Stress in Children and Adolescents at Allegheny General Hospital in Pittsburgh.

"When I heard the term 'horsing around,' I knew exactly what was going on," said Cohen, an expert on child sexual abuse.

While the media generally reported on the allegations, the turmoil, and the effects that Paterno's firing might have on the football program, little public attention was paid to the anonymous victims of the abuse.

That comes as no surprise to Cohen.

The Sandusky case makes people think they would handle such events differently if they saw someone abusing a child, she said. But child sexual abuse is severely underreported, and it is rare that abusers are caught in the act.

Cohen believes that rates of child sexual abuse in Pennsylvania are probably simi-

lar to those in other states, but reported rates are lower because criteria in the state are more difficult to meet than elsewhere.

"Pennsylvania has a high threshold for reporting child abuse," confirmed Scott Hollander, J.D., executive director of KidsVoice, an advocacy organization in Pittsburgh supporting abused, neglected, and at-risk children.

Current law says that the abuse must be intentional, at the hands of a caregiver, have caused serious physical injury, or be sexual abuse. Each of those terms is open to interpretation, said Hollander in an interview.

For instance, in one place, the law says that teachers, coaches, and principals are caregivers, while another section suggests that any employee of a school is covered.

Hollander cited a case in which a child who was being beaten with a belt turned and was struck in the eye by the belt buckle. The resulting severe eye damage was not deemed child abuse because it was "not intentional," he said.

The rush in Pennsylvania to pass new legislation to change reporting standards ignores serious flaws in the system, said Hollander.

"Currently, 9 percent of the calls to child abuse hotlines are unanswered or go to voicemail, or people hang up when they're put on hold," he said. "We need to add capacity and provide more services for treatment before we have still more people call in and not get help."

KidsVoice is backing the efforts of one state lawmaker who wants to create a task force to examine all the issues first and then provide recommendations to the legislature by next spring.

Reporting Abuse

"Almost always it's the child who reports the event and that's when people have to rise to the occasion and believe the child or at least raise questions," Cohen said. "Unfortunately, in so many cases, the community ostracizes the child and rallies around the [alleged perpetrator]."

If authorities who are supposed to protect children don't do a good job, the children learn a number of negative lessons, she said. They think that no one cares or no one believes them or even that it's all right for adults to do what they did.

"They begin to think bad things about themselves," she said. "These are already vulnerable kids and have doubts about themselves—something that an abuser often picks up on."

A twin study published by Australian researchers in 2002 showed that adults abused sexually as children had increased rates of depression, suicide attempts, PTSD, conduct problems, alcohol abuse, and nicotine use. Even higher rates occurred among those who had endured intercourse.

Reporting abuse after a delay of years may introduce yet another difficulty for victims, said Steven Cuffe, M.D., chair of the Department of Psychiatry at the University of Florida College of Medicine in Jacksonville.

"Frequently, they have trouble being taken seriously and are called 'unreliable' witnesses if their response to abuse has resulted in psychological problems in the interim," said Cuffe, who is also chair of APA's Council on Children, Adolescents, and Their Families.

Effects vary from individual to individual, however.

"Don't underestimate the resilience of children," said Cuffe in an interview. "With the appropriate response, children can function well after abuse like this,

please see ***Sexual Abuse*** *on page 16*

Strategies for Preventing Sex Abuse

Child sexual abuse is certainly not limited to college campuses, but the presence of minors on university grounds is not unusual, said Nancy Tribbensee, J.D., Ph.D., senior vice president for academic, legal, and external affairs at the Arizona Board of Regents in Phoenix and board secretary for the National Association of College and University Attorneys.

Universities often hold youth sports or drama camps. Young people attend campus performances or athletic events, and a constant stream of high school students visits campuses as prospective students. Also, many freshmen may not yet have reached their 18th birthdays when they first arrive at college.

Institutions can do a lot to prevent incidents on campus from occurring in the first place, Tribbensee, whose doctorate is in counseling psychology, told *Psychiatric News.*

University legal counsels can vet programs for underage youth to maximize safety and minimize risk to both the children and the institution, she said. (Penn State's legal counsel said he was never told about alleged child abuse by former coach Jerry Sandusky, according to media reports.)

Counsel can help develop policies and procedures to both prevent problems and deal with cases when prevention fails.

A university also should have systems in place to report and investigate allegations, said Tribbensee. That includes reporting mechanisms that don't jeopardize an informant's job.

Information about crimes on or near campuses must be reported. All postsecondary education institutions must disclose to students, employees, and the public information about security policies and campus crime (including sex offenses) under federal law, said Tribbensee.

Campus or local police cannot investigate if they never hear about possible crimes, said Paul Verrechia, M.P.A., chief of police and director of public safety at the College of Charleston in South Carolina, in an interview.

"This is a difficult case," said Verrechia, who is also president of the International Association of Campus Law Enforcement Administrators. "The only thing I'm doing is what I did before the Penn State case: I'm encouraging people to report incidents to us. If you see a violation of the law, call the police."

Media Cling to Stigmatizing Portrayals of Mental Illness

APA Public Psychiatry Fellows explore links between media portrayals of people with mental illness and how they are associated with violent behavior in the minds of many in the public.

BY AARON LEVIN

People with mental disorders are far more likely to be victims of crimes than perpetrators, but that is hardly the impression left by the media, said three APA Public Psychiatry Fellows at APA's 2011 Institute on Psychiatric Services in San Francisco in October.

Their presentation came in the 30th anniversary year of the fellowship, which has given 300 young psychiatrists the opportunity to explore new aspects of the field.

People who commit a violent crime are frequently labeled "psychos," "maniacs," or "schizophrenics" by headline writers and newscasters, inaccurately linking violence and mental illness in the public mind, said Michael Ketteringham, M.D., M.P.H., a fourth-year resident at New York University.

Surveys show that 61 percent of Americans believe that people with schizophrenia are violent toward others, and 50 percent describe them as unpredictable, said Ketteringham.

While the media may find it quick and easy to pin the blame for violent acts on mental illness, a closer look often reveals that many confounding factors such as social class or substance abuse are likely to form the connection to violence, Ketteringham maintained. He added that many studies have suffered from selection bias because they draw from populations of jail inmates or from psychiatric patients. However, the latter is only a subset of the mentally ill population and not representative of people with mental illness as a whole, he said.

Some have tried to blame acts of violence that are committed by people with mental illness on deinstitutionalization. Pushing patients into a fragmented, inadequate community mental health system has led to more persons with mental illness ending up on the streets or in prisons, goes this hypothesis.

"However, there has been no increase in violence by mentally ill individuals since deinstitutionalization, although they are 12 times more likely than others to be victims of crimes in cities," said Ketteringham.

In any case, the effect of blaming violence on mental illness is to increase the already heavy burden of stigma against all people with mental illnesses.

That stigma is reinforced by sensationalized reporting or the exploitation of stock formulas and stereotyping in dramatic shows, said panelist Michael Yao, M.D., a fourth-year resident at the Oregon Health and Science University in Portland. Even children's programming can portray mentally ill individuals as violent and unpredictable.

Media presentations often confirm and reinforce popular misconceptions about mental illness that only serve to deepen fear and stigma, Yao emphasized.

Mental illness is presented as "concealable," and thus more frightening. Patients are seen as responsible for their own ailments, which the public also sees as permanent and untreatable.

Even when media stereotypes do not focus on a link between violence and mental illness, they often depart from reality in condescending and stigmatizing ways, said Yao. Thus, if they are not portrayed as homicidal maniacs, people with mental illness are likely to be depicted as childlike innocents or unconventional free spirits, he noted.

Movies and television are not the only avenues for stereotyping mentally ill people, said Public Psychiatry Fellow Christina Khan, M.D., Ph.D., a third-year resident at Stanford University.

A number of rap songs in the 1990s (and one tune by the mainstream rock group Van Halen) refer to "5150," the section of the California state code that covers involuntary psychiatric confinement, said Khan.

"There has been no increase in violence by mentally ill individuals since deinstitutionalization, although they are 12 times more likely than others to be victims of crimes in cities."

Combating such stigma isn't easy, said Yao. Normalization strategies, like the National Alliance on Mental Illness's "In Our Own Voice," seek to educate the public by bringing them into contact with people who have a mental illness. Such programs have been only modestly successful, but bringing more accurate material to the mass media may do more to shift stigmatizing paradigms. ■

Psychiatrist

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physical health problems, he pointed out.

The clinic's work has reduced inpatient psychiatric admissions by 50 percent and incarcerations by 32 percent, he said.

Now the real trick will be sustaining those numbers.

"Brilliant programs arise, but then the funding dries up and you get pushed for higher patient loads," said Bell. "But you don't want to 'water down the whisky,' as my granddad used to say."

At the end of his talk, Bell suggested to his audience that they should consider the joys of community psychiatry and of taking on at least part of the administrative burden in their future careers.

"Administrative stuff is fun," he said. "It gives you a sense that you are controlling the vision of the organization. You're not just being pushed around. You have a mission; your vision is being realized. Ask for administrative work and you will have more job satisfaction and your patients will have better outcomes."

More about the Steve Schwarzkopf Community Mental Health Center is posted at <www.omh.ny.gov/ombweb/facilities/ropc/consumers/community.html>. ■

Sexual Abuse

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depending on the severity and chronicity of the events."

The first goal is to make sure the child is safe, so there is no recurrence of abuse, said Cuffe. Then, a therapist can work with the family to provide as much support as possible. That is more difficult if the abuser came from within the family.

Evidence-based, trauma-focused therapies can be effective, he said. One of the best tested is "trauma-focused cognitive-behavior therapy," which Cohen helped develop.

"There are advantages to early intervention," said Cohen. Biological changes occurring over time in the brain can take their toll. Medical costs connected with these disorders can be heavy.

"Even if those changes are reversed, you can't turn back the clock on all the pain and suffering that have taken place over the years," said Cohen.

Origins of Abuse

A variety of factors can explain why someone desires sex with a child, said Frederick Berlin, M.D., Ph.D., an associate professor of psychiatry at Johns Hopkins University School of Medicine, who treats patients diagnosed with pedophilia.

Not all have a sexual disorder, he said. Some are impaired by drugs or alcohol, some lack a conscience or moral responsibility. Some may display increased libido during a manic episode and act in sexually inappropriate ways.

However, a subgroup—those with pedophilia—is predisposed to seek out sexual activities with children because there is something abnormal about their sexual makeup.

"There's a lot we don't know about these issues," said Berlin. "We do know that who we are attracted to is not a matter of voluntary choice."

Imaging research has shown some brain differences among those with pedophilia compared with those who do not have that diagnosis. There is also some evidence that some (but not all) children who were sexually abused have a greater predisposition to developing pedophilia.

"In the past, pedophilia was seen as a moral issue, but there is a tremendous need—not just for people with pedophilia, but for the larger society—to learn more about factors that contribute to its development, how to prevent it, and, for people who have it, to provide treatment so they can live safely in the community," said Berlin

Pedophilia is a craving disorder, like alcoholism or drug abuse, he said. Treatments that work well with those disorders also are used for pedophilia (see Strategies for Preventing Sex Abuse). Group therapy often helps patients confront self-deceptive thought processes and look more rationally at their actions, said Berlin.

Lifestyle changes, like avoiding being around children, can help.

"Maybe someday we'll know enough about the biological differences in sexual disorders to change the qualitative nature of a person's desires," he noted. "But in 2011, we're nowhere near that point."

Ironically, laws intended to help sexually abused children may work against bringing persons with pedophilia into treatment, said Berlin. For instance, psychiatrists in Maryland have to report any suspected incident of child sexual abuse, which probably keeps many potential patients from even inquiring about treatment.

Finally, it is not uncommon in controversies in college athletic programs that people assume that the problem will be resolved magically by someone else without dangerous consequences for them or for the school, said sports historian Dave Zang, Ph.D., a professor of kinesiology at Towson University near Baltimore.

In college football, the coach becomes the authority figure, not the police or child-welfare people, said Zang in an interview. And that may have been the paradigm followed when the grad assistant told Paterno what he saw in the shower and Paterno told his athletic director.

Sports sociologists sometimes compare sports to cults, and that isn't far off base, he said.

"The view inside teams or athletic departments is: those outsiders can't understand us," said Zang. "So when things go wrong, they figure they'll fix it themselves."

The Pennsylvania grand jury's findings of fact and recommendation of charges are posted at <www.attorneygeneral.gov/uploadedFiles/Press/Sandusky-Grand-Jury-Presentment.pdf>. The KidsVoice Web site is <www.kidsvoice.org/>. ■

Leadership Fellowship

Psychiatry residency training directors are invited to nominate one resident for the American Psychiatric Leadership Fellowship. The two-year program is designed to develop future leaders in psychiatry. During this time fellows will participate in a component of the APA governance structure, attend APA annual meetings, and receive leadership training.

Psychiatry residents who are in their second year of training at the time of nomination (or PGY 3 of a five-year program), are APA members or have applied for membership, and have passed all national or state board exams needed for full state licensure are eligible.

The deadline for nominations is January 12, 2012. More information and nomination requirements are posted at <www.psych.org/share/OMNA/psychiatric-leadership-fellowship.aspx>. Applicants should call (703) 907-7324 to confirm receipt of their application. ■

MEET THE CANDIDATES IN APA's 2012 ELECTION

President-Elect

Renée L. Binder, M.D.
www.ReneeBinder.com

Mary Helen Davis, M.D.
www.mhdavis4apa.com

Jeffrey Lieberman, M.D.
www.LiebermanforAPA.com

To help APA members select the candidates they believe are best qualified for office, candidates' biographical and position statements will be posted online and accessible from the online ballot. A booklet containing the same information will be mailed with paper ballots.

Treasurer

David Fassler, M.D.
www.davidfassler.com

Robert Feder, M.D.
No Web site

There are 19 candidates vying for national and Area office in this year's election. Here are their photos and Web site addresses for those with a personal candidate Web site. Ballots will be e-mailed on **January 3** to all APA voting members with a valid e-mail address on file with APA.

Trustee-at-Large

Anita Everett, M.D.
No Web site

Bruce Hershfield, M.D.
No Web site

All photos at 100% pix size)

Early Career Psychiatrist Trustee-at-Large

Steve Koh, M.D., M.P.H., M.B.A.
www.stevekohmd.com

Molly McVoy, M.D.
No Web site

Jose P. Vito, M.D.
www.josevito.com

Member-in-Training Trustee-Elect

Andrea Brandon, M.D.
www.apamitte.weebly.com/andrea-brandon-md-phd.html

Brian Hurley, M.D., M.B.A.
www.apamitte.weebly.com/brian-hurley-md-mba.html

Erik Vanderlip, M.D.
www.apamitte.weebly.com/erik-vanderlip-md.html

The remaining members will be mailed a paper ballot. The deadline for replacement ballot requests is **January 24**. The deadline for online voting and receipt of paper ballots is 5 p.m. Eastern Standard Time on **January 31**.

Area 1 Trustee

Jeffrey Geller, M.D., M.P.H.
www.jeffreygellermd.info

Gail Robinson, M.D.
www.gailrobinson.ca

Area 4 Trustee

Ronald M. Burd, M.D.
www.rburd.net

Judith Kashtan, M.D.
No Web site

APA members wishing to campaign on behalf of a candidate should review the APA Election Guidelines. They are posted at <www.psych.org/Resources/Governance/Elections/Election-Guidelines.aspx?FT=.pdf>.

Those with comments or questions about the election should e-mail them to election@psych.org.

Area 7 Trustee

Jeffrey Akaka, M.D.
www.jeffreyakaka.com

Annette M. Matthews, M.D.
No Web site

Are Soda-Swilling Teens More Apt to Be Violent?

The finding of an association between soft-drink consumption and violence is an incidental result, since soft-drink consumption is rarely included in violence surveys.

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BY LESLIE SINCLAIR

Does a junk-food diet lead to antisocial behavior? That was the popular question raised by media covering the infamous 1979 murder trial of San Francisco Supervisor Dan White, although White's lawyers never actually presented the so-called "Twinkie defense" (see How 'Twinkie Defense' Changed California Law).

An online report October 24 in *Injury Prevention* raises the question again, with a study that examined the relationship between carbonated nondiet soft drinks and violence perpetration among Boston high school students.

Sara Solnick, Ph.D., an associate professor of economics at the University of Vermont, and David Hemenway, Ph.D., a professor of health policy at the Harvard School of Public Health and director of the Harvard Youth Violence Prevention Center, surveyed Boston high school students, asking them how often they drank nondiet soft drinks and whether they had carried a weapon or engaged in physical violence with a peer. Regression analysis was used to determine the role of soft-drink consumption in these behaviors.

Credit: Anatoliy Samara/ Shutterstock.com

Both caffeine and sugar have been associated with aggression.

Their survey instrument was the Boston Youth Survey, a biennial paper-and-pencil survey of 9th through 12th grade students in Boston public schools. A total of 1,878 students answered the survey. Aggressive and violent behavior was measured by determination of three conditions: whether the respondent acknowledged being violent toward other adolescents (other than a date or a child in the family), being violent toward another child in the family, or being violent toward someone in a dating relationship.

The researchers also examined whether the respondent had carried a knife or a gun anywhere in the past year; they controlled for gender, age, ethnicity, body mass index, alcohol consumption, tobacco use, frequency of family dinners, and insufficient sleep on an average school night.

The researchers found a significant and strong association between soft-drink consumption and violence. Adolescents who drank more than five cans of soda a week (nearly 30 percent of the sample, characterized as "heavy consumers" of soft drinks) were significantly more likely to have carried a weapon and to have been violent with peers, family members, and dates.

"The influence of soft-drink consumption on violence appears to be a 'dose-response' relationship, with effects visible at low levels of consumption and increasing with greater consumption," they said. "Even among respondents who drink alcohol and smoke cigarettes, those who drink more than five cans of soft drinks per week are significantly more likely to be violent than those who drink fewer soft drinks." They did not evaluate whether violence may contribute to higher consumption of soft drinks.

Solnick and Hemenway noted that they did not know the reason for the association between soft drinks and perpetration of violence. They listed cause-and-effect as one possibility, but said that underlying organic factors, such as low blood sugar, might be at play and mentioned potential confounders for which they could not control, such as family income and other parenting practices.

Paul Appelbaum, M.D., the Elizabeth K. Dollard Professor of Psychiatry, Medicine, and Law and director of the Division of Psychiatry, Law, and Ethics at Columbia University, reviewed the study for *Psychiatric News* and expressed caution about possible overinterpretation of its findings.

"Although the reported association between non-diet sodas and violence is intriguing, this study should not be interpreted as indicating that drinking soda causes violence. All that the data show is that high school students who commit violent acts are more likely to drink sugared and probably caffeinated sodas. There could be many reasons why those behaviors are found together that are not controlled for here."

please see ***Soda*** *on page 32*

How 'Twinkie Defense' Changed California Law

In 1979, San Francisco Supervisor Dan White was tried for the assassinations of San Francisco Mayor George Moscone and Supervisor Harvey Milk. Milk was the country's first openly gay elected official and an important figure in the national gay-rights movement, and many believed White's killing of Milk to be a hate crime. White was convicted of manslaughter rather than murder in the case, receiving a sentence of only seven years, of which he served five.

As part of White's defense, forensic psychiatrist Martin Blinder, M.D., argued that White was functioning with diminished capacity because he was suffering from depression, and therefore could not have acted with the level of premeditation required for a conviction of first-degree murder. He pointed to White's recent change from a highly health-conscious diet to one laden with sugary foods and drinks as partial proof of his state of depression, along with other signs.

Media reports eventually came to refer to this as the "Twinkie defense," wrongly insinuating that White was said to have committed the murders as the result of his junk-food diet. A Twinkie defense has since become a popular derisive label for an improbable legal defense.

More important than this contribution to the American lexicon was that the White case led to the elimination of California's "diminished capacity" law in 1982. Section 25 of the California penal code now states that "In a criminal action, as well as any juvenile court proceeding, evidence concerning an accused person's intoxication, trauma, mental illness, disease, or defect shall not be admissible to show or negate capacity to form the particular purpose, intent, motive, malice aforethought, knowledge, or other mental state required for the commission of the crime charged…. Notwithstanding the foregoing, evidence of diminished capacity or of a mental disorder may be considered by the court only at the time of sentencing or other disposition or commitment."

Health Care Reform Law's Fate Now Up to Supreme Court

With four federal appeals courts offering differing opinions on President Obama's signature health care reform law, the Supreme Court announces plans to hear more than five hours of oral arguments.

BY JONATHAN WOLFE

The U.S. Supreme Court has agreed to make a definitive ruling on the constitutionality of the Patient Protection and Affordable Care Act's individual insurance mandate.

To date, four federal appeals courts have handed down rulings on the federal health care reform law, with two upholding the mandatory-coverage provision, one rejecting the mandate, and another dismissing challenges to the law outright.

In June, Judge Boyce Martin Jr. of the U.S. Court of Appeals for the 6th Circuit asserted in the court's majority opinion that the provision is "a valid exercise of Congress' authority under the Commerce Clause" (*Psychiatric News*, August 5).

Two months later, the 11th Circuit ruled against the law, with Chief Judge Joel Dubina arguing that the mandate "represents. . . the ability to compel Americans to purchase an expensive health insurance product they have elected not to buy" (*Psychiatric News*, September 2). But despite the court's rejection of the minimum-coverage provision, Dubina and Circuit Judge Frank Hull ruled that the rest of the law is acceptable as written.

In September, the 4th Circuit ruled that two separate challenges to the Affordable Care Act lacked merit for consideration (*Psychiatric News*, October 7). The court's acceptance of the commonwealth of Virginia's right to appeal would establish a precedent by which "each state could become a roving constitutional watchdog of sorts," wrote Circuit Judge Diana Gribbon Motz in rejecting Virginia's legal challenge.

In her opinion in the second suit brought before the 4th Circuit, Motz contended that the court lacked jurisdictional authority under the federal Anti-Injunction Act (AIA) to hear the case, as any penalties collected by the federal government for failure to comply with the mandate would be considered taxes.

In early November, less than a week before the Supreme Court's announcement, the D.C. Court of Appeals became the second federal appeals court to rule in favor of the constitutionality of the health care reform law. "The right to be free from federal regulation is not absolute," wrote Senior Circuit Judge Laurence Silberman in the court's majority opinion.

The Supreme Court will hear appeals in three cases related to the 11th Circuit's ruling—*Department of Health and Human Services v. Florida, et al.*; *Florida, et al. v. Department of Health and Human Services*; and *National Federation of Independent Business v. Sebelius*.

In addition to determining the constitutionality of the minimum coverage provision, the Supreme Court will rule on whether the mandate can be severed from the remainder of the law. The high court will also consider the AIA-related issue raised by the 4th Circuit. Lastly, the court will address the question of whether Congress has a right to legislate the withholding of federal Medicaid funding if states fail to expand their coverage under the law.

The court has set aside five and a half hours for oral arguments in the case, which the *New York Times* said are expected to be heard by March. A decision will likely be made in late June, according to the paper. ■

Study Suggests Hallucinogen May Be Personality Changer

Even if ingesting the hallucinogen psilocybin can increase positive feelings of bliss or oneness with the universe, it is questionable whether such feelings represent authentic mystical experience or spiritual growth.

BY JOAN AREHART-TREICHEL

Psilocybin is a compound present in many species of mushroom, most belonging to the genus *Psilocybe*. Psilocybin is also a hallucinogen. And ingesting it can increase the personality trait of openness in people prone to mystical experiences, a new study suggests.

The study was conducted by Johns Hopkins University School of Medicine researchers Katherine MacLean, Ph.D., a postdoctoral research fellow in psychiatry; Matthew Johnson, Ph.D., an assistant professor of psychiatry; and Roland Griffiths, Ph.D., a professor of psychiatry. The results appeared online September 28 in the *Journal of Psychopharmacology*.

"Given the relatively unchanging nature of personality in adulthood, this is a rather remarkable finding," Charles Grob, M.D., told *Psychiatric News*. Grob, a professor of psychiatry and pediatrics at Harbor-UCLA Medical Center in Los Angeles, recently published a study on the use of psilocybin in subjects anxious about a cancer diagnosis, but had no involvement with this particular study.

"This paper will certainly prompt a lot of interest due to the fascination with possibilities for transcendence through altered states of consciousness," James Griffith, M.D., told *Psychiatric News*. In addition to being a professor of psychiatry and neurology at George Washington University, Griffith is author of the book *Religion That Heals, Religion That Harms*.

"[However,] a particular complaint that I have about this and similar studies is the superficiality with which terms such as 'mystical' and 'spiritual' are used," Griffith said. "Episodes of depersonalization are often encountered in many people's lives, triggered either by stress, illness, or external agents such as drugs. They don't deserve the description 'mystical.' The heart of authentic mystical experience is a transformation of meaning that involves relationships with other people . . . not just production of subjective positive feelings of bliss or 'oneness with the universe.' "

Subjects Recruited By Flyers

Fifty-two healthy, well-educated subjects aged 24 to 64 were recruited from the community by flyers announcing a "study of states of consciousness brought about by psilocybin, a naturally occurring psychoactive substance used sacramentally in some cultures." The participants did not receive monetary compensation for participating, but generally reported that they were motivated to participate by curiosity about the effects of psilocybin and the opportunity for self-reflection. Ninety-percent self-identified as spiritually active—for example, regularly praying, meditating, or participating in religious services.

The subjects were evaluated with the NEO Personality Inventory for five broad domains of personality—neuroticism, extroversion, openness, agreeableness, and conscientiousness. They were then given a high dose of psilocybin (30 mg/70 kg). They were reevaluated one to two months later and again more than a year later to determine whether the psilocybin session had brought about any personality change.

One to two months after the subjects had received psilocybin, the assessment did not show any significant changes in neuroticism, extroversion, agreeableness, or conscientiousness. But the 30 out of 52 subjects who had incurred what seemed to be a mystical experience during their psilocybin session indicated a significant increase in the trait of openness. And in these subjects, openness remained significantly higher than baseline more than a year after the session.

"Given that no other study had documented personality change after a discrete laboratory event, I was surprised to see increases in openness traits following a single high dose of psilocybin," MacLean told *Psychiatric News*. "I was even more surprised that this increase lasted through the 14-month follow-up. On the other hand, it's not surprising when you consider what a truly big life event these psilocybin sessions can be for people. The majority of our participants viewed their psilocybin experience as one of the top five or 10 most personally meaningful and spiritually significant experiences of their lives."

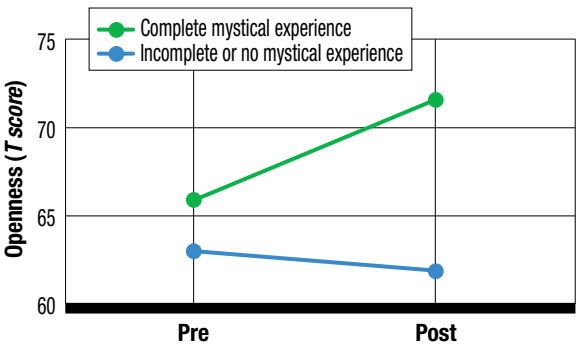
Psilocybin Also Triggered Fear

The psilocybin session did prompt strong fear or anxiety in almost 40 percent of participants at some point during the session, MacLean noted. So in this sense, the session certainly provoked "acutely undesirable effects," she admitted. "However, no participants at the

please see ***Hallucinogen*** *on page 33*

Psilocybin Can Change Some People's Personalities

Subjects who had purportedly had a mystical experience while taking the hallucinogen psilocybin showed significant increases in the personality trait of openness one to two months later, whereas subjects who had not had a mystical experience did not.



Source: Katherine MacLean, Ph.D., et al., *Journal of Psychopharmacology*, September 28, 2011

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from the experts

Professionalism in Psychiatry: Does Your Behavior Measure Up?

BY LAURA WEISS ROBERTS, M.D.
GLEN O. GABBARD, M.D.

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The essence of professionalism is service to others. In psychiatry, our professionalism is expressed in our care of people living with mental illness and their families, in our work with colleagues and students from many fields, in our dedication to advancing science, and in our efforts within communities, health systems, and society at large. As with all disciplines in the house of medicine, upholding professionalism in psychiatry involves the creation and application of special expertise as well as ensuring the competence of our colleagues.

Translating these lofty ideals into the everyday activities of psychiatrists may seem to generate more questions than answers. How do we "think on our feet" fast enough to resolve the professional dilemmas that we encounter every day? Are the professional expectations of psychiatrists different, depending on whether we perform cognitive-behavioral psychotherapy in an urban setting or provide inpatient treatment in a rural hospital? In which situations is it "professional" to accept a gift from a patient rather than graciously decline it? Are professional expectations different for us than physicians in other areas of medicine? How does one know what is "professional" when the standards of the field are evolving so quickly?

There is a short answer and there is a long answer when thinking about these kinds of questions in psychiatric practice. The short answer: a professional behavior is one that withstands the "test" of being truly in the service of the well-being of the patient, rather than other factors that may have bearing in the situation. A concrete example illustrates this principle: a consultation psychiatrist may correctly choose to hold an elderly patient's hand for several minutes after that patient has just learned that she has advanced cancer. In contrast, a psychoanalytic psychotherapist may need to abstain from even a brief hug to his patients at the end of routine sessions. In one situation, physical contact serves to comfort the patient

continued on page 30

Laura Weiss Roberts, M.D., M.A., is chair and the Katharine Dexter McCormick and Stanley McCormick Memorial Professor in the Department of Psychiatry and Behavioral Sciences at Stanford University Medical School. Glen O. Gabbard, M.D., is a professor of psychiatry at SUNY Upstate Medical University in Syracuse, N.Y., and a clinical professor of psychiatry at Baylor College of Medicine in Houston. They are two of the authors of *Professionalism in Psychiatry* (American Psychiatric Publishing). The book may be ordered at <www.appi.org/SearchCenter/Pages/SearchDetail.aspx?ItemId=62337>. APA members can purchase the book at a discount.

Examples of Behaviors Upholding Professional Boundaries

- Absence of any form of sexual contact
- Limited physical contact of any kind
- Consistent and appropriate timing, length, and location of sessions
- Respectful language and style of communication
- Suitable attire
- Judicious use of self-disclosure
- Appropriate efforts to protect patient privacy and to uphold the privilege of confidentiality
- Abstinence from business transactions other than the fee for service
- Limitations on gifts to or from patient

Essential Professional Skills For Ethical Practice

- Recognizing ethical issues
- Appreciating one's own role in the therapeutic process
- Anticipating ethically "risky" situations in patient care
- Approaching, making, and enacting ethical decisions

Source: Glen O. Gabbard, M.D., et al. *Professionalism in Psychiatry*, American Psychiatric Publishing, 2011

Note: "Examples..." is a medium sidebar. Place after fourth paragraph from the end.

Place the photo (at 100% pix size) aligned with the third paragraph of body text

Stroke Predictors May Signal Cognitive-Impairment Risk

Increased attention to prevention and treatment of high blood pressure may be effective in preserving cognitive health, as well as in preventing stroke.

BY LESLIE SINCLAIR

Credit: Rob Marmion / Shutterstock.com

Hypertension may be an important risk factor to address to prevent cognitive impairment.

Researchers at the University of Indiana School of Medicine have reported their latest findings about the relationship between stroke and cognitive decline.

In March, Frederick Unverzagt, Ph.D., an associate professor in the Department of Psychiatry at Indiana University School of Medicine, and colleagues reported that regional disparities in cognitive decline mirror regional disparities in stroke mortality, suggesting shared risk factors for these adverse outcomes.

Now they've confirmed that cardiovascular abnormalities that predict the future occurrence of stroke also predict the development of clinically significant cognitive dysfunction.

Their findings, which are reported in the November *Neurology*, came from the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study, an epidemiological study following a national cohort of 30,239 adults aged 45 or older, recruited from 2003 to 2007. The group was 42 percent African American; 55 percent were female.

Over half of the cohort—56 percent—were residents of the Stroke Belt, that region of the southeastern United States first described in 1965 as having 50 percent higher stroke-mortality rates than the rest of the country, and consisting of North Carolina, South Carolina, Georgia, Alabama, Mississippi, Tennessee, Arkansas, and Louisiana.

The participants' global cognitive status was assessed annually by telephone with the Six-Item Screener (SIS) and every two years with fluency and recall tasks. The SIS is a global measure of cognitive status that assesses three-item recall and orientation to year, month, and day of the week. Scores range from 0 to 6, with a score of 4 or fewer correct items indicative of cognitive impairment. Participants who reported no stroke history and who were cognitively intact at enrollment (SIS score greater than 4) were included.

Regional differences in incident cognitive impairment (SIS score of 4 or under) were adjusted for age, sex, race, education, and time between first and last assessments. After REGARDS participants were excluded due to anomalous data, self-reported stroke at baseline, cognitive impairment at baseline, missing SIS assessments, and incident stroke prior to first SIS, 23,752 participants remained; 196 of them suffered incident stroke during the follow-up period.

The researchers also assessed participants' Framingham Stroke Risk Profile (FSRP), which incorporates age, systolic blood pressure, presence of diabetes mellitus, current cigarette smoking, history of heart disease, atrial fibrillation, left ventricular hypertrophy (LVH), and the use of antihypertensive medication.

Previous studies have shown that high FSRP scores are related to lower cognitive function among stroke-free individuals, but have not investigated the FSRP's predictive value.

Results showed that in this national sample that was stroke-free and cognitively normal at baseline, the FSRP score was linearly related to the rate of cognitive impairment. In the highest FSRP quartile, almost 15 percent of participants developed cognitive impairment during the four-year follow-up period.

"All of the elements of the FSRP are significant predictors of cognitive impairment individually, and the more individual risk factors a person has, the greater the risk of cognitive impairment," wrote Unverzagt and colleagues. "Overall it appears that the total FSRP score and its components, while initially derived to predict stroke, are also useful in the prediction of cognitive impairment."

The researchers suspect that "subclinical cerebrovascular disease, including white matter abnormalities, silent cerebral infarction, and brain atrophy" may underlie the association they identified between stroke risk factors and cognition.

Unverzagt cited previous studies that have investigated the presence of cerebral infarcts in patients who have not shown clinical signs of stroke and told *Psychiatric News* that "a small substudy of the REGARDS population is being planned that will include magnetic resonance imaging of the brain and may inform us on this question."

In the interim, Unverzagt and his colleagues suggested that "increased attention to prevention and treatment of high blood pressure may be effective in preserving cognitive health, as well as in preventing stroke."

The study was funded by the National Institute of Neurological Disorders and Stroke, National Institutes of Health, and Department of Health and Human Services.

An abstract of "Vascular Risk Factors and Cognitive Impairment in a Stroke-Free Cohort" is posted at <www.ncbi.nlm.nih.gov/pubmed/22067959>. ■

Gene Deletions, Duplications Linked To Development of ADHD

Genetic variations, both common and rare, affect shared biological pathways and seem to play a role in attention-deficit/hyperactivity disorder.

BY JOAN AREHART-TREICHEL

Last year, Anita Thapar, M.D., Ph.D., a professor of child and adolescent psychiatry at Cardiff University in Wales, and her team reported a genomewide association study that they believed established for the first time a genetic basis for attention-deficit/hyperactivity disorder (ADHD).

In that study, which was based on genetic material from 366 children with ADHD and 1,047 controls, they were able to link some rare gene duplications or omissions with the illness (*Psychiatric News*, November 5, 2010).

Since then, they have conducted a more extensive ADHD genomewide association study, analyzing genetic material not just from the 366 children with ADHD in the previous study, but from 361 additional children with ADHD and 5,081 comparison subjects. And their results were largely the same as the first time around, they reported November 8 in *AJP in Advance*.

Specifically, they found a significantly higher rate of rare gene deletions or rare gene duplications in children with ADHD than in comparison subjects. And even when they focused solely on the new children with ADHD in this study, this was the case.

"We were pleased that our previous findings were replicated," Thapar told *Psychiatric News*.

"We were [also] surprised that the biological pathways affected by these rare genetic variants overlapped with those affected by common [gene variants or SNPs]," she added. In other words, "even though the common variants didn't reach the very stringent statistical thresholds required to say they are risks, they still seemed to be affecting biological pathways that are affected by the rare copy number variants that were for sure statistically significant. It highlights for me that by dismissing associations that are nonsignificant, maybe we are throwing away potentially valuable information. It also shows how complex it will be capturing different types of genetic risks."

A gene duplication of particular interest also emerged from the scientists' findings. It was found to be present in six children with ADHD, but in none of the comparison subjects. The duplication concerned a gene called CHRNA7. It encodes the alpha 7 nicotinic acetylcholine receptor; is widely expressed in the brain, especially in the hippocampus; is involved in rapid synaptic transmission; and has been implicated in schizophrenia (*Psychiatric News*, July 18, 2008).

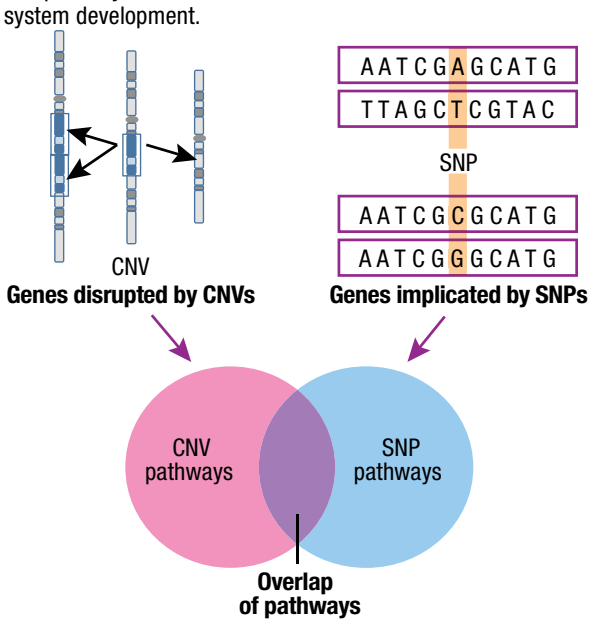
"There needs to be further investigation of CHRNA7 and the biological pathways in which it is involved before we can think about what it might mean clinically," Thapar said. "[But] if specific biological pathways are involved, then it could give clues about treatments."

It is too early to know whether any of the

please see ***Gene Deletions*** *on page 30*

Surprising Overlap Found

Scientists were surprised that the biological pathways of the rare gene duplications or omissions (that is, rare copy number variants [CNVs]) that they had linked with attention-deficit/hyperactivity disorder overlapped with the biological pathways of some common gene variants (SNPs). The pathways concern cholesterol and central nervous system development.



Source: Anita Thapar, M.D., Ph.D., et al., *American Journal of Psychiatry*, November 8, 2011

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Hostility May Put Men on Fast Track to Poor Health

Although telomeres tend to shorten with chronological aging, their length is more dynamic than previously thought. Indeed, they can even increase with age, depending on the individual and the environment.

BY JOAN AREHART-TREICHEL

Telomeres are DNA-protein complexes that cap the ends of chromosomes. Each time a cell divides, the telomeres shorten a bit. If the telomeres become too short, a cell is unable to divide further and dies.

Not just chronological aging, but various life adversities can shorten telomeres, scientists are finding (*Psychiatric News*, June 2, 2006; July 1).

And now it looks as if a negative personality trait—hostility—can chip away at telomere length as well, at least in men. That is a key finding of a study led by Lena Brydon, Ph.D., a senior research fellow at University College London in England and published online October 5 in *Biological Psychiatry*.

Hostility has long been associated with an increased risk of age-related disease and all-cause mortality. But the biological mechanisms mediating the link between hostility and disease and death have been unclear. Thus Brydon and her colleagues decided to see whether hostility adversely affects health by curtailing telomeres and hastening cell death.

Their cohort included 434 men and women who were part of the Whitehall II cohort, that is, a cohort from a larger study investigating psychosocial, demographic, and biological risk factors for coronary heart disease. The subjects were evaluated with an instrument called the Cook Medley Hostility Scale, a widely used self-report measure of hostility, assessing cynical, mistrustful attitudes toward others and also, to some extent, aggressive reactions to people. The subjects were asked to score themselves from 0 to 10 on questions such as "It is safer to trust nobody," "Most people make friends because friends are likely to be useful to them," "I think most people would lie to get ahead," "No one cares much what happens to you," and "Most people are honest chiefly through fear of being caught." The subjects' scores on this instrument were found to range anywhere from 0 to 10, with an average response of 3.

The subjects also provided blood samples so their white cells could be measured for telomere length. Finally the researchers looked to see whether they could find a significant link between high hostility scores and shorter telomere length, taking possibly confounding variables, such as age, body mass index, cardiovascular measures, and health behaviors, into consideration.

Indeed, they did find a significant association between high hostility scores and shorter telomere length—but only for men.

Thus "our findings suggest that telomere attrition might represent a novel mechanism mediating the detrimental effects of hostility on men's health," Brydon and her group concluded. In other words, hostility might be able to speed up the telomere shortening that normally occurs with men's chronological aging, and such fast-tracked telomere shortening might then make the men prematurely susceptible to diseases for which they are at higher risk as they grow older.

The good news, however, as Brydon told *Psychiatric News*, "is that telomere length is more dynamic than previously thought and can in fact decrease, remain stable, or increase with age, depending on the individual and the environment."

A five-year prospective analysis of 608 patients with stable coronary artery disease, she explained, found three distinct leukocyte telomere trajectories: telomere shortening in 45 percent, telomere maintenance in 32 percent, and telomere lengthening in 23 percent. In that study, the rate of telomere shortening over five years was inversely related to baseline blood levels of omega-3 fatty acids, a dietary factor associated with prolonged survival in cardiac patients. Then a separate analysis of 236 healthy elderly men and women observed a similar pattern of leukocyte telomere changes over time, with 30 percent of the sample showing telomere shortening, 46 percent showing telomere maintenance, and 24 percent showing telomere lengthening.

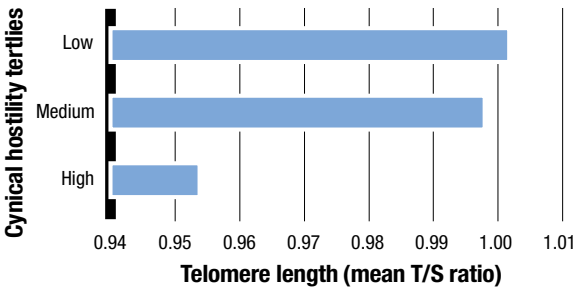
Corresponding findings have also been reported in healthy young adults and in a large multigenerational cohort followed over 10 years, she said.

The study was funded by the British Heart Foundation, United Kingdom Medical Research Council, and Bernard and Barbro Fund.

An abstract of "Hostility and Cellular Aging in Men From the Whitehall II Cohort" is posted at <www.biologicalpsychiatryjournal.com/article/S0006-3223(11)00855-9/abstract>. ■

Hostility Eats Away At Telomeres

The average white blood cell telomere length is shown for men who scored low, medium, or high on hostility. The telomere length of the high-hostility group is markedly less than that of the low-hostility group or of the medium-hostility group.



Source: Lena Brydon, Ph.D., et al., *Biological Psychiatry*, October 5, 2011

Positive Parenting Techniques Alter Child's Genetic Susceptibility

Understanding that some children may be more reactive and sensitive to their environment based on their genetic makeup could lead the way to more personalized parenting interventions.

BY LESLIE SINCLAIR

Which is more likely to determine children's outlook on life: their genetic makeup or the quality of parenting they receive? Both are important, but good parenting can actually influence genetic susceptibility.

A group of researchers from the University of Denver, Rutgers University, the University of Colorado-Boulder, and the University Medical Center Groningen in Groningen, the Netherlands, recently teamed up to investigate their hypothesis that children and adolescents carrying short alleles of 5-HTTLPR, the so-called depression gene, would be more influenced and responsive to supportive and unsupportive parenting and would exhibit higher and lower positive affect, respectively. They investigated this potential gene-environment interaction (GxE) in three independent studies of children and adolescents aged 9 through 15.

The first study included 307 children and adolescents recruited from public schools. Each child provided a DNA sample by buccal swab. A parent completed the Alabama Parenting Questionnaire, a measure of positive parenting, and the children completed the positive affect subscale from the Positive Affect and Negative Affect Scale for Children.

The second study had 197 children and adolescents recruited from public schools. Each child provided a DNA sample by buccal swab and completed the Positive Affect and Negative Affect Scale for Children. Parenting behaviors were ascertained during videotaped observations of parent-child interactions in the laboratory. Behaviors were coded on a 1 to 5 scale by a trained team of reliable coders.

The third study consisted of 1,370 participants in the Dutch prospective cohort study Tracking Adolescents Individual Lives Survey (TRAILS). Perceived positive parenting was assessed by the 18-item Emotional Warmth scale of the EMBU (a Swedish acronym for My Memories of Upbringing) for children (EMBU-C), and by the Behavioral Activation System Drive scale of the Behavioral Inhibition System/Behavioral Activation System scales, selected for high correlation with positive affect as assessed with the Positive Affect and Negative Affect Scale. DNA was extracted from buccal swabs or blood samples from the children.

The researchers presented the results of all three studies together. "Results from all three studies showed that youth homozygous for the functional short allele of 5-HTTLPR were more responsive to parenting as environmental context in a 'for better and worse' manner. Specifically, the genetically susceptible youth who experienced unsupportive, nonpositive parenting exhibited low levels of positive affect, whereas higher levels of positive affect were reported by genetically susceptible youth under supportive and positive parenting conditions," wrote Benjamin Hankin, Ph.D., an associate professor of clinical child and developmental cognitive neuroscience psychology at the Univer-

please see ***Parenting*** *on page 31*

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Credit: Blaj Gabriel/ Shutterstock.com

Children and adolescents who experience warm, sensitive, supportive, and positive parenting have been shown to exhibit higher levels of positive affect.

COMPILED BY LESLIE SINCLAIR

Onfi Approved for Certain Seizures

On October 24, Lundbeck announced that the Food and Drug Administration (FDA) has approved the oral antiepileptic drug ***Onfi (clobazam)*** as adjunctive therapy for seizures associated with Lennox-Gastaut syndrome (LGS) in patients aged 2 and older. Onfi will be available in U.S. pharmacies in early January and is a federally controlled Schedule IV substance.

The FDA approval was based on two multicenter controlled studies similar in terms of disease characteristics and prior treatment of patients, including a phase 3 study in 238 patients with a current or prior diagnosis of LGS. The study's primary endpoint was the percent reduction in the weekly frequency of drop seizures (atonic, tonic, or myoclonic), from the four-week baseline period to the 12-week maintenance period. A phase 2 dose-ranging study was also conducted (n=68) that was consistent with results of the phase 3 trial.

The FDA's announcement of Onfi's approval is posted at <www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm276932.htm>.

New Bupropion Formulation Approved

IntelGenX announced November 11 that the FDA has approved ***CPI-300, a high-strength formulation of bupropion***, for patients with major depressive disorder. CPI-300 is the only single-dose 450 mg formulation of bupropion; the previous highest dosage form was 300 mg, manufactured by several companies and found in the branded product Wellbutrin. When bupropion is used as an antidepressant, 450 mg is the maximum recommended daily dosage. The new formulation is expected to be available in pharmacies in the second quarter of 2012.

European Approval for Adasuve Sought

On October 27, Alexza Pharmaceuticals announced that it has submitted its Marketing Authorization Application to the European Medicines Agency for ***Adasuve (loxapine)***, an antipsychotic approved in the United States in oral and injectable forms. Adasuve uses Alexza's Staccato system to vaporize the drug for deep-lung inhalation and rapid treatment of agitation in patients with schizophrenia or bipolar disorder.

Appetite Suppressant Closer to Approval

An experimental weight-loss drug may be one step closer to FDA approval. Researchers at the University of Alabama's Nutrition Obesity Research Center published online November 3 in *Obesity* the results of a 56-week randomized, controlled trial to evaluate the safety and efficacy of ***Qnexa, a controlled-release combination of phentermine and topiramate***. In addition to average weight loss of 14.4 percent of initial body weight among those who completed the study at the top dose of the combination, severely obese patients had improvements in blood pressure, glucose, triglycerides, and cholesterol. The researchers said their results with Qnexa suggest the potential to treat severely obese patients effectively without surgery.

Vivus, the developer of Qnexa, also announced last week that the FDA has accepted the New Drug Application for Qnexa as an obesity treatment. A decision on the application is expected in April 2012.

Concern Raised Over Serotonin Syndrome

On October 20, the FDA issued Drug Safety Communication notices to update health care professionals and the public on the potential for serotonin syndrome in patients receiving ***methylene blue*** or ***Zyvox (linezolid)***. Concerns were first characterized by the FDA in July.

The agency said that most cases from their Adverse Event Reporting System of serotonin syndrome in patients given serotonergic psychiatric medications and methylene blue occurred in the context of parathyroid surgery that involved the intravenous administration of methylene blue as a visualizing agent. Methylene blue doses ranged from 1 mg/kg to 8 mg/kg. "Because methylene blue is not an FDA-approved drug at this time, and limited data exist regarding its use in various settings, it is not known whether there is a risk of serotonin syndrome in patients taking serotonergic psychiatric medications who are given methylene blue by other routes (e.g., orally or by local tissue injection) or at intravenous doses lower than 1 mg/kg," the FDA advised.

The FDA said that not all serotonergic psychiatric drugs have an equal capacity to cause serotonin syndrome with either methylene blue or linezolid, and that cases occurred in patients taking specific serotonergic psychiatric drugs.

The October and July Drug Safety Communication notices for both methylene blue and linezolid are posted at <www.fda.gov/Drugs/DrugSafety/ucm199082.htm>.

Chantix's Hospitalization Risk Assessed

On October 24, the FDA announced that it had reviewed the results from two FDA-sponsored epidemiological studies that evaluated the risk of neuropsychiatric adverse events associated with the smoking-cessation drug ***Chantix (varenicline)***. Neither study found a difference in risk of neuropsychiatric hospitalizations between Chantix and nicotine-replacement therapy. However, according to the FDA, both studies had a number of design limitations, including only assessing neuropsychiatric events that resulted in hospitalization and not having a large enough sample size to detect rare adverse events. Although these two studies did not suggest an increased risk of neuropsychiatric events that result in hospitalization, they do not rule out an increased risk of other neuropsychiatric events with Chantix.

The FDA advised that health care professionals and patients should continue to follow the recommendations in the physician label and the patient Medication Guide and monitor for neuropsychiatric symptoms when prescribing or using Chantix. Based on the FDA's assessment of available data, the agency continues to believe that the drug's benefits outweigh the risks and that the current warnings in the Chantix drug label are appropriate.

The FDA is continuing to evaluate the risk of neuropsychiatric events with Chantix. The drug manufacturer is conducting a large safety clinical trial to assess neuropsychiatric adverse events, and results from this study are expected in 2017.

The FDA Drug Safety Communication regarding Chantix is posted at <www.fda.gov/Drugs/DrugSafety/ucm276737.htm>. ■

Study Implicates Neurotransmitter In Adolescent Depression

Investigation of anhedonia—a specific symptom of major depressive disorder—in adolescents may advance understanding of depression's neurobiology.

BY LESLIE SINCLAIR

Teenagers are the masters of indifference. They invented rolled eyes, shrugged shoulders, and "whatever." But when typical teen apathy crosses the line into anhedonia, the reduced capacity to experience pleasure that is a core symptom of major depressive disorder (MDD), are there neurobiological abnormalities present?

Researchers at the New York University Child Study Center and the Nathan S. Kline Institute for Psychiatric Research recently sought to determine whether the presence of anhedonia may involve alterations in the major inhibitory neurotransmitter system of gamma-aminobutyric acid (GABA). Studies in adults have documented decreases of cortical GABA in melancholic MDD and decreases of glutamine (the molecular precursor of GABA and glutamate) in anhedonic depressed patients, but no studies have yet investigated brain GABA alterations in adolescents with MDD, said the researchers in the online October 3 *Archives of General Psychiatry*.

Vilma Gabbay, M.D., the medical director of the Anita Saltz Institute for Anxiety and Mood Disorders and Leon Levy assistant professor of child and adolescent psychiatry at the New York University School of Medicine, and her colleagues studied 20 psychotropic medication–free adolescents with a current episode of MDD lasting eight weeks or more; 10 of them were anhedonic, 12 were female, and all were aged 12 to 19. They all met the *DSM-IV-TR* diagnosis of MDD and displayed a severity score of 38 or more on the Children's Depression Rating Scale-Revised (CDRS-R). Potential participants were excluded if they had a significant medical or neurological disorder, an IQ under 80, claustrophobia, an MRI contraindication as assessed by a standard safety-screening form, positive urine toxicology test results, or a positive pregnancy test result. A group of 21 control subjects matched for sex and age were also studied.

Using an approach that had already been demonstrated in several investigations to assess anhedonia severity, the investigators required the presence of both anhedonia and lack of mood reactivity based on semistructured interviews conducted by two child and adolescent psychiatrists (members of the research team); parents were included in the interview for participants under age 18. Anhedonia scores were computed by summing the responses associated with anhedonia on the self-rated Beck Depression Inventory and the clinician-rated CDRS-R.

The anterior cingulate cortex (ACC) region of the brain has been strongly implicated in MDD, and the region appears to be highly relevant in anhedonia, according to Gabbay and colleagues, who assessed ACC GABA levels in their study participants. "We used an imaging method called magnetic resonance spectroscopy, or MRS, which allows the noninvasive assessment of metabolite and chemical concentrations within the brain, to evaluate the ACC region in the study subjects and in the control group," Gabbay explained to *Psychiatric News*. "Since GABA concentrations are considerably lower than concentrations of other neurochemicals, we used J-Editing MRS methodology to assess GABA."

Compared with the controls, adolescents with MDD had significantly less GABA in their ACC regions. When Gabbay and her colleagues looked more closely at the two groups, they realized there was no difference in GABA levels between adolescents with MDD but no anhedonia and the control group: GABA appeared to be specifically implicated in anhedonia.

These findings suggest that GABA, the major inhibitory neurotransmitter in the brain, may be implicated in adolescents with MDD accompanied by anhedonia, according to Gabbay and colleagues, who cautioned that future larger studies replicating these findings as well as building on them are warranted.

Gabbay described the direction she and her colleagues have plotted to advance their findings: "We have initiated the assessment of glutamate concentrations in depressed adolescents using a newly developed MRS imaging technique. Numerous animal studies have linked glutamatergic alterations with anhedonia and depression models; moreover, the syntheses of glutamate and GABA are closely linked. As such, assessment of glutamate is a key to further enhancing our understanding of the neurobiology of MDD and anhedonia."

This study was supported by multiple grants from the National Institutes of Health, the Chrissy Rossi National Alliance for Research on Schizophrenia and Depression Award, and by gifts from the Leon Levy and Anita Saltz foundations.

An abstract of "Anterior Cingulate Cortex Gamma-Aminobutyric Acid in Depressed Adolescents: Relationship to Anhedonia" is posted at <www.ncbi.nlm.nih.gov/pubmed/21969419>. ■

AMA

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tional tools and programs to promote "the broad and appropriate implementation of nonpharmacological techniques to manage behavioral and psychological symptoms of dementia in nursing home residents and the cautious use of medications."

Psychiatrist Paul Wick, M.D., a member of the Section Council on Psychiatry, called the Grassley proposal a "disservice to patients." And it was Wick who offered a change to the original proposal—which would have had AMA collaborate with the Centers for Medicare and Medicaid Services on developing educational tools—amending it so that the AMA would be collaborating with medical specialties rather than with the government.

The proposal on use of antipsychotics for dementia patients received broad support from physicians in other disciplines. Timothy Beittel, M.D., an alternate delegate from North Carolina who works as a medical director in a long-term-care facility, said physicians are already leaving the practice of medicine in long-term care in part because of burdensome administrative requirements.

Charles Cefalu, M.D., a delegate from the American Geriatric Society, told delegates that 60 percent to 80 percent of patients in long-term-care facilities have dementia. "We recognize the importance of using nonpharmacologic interventions to address [behavioral manifestations of dementia]," he said. "But often in an emergency situation we cannot."

He added that for the safety of the patient, the caregivers, and the family, the use of an antipsychotic is often the best option. "Currently the standard of care if an antipsychotic is being used is to recommend discontinuation or reduction [of dose] as appropriate when the behavior is under control," Cefalu said. "Sometimes, however, we have to come back and implement a higher dose for the safety of the patient."

For that reason he called the Grassley proposal an "overly burdensome" one that would "handcuff" physicians treating dementia patients in an emergency situation.

Other Items of Interest

Other items relevant to psychiatry included a report by the Council on Medical Services that would have the AMA advocate that patients with intellectual disabilities be designated a "medically underserved group," allowing federal resources to be available to improve access to care and quality of services for those patients (see AMA Says Intellectual Disability Warrants 'Underserved' Designation). Also, the Council on Science and Public Health produced reports addressing an urgent nationwide shortage of prescription drugs and issues surrounding the approval of "biosimilar" drugs (see AMA: Medication Shortages Are Public-Health Emergency).

Much of the debate around issues at the Interim Meeting—particularly around the financing of the Medicare and Medicaid programs—took place in the shadow of impending congressional deliberations about how to cope with the nation's debt: at the time of the meeting, the deadline for the so-called "supercommittee," charged with developing recommendations for reducing the deficit, was just days away. The committee failed to reach an agreement, however, thereby triggering automatic sequestration—severe, across-the-board cuts in spending—scheduled to go into effect in 2013.

For these reasons, it is likely that the AMA's annual meeting in June 2012—when the 2012 presidential race will be in full swing—will be especially lively. Medicare and Medicaid, implementation of the new health care law, and the impact of a Supreme Court ruling on the insurance mandate in the reform law will figure heavily at the June meeting.

Garnering Suppport for HR 1700

At the Interim Meeting, delegates also reaffirmed the AMA's commitment to a high-priority grassroots and legislative campaign to garner public support for the AMA-sponsored Medicare Patient Empowerment Act (HR 1700), which would allow physicians and patients to enter into private Medicare contracts with each other for a fee different from the Medicare fee, while still allowing patients to use Medicare benefits for partial reimbursement.

Under current regulations, the only way physicians can negotiate a separate fee is by formally "opting out" of Medicare, which removes the physician from Medicare for two years and necessitates each patient's signing a statement acknowledging that he or she cannot be reimbursed by Medicare. But at last year's AMA Annual Meeting in June, delegates approved a resolution calling for the AMA to advocate for the new payment option (*Psychiatric News*, June 16, 2010).

Also approved after much debate was the Council on Medical Services' Report on Medicaid Block Grants and Maintenance of Effort Requirements, which recommends that state governments be given the freedom to develop and test different models for improving coverage for patients with low incomes. The CMS report also asks AMA to oppose any efforts to repeal the Medicaid "maintenance of effort requirements" in the health reform law and the American Recovery and Reinvestment Act; both of those laws mandate that states maintain eligibility levels for all existing adult Medicaid beneficiaries until 2014 and for all children in Medicaid and the Children's Health Insurance Program until 2019.

Not approved was a recommendation in the report that would have put AMA support behind giving states the right to convert Medicaid from an entitlement program to a block grant program as long as certain safeguards were in place.

Supportive testimony stressed that allowing states the option of converting to a block-grant program would help to address Medicaid program costs and underscored the importance of states having the ability to innovate in their approaches to cover their Medicaid-eligible populations. But many physicians opposed the recommendation, saying that states that choose to convert Medicaid to a block-grant program would most likely cut enrollment, decrease provider fees, and reduce benefits.

The council will submit a follow-up report on the subject at the June 2012 meeting.

Texts of items approved by the House of Delegates is posted at <www.ama-assn.org/ama/pub/meeting/reports-resolutions-listing.shtml>. ■

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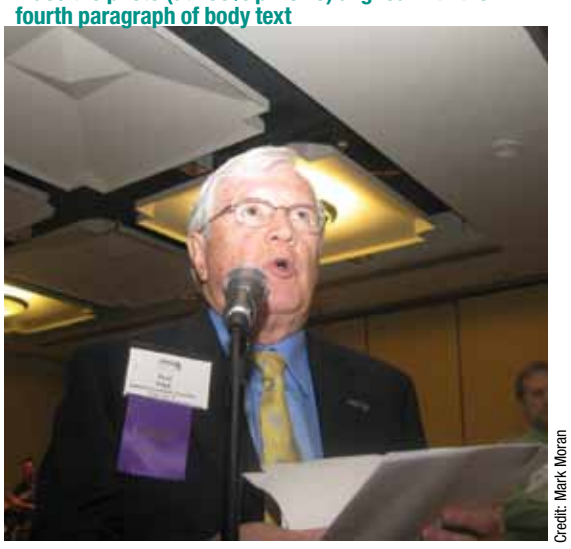

Credit: Mark Moran

Paul Wick, M.D., a member of the Section Council on Psychiatry, believes the Grassley proposal is a "disservice to patients."

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Credit: Ted Grudzinski

Robert Phillips, M.D., a member of the Section Council on Psychiatry, chairs the AMA's Reference Committee on Constitution and Bylaws at last month's AMA meeting.

Huntington's

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tington's disease could counter disease symptoms in the mice. Using multiple well-validated behavioral tests, they found that the combined drug treatment alleviated movement deficits, suppressed anxiety- and depressive-like behaviors, improved motor-skill learning and coordination, and prolonged average survival—from 32 weeks to 42 weeks.

The scientists also gave the two drugs separately to other Huntington's mice and found similarly positive results, but not to the extent as when the two drugs were given together.

Two Key Proteins Increase

Analysis of brain tissue from the drug-treated mice demonstrated not only inhibition of glycogen synthase kinase 3 and histone deacetylases, but an increase in two proteins crucial for neuronal growth and protection—brain-derived neurotrophic factor and heat shock protein 70. These drug-induced brain changes contributed to the beneficial behavioral effects and prolonged survival observed in the mice that had received the drugs, the scientists suggested.

Thus, considering that "lithium and valproate are already Food and Drug Adminstration–approved medications with a long history of safe use in humans, and that the devastating symptoms of Huntington's progressively intensify without remission until death, we believe that our data in these two distinct mouse models provide a strong rationale for using a combination of lithium and valproate to treat Huntington's patients," Chuang told *Psychiatric News*.

Human Trials Yet to Get Under Way

A protocol for studying the combined use of lithium and valproate in Huntington's subjects was approved by the National Institutes of Health (NIH), Chuang pointed out, and he would have been a co-investigator. But the trial did not get off the ground because the principal investigator left NIH. In any event, in light of these new findings, "I very much hope that some clinicians will be interested in conducting a trial using both lithium and valproate for Huntington's," he said.

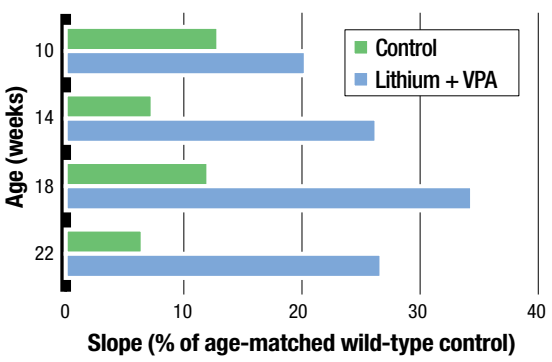
Meanwhile, findings from a few small, short clinical trials do suggest that lithium or valproate might benefit Huntington's patients. For example, a 1973 trial found that lithium treatment strikingly reduced chorea and markedly improved voluntary movements in Huntington's subjects. And a 2000 trial found that valproate helped relieve both movement disorders and psychosis in the subjects.

The research was funded by the Intramural Research Program of the National Institute of Mental Health.

An abstract of "Combined Treatment With the Mood Stabilizers Lithium and Valproate Produces Multiple Beneficial Effects in Transgenic Mouse Models of Huntington's Disease" is posted at <www.nature.com/npp/journal/v36/n12/abs/npp2011158a.html>. ■

Co-Treatment Benefited Motor Skills

In a control group of Huntington's transgenic mice, motor-skill learning tended to decline with age. However, symptoms were significantly alleviated in the transgenic mice that received lithium and valproate (VPA).



Source: De-Maw Chuang, Ph.D., et al., *Neuropsychopharmacology*, November 2011

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Depression Risk Increases When Gene, Trauma Interact

When certain variants of a gene involved in combating stress are combined with a history of childhood trauma, it increases depression susceptibility. So do higher concentrations of the protein made by the gene.

BY JOAN AREHART-TREICHEL

The glucocorticoid receptor—the major regulatory element of people's stress hormone apparatus—may also play a role in the susceptibility to psychiatric illness. Or, more specifically, a gene that modulates glucocorticoid receptor functioning—the FKBP5 gene—may be involved.

For example, one study found that a particular variant of the FKBP5 gene called rs9470080 increased the likelihood that being a victim of child abuse will raise the risk for posttraumatic stress disorder. Another study found that the same variant increased the likelihood of childhood trauma provoking suicide.

Now scientists report that other variants of the FKBP5 gene increase the probability that childhood trauma will contribute to development of depression. The lead investigator was Petra Zimmermann, Ph.D., a scientist at the Max Planck Institute of Psychiatry in Munich, Germany. The results appeared in the October *American Journal of Psychiatry*.

The study included a large community sample of almost 900 people. They were between 14 and 24 years old when the study began. None had had a major depression. All were evaluated for adverse life events, and all were genotyped for the FKBP5 gene. The subjects were then followed for 10 years to determine whether any of them developed major depression.

The scientists found that experiencing psychological trauma was a risk factor for the development of major depression. A major depressive episode occurred in 27 percent of subjects who had been exposed to severe trauma, such as childhood sexual abuse, rape, physical violence, or a serious accident, whereas it occurred in 17 percent of those who had not been so exposed—a significant difference.

The scientists then found that possessing any of five variants of the FKBP5 gene augmented the capability of traumatic events to precipitate a major depression. Individuals who had been traumatized and who carried two copies of any of the five variants were more likely to experience a major depression than individuals who had been traumatized and who carried only one copy. For example, 55 percent of the subjects who carried two copies of the variant rs36800373 and who had been severely traumatized experienced major depression by age 34, compared with 25 percent of subjects who carried only one copy of this variant and who had been severely traumatized.

Thus, "trauma exposure during childhood and adolescence was a strong risk factor for developing subsequent depression in genetically vulnerable individuals, even within the extended time period of 10 years," the researchers concluded.

In related research, Zimmermann told *Psychiatric News* that she and her team found that high concentrations of the protein made by the FKBP5 gene increased depression susceptibility. As a result, one of them is developing FKBP5 protein inhibitors. They will then look to see whether any of these inhibitors have antidepressant capability, especially in people with high FKBP5 protein levels.

The study was funded by the German Federal Ministry of Education and Research and the German Research Society.

"Interaction of FKBP5 Gene Variants and Adverse Life Events in Predicting Depression Onset: Results From a 10-Year Prospective Community Study" is posted at <http://ajp.psychiatryonline.org/data/Journals/AJP/4334/appi.ajp.2011.10111577.pdf>. ■

Psychiatry Fellowship

Psychiatry residents interested in pursuing a career in child and adolescent psychiatry are invited to apply for APA's Child and Adolescent Psychiatry Fellowship. The program provides mentorship by senior child and adolescent psychiatrists and funding to participate in a wide array of sessions at APA's 2012 and 2013 annual meetings.

The fellowship is open to PGY-1 through PGY-3 residents. Applicants must be APA members and have approval from their training director or department chair. The fellowship is supported by an unrestricted educational grant from Shire Pharmaceuticals.

The deadline for applications is January 12. Details are posted at <www.psych.org/share/OMNA/APAShireChildAdolescentPsychiatryFellowship.aspx>. Applicants should call (703) 907-7324 to confirm receipt of their application. ■

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appropriately, but in another it may serve to gratify the physician inappropriately. In the first part of the table, we illustrate examples of behaviors upholding professional boundaries in psychiatry.

The long answer is that professionalism in psychiatry involves constant and honest self-reflection about one's aims and motivations, and it also involves a current understanding of the emerging trends in ethics that serve as the basis for the public trust in our field. Psychiatry is, in fact, held to a different standard than other disciplines in medicine because of the nature of the diseases we treat and the potential vulnerability of our patients; also, the therapeutic relationship itself is the major vehicle for carrying out our treatments. It is both our greatest strength clinically and our greatest vulnerability professionally. Many may argue that society should set higher expectations for other fields of medicine.

Some would also argue that with the heightened prominence of cultural considerations in clinical care, some patients may "ethically" receive one kind of care whereas others may receive a different, perhaps lesser, form of care. These concerns may be true—nevertheless, professionalism in psychiatry, and medicine more broadly, involves the willing acceptance of certain ethical obligations as reflected in four fundamental ethics "skills." (These skills are listed under the second heading of the table)

Professionalism and the ethical underpinnings of our field will only grow in importance in the coming years. Public scrutiny of all professions has increased in response to scandals in arenas as diverse as acceptance of philanthropic gifts, "heroic" behavior to save a patient from suicide, and financial arrangements with pharmaceutical companies. The issues are becoming even more complicated with the development of new technologies, such as psychiatric genetics and biomarkers and the use of surgical interventions for psychiatric indications, not to mention the rapid-paced developments in cyberspace and their implications for doctor-patient communication. The ethics of the field will move ahead regardless of whether we pay attention. It is to our advantage, as well as to the advantage of our patients, if we lead rather than follow in these efforts. ■

Gene Deletions

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researchers' other findings might have clinical implications, she pointed out. But the 13 biological pathways that she and her colleagues linked to variations in both gene number and variations in gene composition are known to affect the development of the central nervous system. Four of the 13 concern cholesterol, which is an important brain component.

The study was funded by the Wellcome Trust and the United Kingdom Medical Research Council.

"Investigating the Contribution of Common Genetic Variants to the Risk and Pathogenesis of ADHD" is posted at <http://ajp.psychiatryonline.org/Article.aspx?ArticleID=180117>. ■

Parenting

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sity of Denver, and his colleagues.

Lead author Hankin explained how this particular GxE study differed from previous works: "Prior studies measured children's temperament, not genetic susceptibility. And most previous research examined only lack of negative environments and lack of negative outcomes, not the presence of positive outcomes in the context of positive environments," he told *Psychiatric News*. "Our intention was to evaluate the full range of environments, from positive to less supportive parenting, and child outcomes from positive emotion to lack of positive emotion, for environmental contexts (parenting) and outcomes (positive emotion) that have clear importance to the development of psychiatric disorders, resilience, and socioemotional functioning."

Hankin also stressed how these findings might affect how 5-HTTLPR is viewed: "When the environment is negative and stressful, negative outcomes such as depression are more probable for individuals carrying a short allele. However, our data show that the short allele also affects individuals when they are reared in very positive, supportive environments; these individuals exhibit high levels of positive emotion. These findings further the idea that certain genes may not be 'vulnerability' genes that place individuals at risk for psychopathology, but rather 'plasticity' genes that affect individuals' sensitivity and reactivity to environments. . . ."

The U.S. portion of this work was supported by a grant from the National Institute of Mental Health.

"Differential Susceptibility in Youth: Evidence That 5-HTTLPR x Positive Parenting Is Associated With Positive Affect 'For Better and Worse' " is posted at <www.nature.com/tp/journal/v1/n10/full/tp201144a.html>. ■

Association News

Let's Stay in Touch

Does APA have your e-mail address on file? Or if it's changed, have you remembered to provide your new address? If not, please update your member profile immediately. It's easy: just go to the APA Web site at <https://myaccount.psych.org/MembershipProfileUpdate/tabid/163/Default.aspx>, log in, click on "Contact Information," and update your information. If you have not provided an e-mail address before, click on "Add new communication method" and then enter the information. And while at the site, take a moment to check over your other contact information and update as necessary. APA wants to stay in touch with you!

Agitation

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order," even when they have other nonpsychiatric medical disorders.

Triage begins with initial contact at a community mental health center, medical office, emergency department, or private psychiatric office, she said. The staff at the front desk should be trained to recognize the signs of agitation so that clinicians can begin the process of deescalation and diagnosis as soon as possible.

"Often we see patients who are just 'difficult,' although not diagnosably agitated, and we can hone our deescalation skills on them."

Obtain a brief history, either from the patient, charts, the front desk, bystanders, family, emergency medical technicians, or police, she said. Take vital signs and blood-sugar and oxygenation levels.

Severe headache, muscle stiffness, heat intolerance, new-onset psychosis, seizures, head trauma, or focal neural signs require immediate medical attention in an emergency department, she emphasized.

"If the patient can be deescalated, and agitation is a common symptom of a psychiatric illness, then routine management is appropriate."

Relegate Drugs to Second-Line Treatment

Emergency room physicians have traditionally relied on drugs to sedate agitated patients. The new guidelines take a more circumspect view.

"Medications are the second line for treatment," said David Pepper, M.D., acting director of emergency psychiatric services at Hartford Hospital in Connecticut. Pepper spoke on behalf of the guidelines panel's medications-group chair, David Feifel, M.D., Ph.D., a professor of psychiatry at the University of California, San Diego, who was unable to attend the meeting.

"Use medications only when verbal techniques fail, but use them judiciously, for calming, not sedation," said Pepper. "We can't evaluate patients physically or psychiatrically when they're asleep and we can't discharge them either. So we want to calm them so they can participate in their care."

Emergency psychiatrists have several choices of drugs for agitated patients, said Pepper. "But don't reach for the IM Haldol right away."

Three Drug Types Discussed

He discussed three groups of medications. First-generation antipsychotics have been around for awhile and have proven efficacy, he said. They are dopamine-2 receptor antagonists, have little effect on vital signs, and minimal drug/drug interactions.

Second-generation antipsychotics work at the D_2 receptors and are also 5HTTA agonists. They, too, have good efficacy and come in different forms: tablets, IM, soluble tabs, and oral solutions that can give patients a choice.

Benzodiazepines work indirectly on GABA receptors and are preferred for use in cases of stimulant intoxication and alcohol withdrawal. They are also safer than antipsychotics for cases of "unknown" cause.

"But these drugs are not a cure," said Pepper. "We still have to find out what the underlying cause of the agitation is."

In the clinic, oral medications should be offered first, although some patients ask for an injection, he said. "It should be the patient's choice."

The sickest patients may still need seclusion or restraint when verbal interventions are insufficient, but psychiatrists should not stop deescalation techniques even then, said Holloman. Continuing to work with the patient may gain his or her cooperation and participation in treatment decisions, including decisions about how to get out of seclusion or restraint as soon as possible, he said.

The new guidelines can be used to develop policies in every emergency department, said Holloman.

"We can teach these techniques, but we have to practice them as well," he said. "Often we see patients who are just 'difficult,' although not diagnosably agitated, and we can hone our deescalation skills on them."

Ultimately, he said, the goals when caring for agitated patients are to exclude medical causes of symptoms, rapidly stabilize the acute crisis, avoid coercion, treat in the least-restrictive setting, form a therapeutic alliance with the patient, and formulate an appropriate treatment plan.

The Web site of the American Association for Emergency Psychiatry is <http://emergencypsychiatry.org/>. ■

legal news

Soda

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Appelbaum, a former APA president, noted that the increase in the rate of violence is seen with as few as two to four cans of soda a week (one-half can or less per day). "So if the effect is due to the consumption of soda, the effect must be remarkably potent, which I believe increases the likelihood that we're looking at an epiphenomenal finding here."

He also pointed out that the group being studied had a high rate of violence, whether or not soda was consumed: "31 percent of the entire sample reported carrying a knife or gun, and 44 percent reported engaging in violence with peers. The rate of violence increased to only 57 percent with five or more cans of soda per week. The authors characterize that as a 'strong association,' but the impact on the actual rate of violence is modest. And whether these findings would generalize to groups with lower base rates of violence is not at all clear," Appelbaum said.

The study was supported by the Centers for Disease Control and Prevention.

An abstract of "The 'Twinkie Defense': The Relationship Between Carbonated Nondiet Soft Drinks and Violence Perpetration Among Boston High School Students" is posted at <http://injuryprevention.bmj.com/content/early/2011/10/14/injuryprev-2011-040117.short?g=w_injuryprevention_ahead_tab>. ■

Meth Users

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including suicidal behavior, and obtained blood specimens for HIV and hepatitis C serology. Participants received a small stipend for each visit.

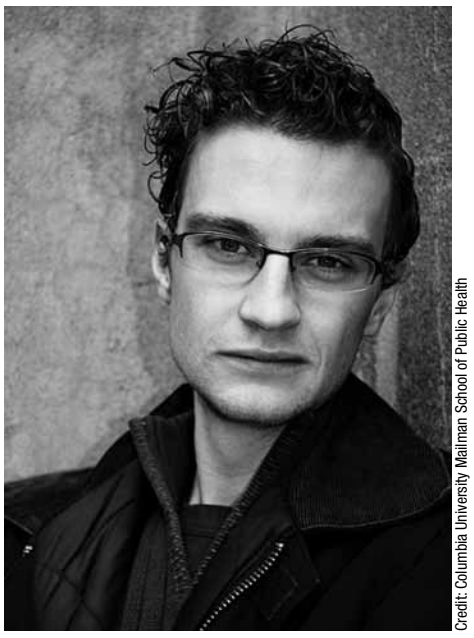
"This is one of North America's largest cohorts of injection drug users," Brandon Marshall, Ph.D., UHRI's analytic coordinator, a postdoctoral fellow at the Columbia University Mailman School of Public Health and lead author of the report, told *Psychiatric News*. "Most of these users—about 5,000 of them—are concentrated in a very small neighborhood, making it an 'ideal' environment for this type of study. We were able to recruit about 1,700 of those 5,000. We have very good rapport in the community, and our study is one of the main points of access to health care for this population, so this is a very well utilized study with a high rate of follow-up."

In a seven-year study that ended in May 2008, the researchers evaluated 1,873 participants. The median age of the sample was 31; 36.2 percent were female, and 601 (32.1 percent) were of Aboriginal ancestry. In total, 149 (8.0 percent) of the group reported a suicide attempt. The primary outcome for this part of their analysis was time to first report of suicidal behavior, and the primary exposure of interest was self-reported methamphetamine injection at least once in the prior six months.

"In this seven-year study, we found that IDUs who injected methamphetamine had an 80 percent greater risk of attempting suicide than those who did not, even after taking into account a wide range of potential confounders," wrote Marshall and colleagues. They also investigated whether a dose-response relationship existed between the frequency of methamphetamine injection and increased likelihood of suicidal behavior, and discovered it did—compared with a period of no methamphetamine injection, infrequent methamphetamine injection was a predictor of attempting suicide, while frequent methamphetamine injection was associated with the greatest risk of attempting suicide.

"Although the etiologic pathway between injecting methamphetamine and suicidal behavior requires further investigation, it is likely that a combination of neurobiological, social, and structural mechanisms account for this association," suggested Marshall and colleagues.

"Compared to other IDUs, it is possible that methamphetamine users have more isolated social networks and thus poorer social support systems. . . . Future studies that combine neurobiologic analyses with social epidemiologic approaches may provide greater insight into these potential mechanisms."



Credit: Columbia University Mailman School of Public Health

Brandon Marshall, Ph.D.: This study is one of the first to examine suicidal ideation in injection drug users in a longitudinal manner.

The researchers said that although a variety of techniques was undertaken to ensure that the sample used was representative, caution is recommended when generalizing these findings to other settings.

An abstract of "Injection Methamphetamine Use is Associated With an Increased Risk of Attempted Suicide: A Prospective Cohort Study" is posted at <www.ncbi.nlm.nih.gov/pubmed/21676557>. ■

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Brain Training

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individuals who are extremely physically fit, as well as those who are much less so, can benefit from training, depending on how the training is adapted for the individual.

For a healthy brain, small amounts of training on higher-level cognitive functions may produce some lasting improvements. But Vinogradov argued that for the impaired brain, such tasks need to be broken down into component parts. She drew an analogy to how a beginning tennis player with poor coordination might learn a tennis serve by breaking it down in very specific components: hand-eye coordination, the toss of the ball, the follow-through with the swing. These components would be practiced intensively one at a time before putting them together into the complete tennis serve.

So, too, with the tasks of attention and working memory for a person with schizophrenia. "When the brain is learning new verbal and auditory information, verbal and auditory stimuli are coming through the auditory system," she said. "We know these systems aren't working very well in schizophrenia so we have to 'tune up' the brain to be a better listener and to be better at attending to and representing bits and pieces of auditory and verbal information and holding them in working memory. In this way, we can drive improvements in these distributed neural systems at every level, by helping to clean up the signal in an otherwise noisy system."

Vinogradov emphasized that brain training using these principles of neuroplasticity must be rigorous and intensive, adapted to the individual level of skill, and provide sufficient reward to engage and motivate subjects.

In a study published in the *American Journal of Psychiatry* in 2009, 55 clinically stable schizophrenia subjects were randomly assigned to either 50 hours of computerized auditory training or a control condition using computer games. Those receiving auditory training engaged in daily computerized exercises that placed implicit, increasing demands on auditory perception through progressively more difficult auditory-verbal working-memory and verbal-learning tasks.

Relative to the control group, subjects who received active training showed significant gains in global cognition, verbal working memory, and verbal learning and memory. They also showed reliable and significant improvement in auditory psychophysical performance; this improvement was significantly correlated with gains in verbal working memory and global cognition.

"These gains may be due to a training method that addresses the early perceptual impairments in the illness, that exploits intact mechanisms of repetitive practice in schizophrenia, and that uses an intensive, adaptive training approach," Vinogradov and colleagues wrote.

Most promising, she presented evidence that improved cognition from this kind of training was correlated with increases in quality-of-life scores, six months after training.

Moreover, she said that brain-derived neurotrophic factor (BDNF) may serve as a biomarker of cognitive improvement. In a paper published in *Biological Psychiatry* in 2009, schizophrenia subjects who engaged in computerized cognitive training designed to improve auditory processing showed significant cognitive gains and a significant increase in serum BDNF compared with subjects who played computer games. This increase was evident after two weeks of training, and after 10 weeks in the active condition, subjects 'normalized' their mean serum BDNF levels, whereas the control group showed no change.

Much of the research has been with patients who have been ill for many years, and Vinogradov presented preliminary evidence that such brain-training techniques may be especially useful for patients much earlier in the disease process.

"The field of schizophrenia research has been characterized by nihilism, the idea that the brains of people with schizophrenia are irreparably broken," Vinogradov said. "But I would like to argue that the brain is not immutably fixed, and that even in people with schizophrenia these neural systems show a high degree of plasticity and can change."

"Using Neuroplasticity-Based Auditory Training to Improve Verbal Memory in Schizophrenia" is posted at <http://ajp.psychiatryonline.org/article.aspx?articleID=100952>. An abstract of "Is Serum Brain-Derived Neurotrophic Factor a Biomarker for Cognitive Enhancement in Schizophrenia?" is posted at <www.ncbi.nlm.nih.gov/pubmed/19368899>. ■

Hallucinogen

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14-month follow-up reported that the sessions had harmed them, and most participants viewed the experience as positive in the long run."

Although the results don't have any direct clinical implications, they may be viewed as promising in that "they open up all sorts of new avenues for research into the potentially therapeutic benefits of psilocybin and other classic hallucinogens," MacLean commented. For example, "although we didn't see changes in personality traits other than those falling within the openness domain, it's possible that psilocybin might decrease maladaptive traits in people who are more depressed, anxious, tense, aggressive, or impulsive than our volunteers were."

These characteristics fall under the personality trait of neuroticism, she noted. And "the findings suggest that mystical or spiritual experiences might have real-world benefits in terms of positive changes in certain traits, attitudes, and behaviors."

She and her colleagues are conducting several other psilocybin studies. For example, they are looking to see whether adding psilocybin to cognitive-behavioral therapy can help people quit smoking. They are examining the effects of psilocybin on individuals who are experiencing anxiety or depression due to their cancer diagnosis and are exploring the combined effects of psilocybin and daily meditation on healthy volunteers.

"In the future, we will be examining the effects of psilocybin on people of different religious or spiritual backgrounds, such as long-term Buddhist meditators," she reported. "So it's possible that we'll soon have more to say about the religious implications of psilocybin use."

The study was funded by the National Institute on Drug Abuse, Council on Spiritual Practices, Heffter Research Institute, and Betsy Gordon Foundation.

An abstract of "Mystical Experiences Occasioned by the Hallucinogen Psilocybin Lead to Increases in the Personality Domain of Openness" is posted at <http://jop.sagepub.com/content/early/2011/09/28/0269881111420188.abstract>. ■

ADHD

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their findings across demographic lines, the researchers noted that while children of lower socioeconomic status are more often diagnosed with ADHD than children of higher socioeconomic status, the latter group are more likely to receive medications for treatment of the condition.

The researchers also found that family medicine practitioners in many jurisdictions reported "significant pressure" from parents and teachers to prescribe stimulant medications.

"Attention Deficit Hyperactivity Disorder: Effectiveness of Treatment in At-Risk Preschoolers; Long-Term Effectiveness in All Ages; and Variability in Prevalence, Diagnosis, and Treatment" is posted at <www.effectivehealthcare.ahrq.gov/ehc/products/191/818/CER44-ADHD_20111021.pdf>. ■