



Clinical Psychiatry News



VOL. 37, No. 10

The Leading Independent Newspaper for the Psychiatrist—Since 1973

OCTOBER 2009

“We can say with reasonable confidence that bipolar disorder is a condition of mitochondrial dysfunction,” says Dr. Richard C. Shelton, a psychiatrist affiliated with Vanderbilt Medical Center in Nashville, Tenn.



©ANNE RAYNER/VUMC

Mitochondria Key In Mood Disorders

BY JANE SALODOF
MACNEIL

SANTA FE, N.M. — Mitochondrial dysfunction plays a role in recurring mood disorders, and might help explain why most treated patients eventually have relapses or recurrences, according to a leading investigator in psychiatry and pharmacology.

Unipolar and bipolar disorder are not mitochondrial diseases, but both appear to involve mitochondrial dysfunction, Dr. Richard C. Shelton told attendees at an annual psychiatric symposium sponsored by the University of Arizona.

The evidence is strong in bipolar disorder, and emerging in major depressive disorder, he said. Moreover, patients with mitochondrial diseases, such as certain forms of Parkinson's, might be at increased risk of depressive disorders.

“Future treatment development may involve modulation

of mitochondrial function,” said Dr. Shelton, James G. Blakemore Research Professor of Psychiatry and professor of pharmacology at Vanderbilt Medical Center in Nashville, Tenn.

Lithium and valproate—two agents commonly used in bipolar disorder—interact with mitochondria, he noted. In addition, some mitochondrial-targeted antioxidants in drug development for mitochondrial diseases “may be useful for bipolar disorder.” One investigational agent, triacetylluridine, significantly reduced depressive symptoms of 11 bipolar disorder patients in a 6-week trial (*Exp. Clin. Psychopharmacol.* 2008;16:199-206). “We can say with reasonable confidence that bipolar disorder is a condition of mitochondrial dysfunction,” Dr. Shelton said, citing molecular and magnetic resonance spectroscopy studies, including a meta-analysis of the latter in bipolar disorder.

See **Mitochondria** page 6

INSIDE

New Practice Parameter

AACAP releases guidelines on prescribing to children and adolescents.

PAGE 2



Issuing a Global Challenge

Dr. Amin A. Muhammad Gadit backs collaboration with primary care.

PAGE 8

Curbing Kleptomania

Naltrexone appears to reduce urges, behaviors.

PAGE 17



Sleep and Pregnancy

Early management, treatment are important.

PAGE 41

Stimulants Fend Off Comorbidities in Boys With ADHD

Treated patients less likely to repeat grade.

BY BRUCE JANCIN

ISTANBUL, TURKEY — Stimulant therapy for boys with attention-deficit/hyperactivity disorder protected them into young adulthood against development of depression, anxiety disorders, and disruptive behavior disorders in a landmark 10-year prospective case-control study.

Perhaps equally important, the stimulant-treated children were significantly less likely to repeat a grade in school than boys with ADHD who did not receive stimulant therapy in this naturalistic observational study, Dr. Joseph Biederman reported

at the annual congress of the European College of Neuropsychopharmacology.

“School failure is a major issue. I do not know how it is here in Europe, but in the U.S. repeating a grade is a very serious academic dysfunction. I tell my residents that the train of childhood passes through the station only once in life; if you miss that train you will not be able to recuperate,” said Dr. Biederman, professor of psychiatry at Harvard Medical School, Boston.

Stimulant therapy neither increased nor decreased the risk of a subsequent drug, alcohol, or nicotine use disorder during 10

See **Stimulants** page 23

Methamphetamine Use in U.S. Continues Slide

BY RENÉE MATTHEWS

WASHINGTON — The past-month methamphetamine use dipped sharply from 529,000 in 2007 to 314,000 in 2008 in people aged 12 years and older, according to data from the 2008 National Survey on Drug Use and Health.

That represents a decline of past-month meth use by almost half since 2006, when that number was 731,000.

One possible reason for the decrease could be the effect of the Combat Methamphetamine

Epidemic Act (CMEA), which was enacted in 2006 to regulate sales of over-the-counter medications that could be used in manufacturing methamphetamine, said Dr. Carl C. Bell, director of public and community psychiatry at the University of Illinois at Chicago.

Under the CMEA, the medications were taken off the shelf, certain limits placed on their purchase, customer ID was required, and sales were tracked—making it easier to find methamphetamine labs and close

See **Methamphetamine** page 5



Want Daily Medical News and Commentary?

Follow us on **Twitter**
Twitter.com/MedicalNewsNet

'Demand-Side Factors' Cited

Methamphetamine from page 1

them down, said Dr. Bell, also with Community Mental Health Council Inc. and the Institute for the Prevention of Violence, both in Chicago.

However, Lloyd Johnston, Ph.D., principal investigator of the Monitoring the Future study, which tracks drug use among 8th, 10th, and 12th graders, said in an interview that he and his colleagues have been reporting a steady drop in methamphetamine use in that population since they started monitoring it in 1999 when past-year use was 4.1%, compared with 1.3% in 2008.

"The drop in meth use among teens and young adults has been occurring since the turn of the decade," said Dr. Johnston, who is also a professor at the University of Michigan's Institute for Social Research in Ann Arbor. "We don't have the relevant perceived risk measure for meth, but I think that the tremendous amount of bad publicity that meth use and local meth production received in earlier years led young people to see it as more dangerous and less glamorous than they had previously."

The NSDUH study found that misuse of prescription drugs also decreased significantly between 2007 and 2008 among individuals aged 12 years and over—including adolescents—and that there has been progress in containing other types of illicit drug use, though the data showed that the overall national past-month users of illicit drugs has remained level at about 20 million (8%) since 2002. (Illicit drugs include marijuana/hashish, cocaine/crack, heroin, hallucinogens, in-

halants, and prescription psychotropics that are used nonmedically.)

"We are seeing the benefits of a public effort that accepts that addiction is treatable and therapy works," said Eric B. Broderick, D.D.S., the acting administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA), which sponsored the study and presented the report at a press conference. "It's important to get [our] message out."

Marijuana was the most commonly used illicit drug, though again, 2008 levels of use remained steady compared with the previous year. The drug was used by 15.2 million or just under 75.7% of current illicit drug users, and 57.3% of all users used only marijuana.

In the 12- to 17-year-old group, 9.3% used illicit drugs, of whom 6.7% used marijuana (8% in 2007) and 2.9% used nonmedical prescription drugs. The remainder used inhalants and hallucinogens (1% each) and cocaine (0.4%).

Within this group, types of drugs used in the previous month varied by age: in the 12- to 13-year group, 1.5% had used prescription drugs nonmedically and 1% had used marijuana; in the 14- to 15-year group, almost 5.7% had used marijuana and 3.0% nonmedical prescription drugs; and among 16- to 17-year-olds, 12.7% had used marijuana and 4.0% hallucinogens.

Overall illicit drug use and use of specific drugs in this group held steady between 2007 and 2008, though there was an increase in the past-month rate of hallucinogen use (1.0% in 2008 vs. 0.7% in

2007) because of an increase in Ecstasy use (0.3% in 2007 vs. 0.4% in 2008), and a decline in the nonmedical use of prescription drugs (2.9% in 2008 vs. 3.3% in 2007) that was driven by a slowdown in nonmedical pain reliever use.

Past-year use of Ecstasy was 1.4% for 2008, which was significantly lower than 2002's level of 2.2%, but higher than the lowest level of 1.0% in 2005. Similar use of LSD also showed an upward trend to 0.7% last year, compared with 1.3% in 2002 and the highest rate of 0.4% in 2006.

Dr. Johnston said that data from the MTF study had shown that "Ecstasy use had dropped dramatically after 2001 as teens came to see it as more dangerous than they previously had [however,] more recent cohorts of teens are now seeing Ecstasy use as considerably less dangerous than teens did just 3-5 years ago, making them more vulnerable to a rebound in use."

He said that he and his colleagues had found that LSD use in teens had bottomed out in 2002, probably because of a drop in availability rather than an increase in perceived risk of the drug. However, there has been a "slight bounce" back in recent years, and of concern is that the decline in perceived risk and disapproval of the drug, might make this group vulnerable to LSD use if supply increases, he noted.

"This erosion in perceived risk is something that we believe happens as new cohorts of young people age enter adolescence and don't know what their predecessors learned about the drug. We call it 'generational forgetting,'" Dr. Johnston said.

The NSDUH study showed that current illicit drug use was higher among young adults aged 18 to 25 years (20%) than it was in youths aged 12-17 (9%) and those aged over 26 (6%). However, the 2008 and 2007 rates remained steady.

Among those aged 50-59 years—the baby boomers—past-month use increased from 2.7% in 2002 to 4.6% in 2008. In the 50- to 54-year group, that rate went from 3.4% in 2002, to 6.0% in 2006, and 4.3% in 2008; and in the 55- to 59-year group, the levels were 1.9% in 2002 and 5.0% in 2008. The investigators suggest this increase might be a result of the aging boomers' higher lifetime rates of illicit drug use.

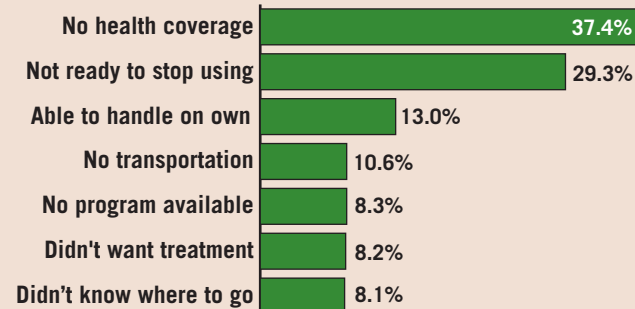
Among the continuing concerns is that of the 23.1 million people who need treatment for illicit drug use, only 2.3 million (about 10%) receive treatment. Gil Kerlikowske, director of the National Drug Control Policy, emphasized the importance of addressing these treatment disparities. "Health care costs can be contained" with effective care and treatment, he said, adding that "treat-

ment is half the cost of incarceration."

Dr. Broderick underscored the importance of health reform in this new approach. "Of those Americans who made an effort to get treatment but did not receive it, the top reason was [that they had] no health coverage and could not afford the cost," he said.

Mr. Kerlikowske's contention that he had "ended the war with drug users" and

Reasons Given for Not Receiving Substance Abuse Treatment



Note: Based on a national survey of persons aged 12 and older.
Source: 2008 National Survey on Drug Use and Health, SAMHSA

ELSEVIER GLOBAL MEDICAL NEWS

Mental Illness and Substance Use

Mental illness appears to raise the stakes when it comes to illicit drug use and cigarette use, the 2008 NSDUH data show.

For example, the incidence of past-year illicit drug and cigarette use in mentally ill persons aged 18 years and older was almost double that of those without mental illness.

The rates of alcohol use, however, were closer between the groups.

When it came to suicide consideration, planning, and attempting, those differences increased notably between the two groups: Past-year substance users were more than three times more likely to have considered suicide than were nonusers (11.0% vs. 3.0%), more than four times more likely to have planned a suicide (3.4% vs. 0.8%, respectively), and nearly seven times more likely to have attempted suicide (2.0% vs. 0.3%), SAMHSA noted in a press release based on data from the survey.

The survey asked all adult respondents (those aged 18 and over) about suicidal thoughts and behavior, whereas data on mental illness were collected both in youths aged 12-17 years and in adults. Until now, suicidal data had been collected only

within the major depressive episode module.

The data showed that in the general U.S. public, nearly 8.3 million adults (3.7%) seriously considered committing suicide in the previous year, 2.3 million had made a suicide plan, and 1.1 million had attempted suicide. Young adults aged 18-25 years were at greatest risk for suicidal thoughts (6.7%), compared with those aged 26-49 (3.9%) and the 50 or older age group (2.3%). The trends for planning and attempting were similar between the three age groups. The findings showed "just how pervasive the risk of suicide is in our nation . . . the magnitude of the public health crisis revealed by this study should motivate us to do everything possible to reach those at risk," said Dr. Broderick.

Among youths, rates of substance, alcohol, and cigarette use in those with major depressive episode (MDE) were more than double those of nonusers. Of those with past-year MDE, 37.4% had used illicit drugs, compared with 17.2% of nonusers; 3.6% vs. 1.8%, respectively, reported daily cigarette use; and 3.4% vs. 1.8% reported heavy alcohol use.

that the new focus should be on "prevention, treatment, and recovery in a holistic way"—drew praise from Dr. Bell and Dr. Johnston.

"Thank God someone with sense is in the national drug control policy area. This is a shift we have been pushing in the Institute of Medicine's 2009 report," Dr. Bell said.

Dr. Johnston said he had long been a proponent of demand-side action in dealing with drug use. "[I have] argued to the Congress and elsewhere that the supply-side strategy is flawed by the simple economic reality that there will be an endless supply of suppliers. There is good evidence from our studies that demand-side factors have reduced drug use substantially at times," he said.

In response to an attendee's question about how to shift current levels from "steady" to "declining," Dr. Broderick said there was a need to continue raising awareness about importance of addiction therapy, to work harder in targeting difficult-to-reach populations such as 18- to 25-year-olds, and to address use among older persons.

Dr. H. Westley Clark, director of SAMHSA's Center for Substance Abuse Treatment, echoed that sentiment, saying that collaboration between the criminal justice, welfare, and public health and safety systems was also key in thwarting substance abuse, with about one-third of referrals for drug treatment coming from the criminal justice sector. "It's not about abstinence; it's about recovery," he said, adding that "recovery is a process [that] involves many different people."

The National Survey on Drug Use and Health, formerly known as the National Household Survey on Drug Abuse, interviews about 67,500 individuals in the general U.S. population aged 12 years and older. Each respondent who completes the interview receives \$30. Military personnel, inmates, inpatients, and homeless persons who do not live in a shelter are excluded. ■