New Approaches for Treating Bipolar Disorder:  
Mass General Clinician-Researchers Study Wide Range of Interventions

Susan J. Noonan, MD, believes the illness first surfaced when she was a teenager. Although severe at times, the episodes of depression did not stop her from attending college and medical school, or from becoming an emergency physician.

But left untreated for many years, the prolonged bouts of depression followed by intense periods of energy took their toll. Despondent and unable to work, Dr. Noonan sought help at the Massachusetts General Hospital Bipolar Clinic and Research Program (BCRP). That was 15 years ago.

Complex SymptomS
Bipolar disorder is a treatable illness characterized by extreme changes in mood, behavior, energy and thinking. A person with the disorder can alternate between deep despair (depression) and unusual energy (mania). Episodes of depression and mania can last for hours, days, weeks or months, and can occur simultaneously. In severe cases, a person may experience delusions or hallucinations.

People with bipolar disorder experience depressive episodes more often than manic episodes. Symptoms of depression include prolonged sadness, changes in appetite and sleep, loss of energy, inability to concentrate, social withdrawal and suicidal thinking and behavior.

Symptoms of mania include rapid speech, grandiose thoughts, irritability, agitation and a reduced need for sleep. These symptoms can lead to dangerous behaviors such as unsafe driving, excessive spending and hypersexuality. Substance use disorders are often associated with bipolar disorder.

The causes of this disorder are not well understood. According to Andrew A. Nierenberg, MD, BCRP director and Harvard Medical School professor of Psychiatry, the condition probably reflects multiple bodily dysregulations. These may range from poorly modulated neural circuitry and brain energy metabolism to mitochondrial abnormalities. Genetics also play a role.

An Enormous Toll
People who suffer from poorly regulated bipolar disorder are often unable to attend school, work or cope with everyday challenges. The annual economic toll in direct costs and lost productivity is estimated at more than $151 billion in the U.S. – a figure matched by the extraordinary disruption the illness can cause to those affected, their families, friends and co-workers.

Bipolar disorder is estimated to affect 2 to 3 percent of adults worldwide. Children can have the disorder too, although their symptoms differ from what adults experience. Young adults in the 18 to 25 peak-onset age group are roughly 1.5 times more likely than those between the ages of 45 and 59 to have the disorder, and up to six times more likely than people over 60. “We’re now seeing very high rates of mood disorders in college students,” notes Michael E. Henry, MD, medical director of the BCRP. “Earlier recognition and treatment of the illness can prevent a significant amount of suffering for these individuals and their families.”

Treating the Person, Not the Episodes
When Dr. Noonan sought the help of Dr. Nierenberg in 1998, her life changed. “Even though it took a long time to find the right treatment, Dr. Nierenberg and his team held out hope for me, even at times when I had none,” she says.

Now involved in a different field of medicine, and inspired by her experience with the BCRP, Dr. Noonan has written a book, (Continued on page 7)
Message from the Chief

One in every five young people worldwide is estimated to suffer from a psychiatric disorder. In the United States, only 20 percent of these youngsters receive some kind of mental health services, and only a small fraction receive care from a trained child psychiatrist or psychologist. For children and their families, delays in seeking or receiving care can lead to years of distress, family strife and adverse consequences for a young and developing brain during critical periods of development.

We at MGH Psychiatry have made it a priority to expand programs serving children, adolescents and young adults. Three of these are highlighted in this issue of Mindscapes: a TelePsychiatry Initiative that provides “virtual visits” and continuity of care for children and families for whom the trip to Mass General presents special challenges; a new parent guidance program, called The Fatherhood Project, to help fathers strengthen the emotional bonds with their children; and The Clay Center for Young Healthy Minds, an ambitious web-based and public media information program to guide parents, teachers, coaches and others adults in their care for and work with children.

While preventing the onset of a psychiatric disorder or intervening early are foremost goals, addressing the needs of adults who suffer is also a priority. The quest to identify more effective treatments, to test their efficacy and safety and to incorporate beneficial interventions into standard care propels our clinical research program. The work of the Bipolar Clinic and Research Program, also featured, exemplifies the range of innovative options that our faculty is seeking to bring forward.

Philanthropy is the driver of several of these endeavors, and an important resource for others. On behalf of my colleagues who lead these programs, we thank you, our friends and supporters, for your confidence and partnership which make them possible.

Jerrold F. Rosenbaum, MD
Psychiatrist-in-Chief
Massachusetts General Hospital
Stanley Cobb Professor of Psychiatry
Harvard Medical School

TelePsychiatry Initiative Expands Care for Young People

One in five children or teens in the United States will require care for a serious psychiatric illness at some point in their lives. With a shortage of child and adolescent psychiatrists—nine for every 100,000 youth—it can take months to get an appointment. And some youngsters find the prospect of a visit to the doctor’s office so daunting that they have tantrums, refuse to go or simply shut down emotionally by the time they get to their appointment.

To improve access to mental health care for young people—and overcome barriers created by geography, income or difficulties getting to office visits—the MGH Department of Psychiatry is piloting a child and adolescent TelePsychiatry initiative under the direction of Janet Wozniak, MD. Part of Mass General’s TeleHealth initiative launched in 2011, MGH TelePsychiatry connects young patients to their clinicians using secure videoconferencing technology.

INITIAL FOCUS ON CHILDREN AND TEENS WITH AUTISM

The pilot, launched in March 2013, initially focused on children and adolescents with an autism spectrum disorder (ASD). For individuals with ASD, a trip to a doctor’s appointment and the disruption of daily routines can be overwhelming.

“By the time I see these patients, they are stressed and emotionally drained,” notes Dr. Wozniak, who is also associate director of the Alan and Lorraine Bressler Clinical and Research Program for Autism Spectrum Disorders and director of the MGH Child and Adolescent Outpatient Psychiatry Service. “Virtual visits allow youngsters to talk with me by video in their own homes, making a big difference in their receptivity to treatment.”

Dr. Wozniak has observed that many parents also prefer virtual visits, as such visits do not require them to take time away from work, battle traffic or remove children from school or therapeutic programs to visit the doctor.

EXPANSION OF INITIATIVE

Since March, the pilot has expanded to include young people with other conditions such as addiction, depression and attention deficit/hyperactivity disorder, and further growth is planned.

“TelePsychiatry is a potentially transformative tool,” says MGH Psychiatrist-in-Chief Jerrold F. Rosenbaum, MD, “because it reduces stress for young patients and helps us meet the tremendous demand for child psychiatry expertise with more efficient new ways to deliver care.”
A divorced father demonstrates to his son with a six-foot stack of legal papers that for 16 years he has tried to reach out to him.

Another father calls his daughter every day from prison, talking with her about her life, her friends, her problems.

Ten percent of single-family households are now led by fathers. As women enter the workforce in increasing numbers, and many become their family's primary wage earner, the role of fathers and the definition of masculinity are changing.

The Fatherhood Project (TFP) at Massachusetts General Hospital is grounded in research that demonstrates the importance of fathers' emotional engagement and connection with their children.

Children Do Better When Fathers Are Emotionally Involved

The research is clear – children whose fathers are emotionally involved with them do better emotionally, socially, academically and behaviorally:

- Boys are less violent and are involved less frequently with the criminal justice system.
- Girls and boys have greater empathy, increased tolerance of stress, and better problem-solving ability.
- The incidence of depression and early pregnancy in girls decreases.
- The onset of sexual activity is delayed.
- More young people complete college.

These findings have been shown across social classes, and are particularly pronounced for lower income families.

Focus on New Fathers and Underserved Communities

Raymond Levy, PsyD, founding director of TFP and a leading expert on fatherhood, began the program in response to the need to help fathers engage emotionally with their children. TFP imparts critical skills and information to groups of fathers including incarcerated men, refugees, divorced/non-resident fathers and new fathers.

Dr. Levy teaches incarcerated dads in two state prisons in Massachusetts: MCI Concord and Shirley. Children with fathers in prison are six times more likely to be incarcerated than children of non-incarcerated dads, yet with practiced emotional involvement, fathers can significantly change this outcome.

Skills taught by Dr. Levy include: listening skills, the capacity for empathy, the ability to manage one's emotions, the capacity to understand the motivations of others and the difference between authoritarian and authoritative parenting. As a result of Dr. Levy's training, a new definition emerges of what it means to be a man, and to be a father, and dads become more emotionally and interpersonally effective as parents.

John Badalament, EdM, program director, brings 15 years of experience in the fatherhood field to TFP. He is author of “The Modern Dads Dilemma: How To Stay Connected With Your Kids In A Rapidly Changing World” and director of the acclaimed PBS documentary, “All Men Are Sons: Exploring the Legacy of Fatherhood.”

Mr. Badalament co-directs a group for fathers from Bhutan at the MGH Chelsea HealthCare Center, and a Teen Dads group at Chelsea High School. “In order to help teen dads achieve success as parents and as students, we are developing unique interventions to meet the specific needs of this population,” Mr. Badalament explains.

Teaching Professionals

Dr. Levy and Mr. Badalament are also teaching social service and mental health professionals how to help fathers understand the importance of emotional engagement with their children, and to sustain working clinical relationships with fathers. Recently, they have lectured at conferences including the Massachusetts Second Annual Fatherhood Leadership Summit and the Annual American Public Health Conference.

TFP is currently developing programs at Mass General to help healthcare providers in a variety of medical specialties to establish and maintain contact with fathers, from their children's birth to adolescence. TFP is also training residents in Pediatrics to include fathers in their children's medical care, particularly in disrupted family situations.

Dr. Levy strives to make The Fatherhood Project a national model. “My vision is that TFP will generate innovative tools, resources and services that can be replicated in hospitals, prisons, schools and other public settings around the country,” Dr. Levy says. “We want to improve the lives of children and families everywhere.”
MGH Psychiatry Out and About
9th Annual Pediatric Psychopharmacology Council Seminar

From left: Janet Wozniak, MD, Pem Guerry and Maureen Guerry
From left: Gagan Joshi, MD, Joseph Biederman, MD, Lorraine Bressler, Thomas J. Spencer, MD, Ronna Fried, EdD
From left: Edward T. Sullivan Jr. and Constance M. Sullivan, Christopher V. Wolfington

10th Annual Depression and Bipolar Council Dinner

From left: Guest speaker and best-selling author, Joseph Finder and his wife Michele Souda, Maurizio Fava, MD
From left: Susanne K. Potts and John T. Potts Jr., MD
Mark Weld and Gerry Gray

Inaugural Harry E. Ford, III, MD Psychiatry Grand Rounds Lecture

From left: David C. Henderson, MD, Chrissy Rooney, Peg Henehan, and guest speaker Felton J. Earls, MD

11th Annual Schizophrenia Education Day

From left: George B. Handran, Trustee, Sidney R. Baer, Jr. Foundation, Daphne J. Holt, MD

Recovery Research Institute Launch

From left: John F. Kelly, PhD, Michael P. Botticelli, Deputy Director, White House Office of National Drug Control Policy

Photos by Nate Fried-Lipski
Photo by Lesley White
Photo by Arthur N. Papas, MD
On Sept. 24, 2013, philanthropic supporters and their families, as well as patients, local business owners, state officials and MGH faculty and administration, gathered in the historic MGH Ether Dome to celebrate the launch of The Clay Center for Young Healthy Minds. Years of planning and generous gifts from Landon T. and Lavinia D. Clay, Elizabeth Gail Hayden and several other supporters have brought the center to life under the leadership of Eugene V. Beresin, MD. Dr. Beresin is the longtime former director of the MGH Child and Adolescent Psychiatry Residency Training Program.

EDUCATING PARENTS AND OTHER ADULTS

The Clay Center is a multifaceted information resource aimed at educating parents and other caregivers about the mental health needs of children, teens and young adults who struggle with behavioral, emotional and/or learning challenges. Based in the Department of Psychiatry, the center will foster collaborations with experts at Mass General and Harvard Medical School as well as leading regional and national media, and mental health and child advocacy organizations.

“Our mission is education ... We know that the majority of psychiatric disorders begin by young adulthood, and if we can help catch them early, there is a better chance of preventing hardship later.”
— Eugene V. Beresin, MD

“Our mission is education,” says Dr. Beresin. “We want to provide a strong, online community to support the mental health needs of young people and their families. We know that the majority of psychiatric disorders begin by young adulthood, and if we can help catch them early, there is a better chance of preventing hardship later.”

AN ENGAGING, GO-TO RESOURCE ON THE WEB

The Clay Center’s website (www.pathstodream.org) offers a wealth of information including “Where to Turn,” a comprehensive list of services and blog posts. Many of the blog posts are supplemented by videos by MGH clinicians that address parenting concerns categorized by age group. Topics range from “Giving a 2-year-old a 15-minute time-out,” to “What if my child has an anxiety disorder?”

The center’s outreach efforts involve social media, partnerships with WBUR and other media outlets, original podcasts and videos, educational forums and collaborations with a number of specialists across Partners HealthCare and Mass General, including those within the Mass General Hospital for Children. Dr. Beresin and a core group from the MGH Department of Psychiatry form the “DREAM” team – Tristan Gorrindo, MD, managing director; Ellen B. Braaten, PhD, associate director; and Steven C. Schlozman, MD, associate director. DREAM, the center’s abbreviated mission statement, stands for Developing Resilience through Engagement, Awareness and Media.

PROMOTING AWARENESS, COMBATING STIGMA

According to Dr. Beresin, psychiatric disorders are more common than almost any disorder in medicine, and one in four adults will be affected by mental illness during their lifetime. But despite the prevalence, the stigma of mental illness remains widespread. The team recognized a lack of reliable public information related to mental illness and wellness in young people, and created The Clay Center as a way to help increase awareness, promote resilience and combat public misperception. “What better place to provide a trusted resource for information than MGH Psychiatry?” Dr. Beresin says. “All the public may hear about mental illness is the misconception that it is associated with violence. People hear very little about resilience.”

Center benefactor Landon T. Clay concurs: “By empowering youths and training adults to recognize signs of mental illness, we can strengthen young people’s resilience, and eradicate the social scar associated with mental illness.”

For more information about The Clay Center for Young Healthy Minds, visit www.pathstodream.org.

Adapted from MGH Hotline, Oct. 4, 2013.
Celebrating Two New Endowed MGH Chairs

MIchele and David Mittelman Family Endowed Chair in Child and Adolescent Psychiatry

Daniel A. Geller, MD, director of the MGH Pediatric Obsessive-Compulsive Disorder (OCD) and Tic Disorder Program, was honored as the inaugural incumbent of the Michele and David Mittelman Family Endowed Chair in Child and Adolescent Psychiatry in the field of OCD and Related Disorders on June 27, 2013.

The chair was made possible thanks to the generosity of the Mittelman family along with contributions from a dozen other families. Michele H. Mittelman spoke at the event, along with MGH President Peter L. Slavin, MD, Jerrold F. Rosenbaum, MD, MGH chief of Psychiatry and Dr. Geller’s mentor, James Harris, MD.

“Dr. Geller certainly is an appropriate selection for this chair, as he is known internationally for his innovative research in the field of obsessive-compulsive disorder and other related conditions in young people,” Dr. Slavin said. “Calling him a pioneer is an understatement, as his career is marked by many firsts and unusual accomplishments.”

Dr. Geller founded the Pediatric Obsessive-Compulsive Disorder Program at Mass General in 1992. For more than two decades, he has studied the causes, symptoms, familial patterns, genetics, and treatment and outcomes of OCD and other psychiatric disorders that begin in childhood, and has produced a comprehensive body of original research.

Dr. Geller is leading an innovative study to evaluate whether taking a particular medication can speed up the therapeutic effects of cognitive behavioral therapy for children with OCD, and is developing a study on PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections), the sudden, unexpected onset of OCD or tic symptoms in children immediately following a streptococcal infection.

“I am deeply honored to be the incumbent of this endowed chair,” said Dr. Geller. “And to have the trust of the families who made this possible.”

Adapted from MGH Hotline, Aug. 2, 2013.

Michele and Howard J. Kessler Endowed Chair in Public and Community Psychiatry

Derri L. Shtasel, MD, MPH, founding director of the MGH Division of Public and Community Psychiatry, was honored as the first incumbent of the Michele and Howard J. Kessler Chair in Public and Community Psychiatry on Sept. 13, 2013. The endowed chair, funded by the Kessler Center of Excellence at Partners HealthCare, will support Dr. Shtasel and successive directors as they lead efforts to expand and integrate services for individuals who suffer from severe mental illness and who rely on government and community-based agencies for care.

“I applaud Michele and Howard Kessler for recognizing the need to create systems of mental health care for medically vulnerable populations,” said Peter L. Slavin, MD, MGH president. “Creating these systems is a crucial responsibility of the division’s leader, and I can think of no better person to fulfill these responsibilities than Derri Shtasel.”

The ceremony also included remarks by Jerrold F. Rosenbaum, MD, MGH chief of Psychiatry, Boston Mayor Thomas M. Menino and Rep. Patrick J. Kennedy who sponsored the Mental Health Parity and Addiction Equity Act along with his father, the late Sen. Edward Kennedy. Other special guests included members of the Kessler family and Dr. Shtasel’s husband, Gary L. Gottlieb, MD, MBA, president and CEO of Partners HealthCare, and their children.

Dr. Shtasel, who founded the Division of Public and Community Psychiatry in 2009, has dedicated her career to serving underserved and marginalized patients through direct care, teaching, administration and community collaboration. Dr. Shtasel is also executive director of the Kraft Family National Center for Leadership and Training in Community Health at Partners HealthCare.

“The Michele and Howard J. Kessler Chair enhances our ability to recruit mission-driven trainees; connects our amazing young people to the sickest and neediest; continuously improves community partners’ relationships; and grows community-based, community-focused research,” noted Dr. Shtasel. “Perhaps most importantly, it provides a vehicle to amplify the voices of people whose voices are hard to hear, and encourages us to think and talk openly about social justice.”

Adapted from MGH Hotline, Oct. 4, 2013.

Dr. Noonan’s story illuminates the BCRP philosophy of treating the person with the disorder, not just the mood episodes. “The disorder is the person’s vulnerability to have mood symptoms in between major mood episodes,” says Dr. Nierenberg. “To treat just the mood episodes would be like treating a heart attack without addressing cholesterol, blood pressure, diet and exercise.”

That philosophy has led the BCRP team of seven psychiatrists, five psychologists and one research fellow to discover and offer patients some of the most innovative pharmacological, wellness and cognitive therapies available.

“To treat just the mood episodes would be like treating a heart attack without addressing cholesterol, blood pressure, diet and exercise.”

— Andrew A. Nierenberg, MD

**Innovative Treatments: New Tricks For Old Drugs**

Even with U.S. Food and Drug Administration approval of several medications for bipolar disorder, many people with the disorder continue to experience mood episodes and symptoms. In response to the urgent need for new treatments, the BCRP has been exploring new uses for older medications that have been proven safe for other illnesses. Such medications have been targeted for testing at Mass General because of their protective effect on neurons.

The BCRP team is pursuing grants to explore whether minocycline – an antibiotic typically used to treat conditions such as acne and urinary tract infections – can effectively treat bipolar depression because of its effects on the neurotransmitter glutamate. The team also hopes to study the use of an older anti-cholesterol drug to treat bipolar depression because of its impact on receptors in the nucleus of neurons. Evaluating the effects of exercise on bipolar depression is another target area for study because exercise can cause muscles to produce a protein, PGC-1 alpha, which has similar effects on the same receptors.

**Other Innovative Therapies**

The team is also exploring non-medication therapies to help patients feel better physically and overcome the difficulties associated with the illness. These treatments range from techniques to increase mindfulness, foster self-acceptance, reduce anxiety and improve occupational and interpersonal functioning, to methods for implementing better nutrition, exercise and wellness regimens.

“Our clinic is unique in that we have on staff four of perhaps 20 to 30 people in the world who are grounded in cognitive behavioral therapy (CBT) and also focused on developing new ways of treating patients with bipolar disorder,” says Louisa G. Sylvia, PhD, associate director of Psychology.

To help the BCRP pursue its ambitious research goals, Mass General is now raising funds for an endowed chair in mood disorders research to be named after the late Thomas P. Hackett, MD – MGH chief of Psychiatry from 1976 to 1988 – with Dr. Nierenberg as the proposed incumbent.

Dr. Noonan applauds the proposed appointment, having long observed Dr. Nierenberg’s relentless pursuit of treating the person, not the symptoms. She remembers Dr. Nierenberg telling her: “The time you are feeling the worst is not the time to give up.” “And besides,” adds Dr. Noonan, “I can’t give up because Dr. Nierenberg won’t give up on me.”
Faculty Books

**ALMOST ANXIOUS: Is My (or My Loved One's) Worry or Distress a Problem?**

By Luana Marques, PhD, with Eric Metcalf, MPH
Published by Harvard Health Publications/Hazelden, 2013

It’s common for people to worry about problems in their lives. But for some people, obsessing for weeks and months, or avoiding social situations due to feelings of panic, can become regular habits of mind. These individuals may have “almost anxiety.”

In *Almost Anxious*, Luana Marques, PhD, describes the spectrum of these symptoms, from normal situational anxiety to a diagnosable anxiety disorder. Drawing on case studies and the latest research, she provides readers with the tools to:

* assess whether worries are a problem;
* gain insight on how to intervene with a loved one who has excessive worries;
* discover proven strategies to change unhealthy feelings of distress;
* gauge the physical, psychological, and social impact of one’s anxiety symptoms; and
* determine when and how to get professional help if needed.

*Book summary is based on publisher description found at www.amazon.com.*