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- Psychiatry in the Age of Health Care Reform
- Borderline Personality
 Disorder: Instilling
 Meaningful Change in
 Quality of Life for Patients
- The New Science of Mind

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SAVE THE DATE

Advances in the Understanding and Treatment of Adolescents with Personality Disorders

May 17, 2014, 8:30 am to 5:30 pm Weill Cornell Medical College New York, NY For information, contact: Jill C. Delaney, LCSW Personality Disorders Institute (212) 213-8955 or jid2001@med.cornell.edu



Psychiatry in the Age of Health Care Reform

By Jeffrey A. Lieberman, MD

President, American Psychiatric Association

The wheel of health care reform is in full spin as the implementation of the 2014 health insurance changes mandated by the Patient Protection and Affordable Care Act (ACA) ramps up. Although some reforms have already begun to occur, the majority of changes loom ahead as the law goes into effect in the coming years. These reforms hold important implications for psychiatrists, allied mental health care providers, hospitals and, most importantly, our patients. This article will summarize the key elements of health care reform (HCR) and describe what mental health care providers must do in response.

We can divide the provisions of the ACA into those focused on health care service reform and those focused on health insurance reform. Some of the latter have been in place almost from the passage of the groundbreaking law (for example, ending certain underwriting restrictions for preexisting conditions), while some have begun or will soon (enrollment in health insurance exchanges, Medicaid expansion), and still others have been postponed (for example, the employer mandate will not begin until 2015). The reforms in health care services, though under way, are more slowly affecting practice and the financing of behavioral health services.

Many people have already benefited from changes in health insurance underwriting associated with the ACA. Children under 19 years old cannot be denied health insurance on the basis of a preexisting



Dr. Jeffrey A. Lieberman

condition, and underwriting for all health insurance benefits has become more closely regulated. As of 2014, no one will be denied coverage on the basis of preexisting conditions. Children may remain on parental health insurance policies until they are 26, even if they are no longer full-time students. They will not lose eligibility for health insurance, even if they develop one of the many mental disorders that have their onset around that age.

The most ambitious aspects of the ACA are also the most controversial. The law creates an individual mandate for health insurance, with federal subsidies for individuals who cannot afford the cost and tax penalties for individuals who do not buy insurance.

(continued on page 4)

Borderline Personality Disorder: Instilling Meaningful Change in Quality of Life for Patients

In 1980, Otto F. Kernberg, MD, John F. Clarkin, PhD, and John M. Oldham, MD, MS, founded a clinical research group within the Department of Psychiatry at Weill Cornell Medical College and NewYork-Presbyterian/Weill Cornell Medical Center focused on borderline personality disorder. Their purpose was to assemble psychiatrists, psychotherapists, neuroscientists, and other researchers to assess the pathology, develop new treatments, and teach trainees – from medical students to postdoctoral fellows – how to deal with

this serious disorder. One of these trainees, Frank E. Yeomans, MD, PhD, was then a resident in psychiatry. Nearly 35 years later, Drs. Kernberg, Clarkin, Yeomans, and their colleagues have forged important advances in understanding and treating borderline pathology, and the Personality Disorders Institute at NewYork-Presbyterian/Westchester Division continues as a vital and trusted source of research and clinical progress in the field. Dr. Oldham has since become Senior Vice President of The Menninger Clinic.

(continued on page 2)





Borderline Personality Disorder (continued from page 1)

"What's extraordinary about the Institute is its longevity," says Dr. Clarkin, Co-Director of the Personality Disorders Institute. "It's unusual for a group of people in psychoanalysis, psychotherapy, and neuroscience to have collaborated on a specific problem area for such a long period of time. When we started in 1980, we were interviewing patients together to understand what senior clinicians did to try to help these patients."

"Borderline personality disorder is a quite prevalent, severe personality disorder affecting approximately one to two percent of the United States population," says Dr. Kernberg, Director of the Personality Disorders Institute. "It represents about 16 percent of hospitalizations of psychiatric patients." Dr. Kernberg's own study of borderline personality organization dates back to the 1970s. In fact, he was one of the first to describe the syndrome several years before the disorder was added to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*.

The essential problem in borderline personality disorder (BPD) is identity diffusion – an inability for an individual to integrate the concept of self and that of significant others. According to Dr. Kernberg, these two functions are deeply altered in patients diagnosed with borderline personality disorder, resulting from their experiences from birth and in the first few years of life. "There are two types of experiences: those of low affect in which an individual learns everything about oneself and their surrounding world, and experiences of high affect states, either very pleasurable ones – excitement, enjoyment, surprise, or extremely negative ones - rage, fear, disgust, depression," says Dr. Kernberg. "These earliest experiences tend to group themselves into an idealized state and a persecutory one. Under ordinary circumstances, the individual develops a realistic view of self and others that permits the integration of a normal identity. But when the negative or aggressive segment dominates the loving one, integration does not occur. A permanent dissociation results, relationships with other people become chaotic, and the capacity to commit to work and to love is distorted."

Individuals with borderline personality disorder are further characterized by impulsivity, emotional immaturity, and anger, if not rage, directed against others and against themselves, with self-mutilating behavior and suicidal tendencies often present.

Both clinical experience and biochemical research have fostered a better understanding of the underlying pathology of BPD. "We know that insecure attachment can alter predisposition," says Dr. Kernberg. "Excessive physical pain in the first year of life, perhaps due to chronic physical illness or abuse, chaotic family situations, and abandonment can play a role in its etiology." In 2007, Drs. Kernberg, Clarkin, Yeomans, and several of their colleagues in the Department of Psychiatry collaborated with David A. Silbersweig, MD, then Director of the Functional Neuroimaging Laboratory at Weill Cornell, to also explore a biochemical connection.

"The central theme in BPD is of emotions not in control, so one of our questions was how does the brain and the biological system control emotion and affect," says Dr. Clarkin. "In this study, we compared borderline patients with normal subjects in terms of how they process negative affect."

The researchers used a specifically designed functional magnetic resonance imaging (fMRI) activation probe to test hypotheses concerning decreased prefrontal inhibitory function in the context



Dr. Otto F. Kernberg and Dr. John F. Clarkin

of negative emotion in patients with borderline personality disorder. "Essentially we found that the brain was overreacting at its emotional centers and underreacting at the control areas," notes Dr. Clarkin. "So you have individuals who, especially in social situations, overreact to emotional stimuli and, in particular, any stimuli that indicate to them that they are being slighted or rejected by others."

The ultimate goal is cure, which means normalization of the personality.

Treatment for borderline personality disorder is based in both psychopharmacology and psychotherapy approaches. Psychopharmacological treatments are geared to reducing the hyperactivity of negative affect through the use of SSRI antidepressants, antipsychotic medications, and/or mood stabilizers. The problem is that, in general, the medications that reduce hyperactivity of negative affects and increase affective control tend to lose their effectiveness. "Therefore, in the long run the critical treatment for these patients is psychotherapeutic, with medications serving as an adjunct," says Dr. Kernberg. "Medications can be very helpful in reducing symptoms – patients are no longer anxious or depressed. They don't cut themselves. They don't have dissociative periods, and they don't need to be hospitalized. But what remains is an impoverishment of the personality that prevents development in their career and an inability to establish intimate relations or a family life."

Both cognitive behavioral therapies (CBT) and psychodynamic psychotherapies have demonstrated their effectiveness in the treatment of BPD. "However," says Dr. Kernberg, "not all treatments are effective for all patients. There are different indications depending on the particular psychopathology so the treatment has to be highly selective in terms of the psychotherapy that one is going to apply."

Over the past 25 years, Dr. Kernberg and his colleagues have developed a therapeutic approach called transference-focused psychotherapy (TFP) that draws on advances in object relations theory and attachment theory with the goal of not merely treating symptoms, but changing the patient's underlying personality.

"TFP permits the patient to activate the negative states in which the therapist is the enemy, and the patient is the therapist's victim, or the patient becomes the victimizer who attacks the therapist. The ultimate goal is to enable the patient to tolerate such a state without getting panicky, upset, or disorganized by it," explains Dr. Kernberg. "At the same time, the therapy facilitates the activation of the idealized state in which the patient is perceiving the relationship with the therapist as perfect. By combining these two extremes, you are able to show the patient how these are each an exaggeration of normal situations in which good and bad, nice and ugly, friendly and unfriendly, are much more toned down and intertwined. In other words, you integrate interpretively these two extremely opposite versions of experience to bring about a normalization of the patient's identity and help resolve the syndrome of identity diffusion."

Transference-focused psychotherapy is a relatively lengthy and complex treatment that requires a high level of therapeutic specialization. Dr. Kernberg also emphasizes that there are cases in which cognitive behavioral therapies should be the first-line approach. "If CBT doesn't work, you can shift to a mentalization-based psychotherapy. If there are indications that the individual has the potential for a radical change of personality, you can move into transference-focused psychotherapy. Likewise, for patients who are not able to respond to or benefit from psychodynamic psychotherapies, you can move to a cognitive behavioral model.

Treatment of the total personality will enable the patient to truly function in a fully normal way in life. "We have clinical illustrations that demonstrate this is possible," says Dr. Kernberg. "To change total personality structure takes, at a minimum, a year and a half of intensive psychotherapy. There are cases that need three to five years of treatment. Some cases may need more. We need to determine how we can achieve maximum results in the minimum



Borderline Personality Disorder: A Clinical Teaching Guide

In Remnants of a Life on Paper, Bea Tusiani recalls the struggle of her daughter, Pamela, with borderline personality disorder and the roller coaster effect it had on the family. "The book provides an intense first-hand view of experience of borderline personality disorder from the dual point of view of the person suffering from the disorder and of

the family," says Dr. Frank E. Yeomans, Director of Training for the Personality Disorders Institute at Weill Cornell, who has authored a clinical teaching supplement to the book. "In the supplement I convey what we, as clinicians, can learn and should know from this very personal account. *Remnants of a Life on Paper* provides valuable insights that can help us recognize, better understand, and better treat BPD. Identifying how the illness presents, diagnosing it accurately, finding trained specialists, communicating the diagnosis and treatment plan to the patient, as well as to the family, and involving the family appropriately, are some of the crucial steps in treating a patient with borderline personality disorder."

The Clinical Teaching Guide can be downloaded at remnantsofalife.com.

time necessary, and this requires further research. We are now engaged in developing a study to determine the long-range effects of TFP and to confirm if it produces an enduring more radical modification of personality."

Drs. Kernberg, Clarkin, and Yeomans recently completed a pilot study with Dr. Silbersweig, now Chairman of Psychiatry at Brigham

and Women's/Faulkner Hospitals, using fMRI scoring to evaluate 10 borderline patients treated for a year with TFP. "These patients significantly improved in terms of symptoms and also in terms of functioning in a work environment," says Dr. Clarkin. "When comparing fMRI before and after TFP, changes at the brain level suggest the treatment is helping these patients gain more cognitive control over their emotions. The next step is the development of a larger study



Dr. Frank E. Yeomans

with a control group so that we can show that these changes are related directly to the treatment and not just to the passage of time — although every evidence we have suggests that time alone does not change the patient with BPD significantly." This important pilot demonstration of significant positive changes in symptoms and work functioning with accompanying changes in brain functioning was done with generous support from the Alvin Dworman Foundation and the Weill Cornell Department of Psychiatry.

"The pilot study produced very exciting data," adds Dr. Yeomans. "All we have had available for borderline personality disorder for a long time was treatment focused on symptomatic relief, but this fell far short of helping patients have satisfaction in the lives they are living. We found that at the end of one year of TFP treatment — which is not even a full treatment by any standards for a person with a severe personality disorder — a significant number of patients had moved from an insecure internal sense of attachment to a secure one. This is major shift in a person's internal sense of self and others. Individuals with insecure attachment are never at ease, never comfortable and secure in relationships. The shift to a secure attachment provides a sense of a 'safe haven' in the world.

"The study is extremely promising because it goes beyond symptom relief to look at psychological mechanisms – how one feels in relation to others and in relation to the world," adds Dr. Yeomans. "An independent study by colleagues in Germany and Austria confirmed our findings, leading us to feel more encouraged about the potential of this type of therapy to change the quality of patients' lives."

The Personality Disorders Institute at NewYork-Presbyterian/ Westchester has developed a range of therapies — based on years of experience and empirical studies — through which patients can benefit, helping to alleviate what has been referred to as the burden of borderline patients in a general psychiatric practice. "More and more evidence is being acquired demonstrating that these specialized treatments are effective and provide help to a population of patients who had been considered difficult and sometimes even untreatable just a generation ago," says Dr. Yeomans.

Dr. Yeomans also emphasized the important role of public education and outreach: "In spite of its prevalence of almost 2 percent

(continued on page 4)

Psychiatry in the Age of Health Care Reform (continued from page 1)

Health insurance exchanges in each state are offering a carefully regulated array of health insurance plans to certain individuals who are not part of employer health insurance schemes. The federal government is subsidizing the premiums on a sliding scale for individuals with incomes between 133 percent and 400 percent of the poverty level.

Implementing the health exchanges is a monumental task and will be a challenge for the states and federal government in 2014 and beyond. This has already been painfully evident in the botched rollout of the HealthCare.Gov website.

While the Supreme Court upheld the principle of the federal health insurance mandate and its tax penalties, it also struck down the requirement that every state expand its Medicaid program to provide nearly universal health insurance coverage for individuals with incomes below 133 percent of the poverty level. Some states are taking advantage of the complete federal subsidy of the Medicaid expansion, but others are not participating in that part of the law. In an effort to improve the coverage afforded by Medicaid, the ACA calls for an increase in Medicaid physician fees, which have historically been so low that many physicians will not accept Medicaid beneficiaries as patients. Except for states that opt out of the Medicaid expansion, the implementation of the ACA in 2014 will bring near-universal health insurance to the United States.

So what does this mean for psychiatrists and patients seeking mental health care? The near-universal health insurance coverage should mean that patients and their families will have lower out-of-pocket costs and should expect a broader choice of doctors and health care programs. It may also create an increase in the demand for psychiatric services and more resources to help pay for them.

Universal coverage is also paired with a mandate that health insurance cover treatment for mental disorders, including substance use disorders, and that the coverage will be at parity in the cost-sharing and managed care provisions of their health insurance policies. The historic Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008 (the final rule for which was released by the administration on November 8, 2014)

"The line it is drawn, the curse it is cast
The slow one now, will later be fast
As the present now, will later be past"
— Bob Dylan

"The Times They Are a-Changin"

applies to the ACA, making this health insurance legislation a triple victory for mental health care and psychiatry in terms of universal coverage, a behavioral health mandate, and parity.

This victory, however, is not without some concerns. First of all, not everyone in every state will be insured. Some will fail

to sign up, some undocumented immigrants will not be covered, and very poor people in some states will not be covered because their state chose not to participate in the Medicaid expansion. Second, not all behavioral health services will be covered. Some support services for individuals with disabling conditions or certain rehabilitation services may not be covered, even in the broader array of Medicaid services. Even there, however, the ACA offers new opportunities in a provision for states to elect to cover some of these home- and community-based services by modifying their Medicaid plans.

Health care reform will also change the types of mental health services and ways that they are provided. Among other innovative services, the ACA provides an opportunity for supporting prevention services and early intervention. The law authorizes spending for early interventions in populations at risk for behavioral health conditions. Accountable care organizations (ACOs) and patient-centered medical (or health care) homes offer new opportunities for psychiatrists to practice in "integrated health care" arrangements with new financing schemes. Integrated care creates new opportunities for patients to get holistic care, addressing their co-occurring general medical conditions. It also offers new settings in which mental health care can be provided within the mainstream of medical care.

These are indeed interesting and exciting times, but times in which we must "keep our eyes wide open" and be ready to address the challenges and take advantage of new opportunities. [Reprinted with permission from *Psychiatric News.*]

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Borderline Personality Disorder (continued from page 3)

of the population, this disorder has remained surprisingly unknown and, when known, is often misunderstood. Private funding allowed the creation in 2004 of the Borderline Personality Disorder Resource Center (bpdresourcecenter.org). This unique service provides information and referrals to individuals suffering from the disorder, families, and health care professionals; it fills in what had been a glaring gap." Utilization of this service is growing exponentially with over a half million people having accessed the site and its staff for information and resources to date.

"We still are advancing in our knowledge toward a better way of defining which patients will respond best to which treatments," says Dr. Clarkin, "but there is no doubt that nowadays we have powerful ways to help patients with borderline personality disorder to achieve definitive improvement in their lives."

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The New Science of Mind

By Eric R. Kandel, MD

These days it is easy to get irritated with the exaggerated interpretations of brain imaging – for example, that a single fMRI scan can reveal our innermost feelings – and with inflated claims about our understanding of the biological basis of our higher mental processes.

Such irritation has led a number of thoughtful people to declare that we can never achieve a truly sophisticated understanding of the biological foundation of complex mental activity.

In fact, recent newspaper articles have argued that psychiatry is a "semi-science" whose practitioners cannot base their treatment of mental disorders on the same empirical evidence as physicians who treat disorders of the body can. The problem for many people is that we cannot point to the underlying biological bases of most psychiatric disorders. In fact, we are nowhere near understanding them as well as we understand disorders of the liver or the heart.

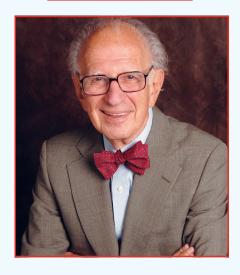
But this is starting to change.

Consider the biology of depression. We are beginning to discern the outlines of a complex neural circuit that becomes disordered in depressive illnesses. Helen Mayberg, at Emory University, and other scientists used brain-scanning techniques to identify several components of this circuit, two of which are particularly important.

One is Area 25 (the subcallosal cingulate region), which mediates our unconscious and motor responses to emotional stress; the other is the right anterior insula, a region where self-awareness and interpersonal experience come together.

These two regions connect to the hypothalamus, which plays a role in basic functions like sleep, appetite and libido, and to three other important regions of the brain: the amygdala, which evaluates emotional salience; the hippocampus, which is concerned with memory; and the prefrontal cortex, which is the seat of executive function and self-esteem. All of these regions can be disturbed in depressive illnesses.

In a recent study of people with depression, Professor Mayberg gave each person one of two types of treatment: cognitive behavioral therapy, a form of psychotherapy that trains people to view



their feelings in more positive terms, or an antidepressant medication. She found that people who started with belowaverage baseline activity in the right anterior insula responded well to cognitive behavioral therapy, but not to the antidepressant. People with above-average activity responded to the antidepressant, but not to cognitive behavioral therapy. Thus, Professor Mayberg found that she could predict a depressed person's response to specific treatments from the baseline activity in the right anterior insula.

These results show us four very important things about the biology of mental disorders. First, the neural circuits disturbed by psychiatric disorders are likely to be very complex.

Second, we can identify specific, measurable markers of a mental disorder, and those biomarkers can predict the outcome of two different treatments: psychotherapy and medication.

Third, psychotherapy is a biological treatment, a brain therapy. It produces lasting, detectable physical changes in our brain, much as learning does.

And fourth, the effects of psychotherapy can be studied empirically. Aaron Beck, who pioneered the use of cognitive behavioral therapy, long insisted that psychotherapy has an empirical basis, that it is a science. Other forms of psychotherapy have been slower to move in this direction, in part because a number of psychotherapists believed that human behavior is too difficult to study in scientific terms.

Any discussion of the biological basis of psychiatric disorders must include genetics. And, indeed, we are beginning to fit new pieces into the puzzle of how genetic mutations influence brain development.

Most mutations produce small differences in our genes, but scientists have recently discovered that some mutations give rise to structural differences in our chromosomes. Such differences are known as copy number variations.

People with copy number variations may be missing a small piece of DNA from a chromosome, or they may have an extra piece of that DNA.

Matthew State, at the University of California, San Francisco, has discovered a remarkable copy number variation involving chromosome 7. An extra copy of a particular segment of this chromosome greatly increases the risk of autism, which is characterized by social isolation. Yet the loss of that same segment results in Williams syndrome, a disorder characterized by intense sociability.

This single segment of chromosome 7 contains about 25 of the 21,000 or so genes in our genome, yet an extra copy or a missing copy has profound, and radically different, effects on social behavior.

The second finding is *de novo* point mutations, which arise spontaneously in the sperm of adult men. Sperm divide every 15 days. This continuous division and copying of DNA leads to errors, and the rate of error increases significantly with age: a 20-year-old will have an average of 25 *de novo* point mutations in his sperm, whereas a 40-year-old will have 65. These mutations are one reason older fathers are more likely to have children with autism and schizophrenia.

Our understanding of the biology of mental disorders has been slow in coming, but recent advances like these have shown us that mental disorders are biological in nature, that people are not responsible for having schizophrenia or depression, and that individual biology and genetics make significant contributions.

The result of such work is a new, unified science of mind that uses the

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The New Science of Mind (continued from page 5)

combined power of cognitive psychology and neuroscience to examine the great remaining mysteries of mind: how we think, feel and experience ourselves as conscious human beings.

This new science of mind is based on the principle that our mind and our brain are inseparable. The brain is a complex biological organ possessing immense computational capability: it constructs our sensory experience, regulates our thoughts and emotions, and controls our actions. It is responsible not only for relatively simple motor behaviors like running and eating, but also for complex acts that we consider quintessentially human, like thinking, speaking and creating works of art. Looked at from this perspective, our mind is a set of operations carried out by our brain. The same principle of unity applies to mental disorders.

In years to come, this increased understanding of the physical workings of our brain will provide us with important insight into brain disorders, whether psychiatric or neurological. But if we persevere, it will do even more: it will give us new insights into who we are as human beings.

"The Science of Mind" was published in *The New York Times* on September 6, 2013, and is reprinted with permission by Dr. Kandel.

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