When considering mental health disorders, clinicians often focus on treatment strategies, improving patient quality of life, and reducing caregiver burden. More recently however, the body of literature related to life expectancy of patients with mental illness has been increasing. In particular, there has been growing concern surrounding opioid abuse, suicide, and Alzheimer disease.

From 2016 to 2017, the life expectancy in the United States dropped from 78.7 to 78.6 years. However, the 10 leading causes of death remained unchanged during this same period. These findings were recently published in a report by the US Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, which described mortality trends, risk of death in special populations, and early measures of death in the US for 2017.

(Continued on page 1)

Clinically Relevant Developments in Psychiatry

Psychiatry continues to evolve rapidly, advancing our understanding of the complex etiology of mental disorders with each year and bringing advances in psychiatric treatments; 2018 was no exception. Here is a selection of eight research developments that may impact psychiatric clinical practice in the coming years. This list is neither comprehensive nor definitive, but a brief assortment expected to be of interest to a clinical audience. These preliminary findings add to the armamentarium of treatments for a range of psychiatric disorders.

(Continued on page 3)
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2019 Meeting Theme

Revitalize Psychiatry: Disrupt, Include, Engage & Innovate
Life Expectancy
Continued from cover

J. John Mann, MD, from the department of psychiatry at Columbia University in New York, told *Psychiatric Times*, “We [only] have data from the CDC for 2017 and no later.” Data from the mortality report are compiled into a computerized database, known as the National Vital Statistics System, which contains death certificates from all 50 states and the District of Columbia. Researchers use statistical techniques to generate population-based reports from these records and the findings are released annually by the CDC.

Mortality patterns among US residents were analyzed by sex, race, ethnicity, and cause of death. The 2017 data indicate that life expectancy decreased primarily due to increases in mortality from unintentional injuries, suicide, diabetes, and influenza and pneumonia.

Opioid/prescription drug abuse Since the turn of the 20th century, opioid misuse in the US has been increasing.2 Current evidence has shown this trend is not restricted to one particular demographic group; however some groups exhibit higher risk than others, including males, Medicaid recipients, and those with past substance use disorders. Furthermore, unsafe injection methods, such as reusing and sharing contaminated needles, are common practices among individuals who misuse opioids.

According to the CDC, deaths due to drug overdose reached a record high this past year, with over 70,000 deaths reported in 2017.7 The number of deaths that involved synthetic opioids, adults in the US misuse prescription opioid analgesics.4 Furthermore, thousands of Americans die each year due to illicit opioid use. Several key stakeholders are concerned about opioid overprescribing, noting that few clinicians obtain sufficient opioid-specific prescribing training.

When considering a practical solutions to resolve the opioid epidemic, several strategies have been proposed, including improving accessibility to medication-assisted therapies, such as naloxone and buprenorphine, using abuse-deterrent drug designs and adhering to evidence-based prescribing guidelines.

Given that millions of Americans are struggling with chronic pain, developing effective non-opioid analgesics is another strategy. Further research to increase our knowledge of the biological mechanisms that mediate pain is essential to produce lasting solutions.

Suicide On a global scale, the World Health Organization (WHO) estimates that nearly 800,000 people die because of suicide each year. Unfortunately, because the absence of adequate recording systems and the complexities of suicide death registration, the exact figure remains largely undetermined. Furthermore, approximately 80% of suicides occur in nations with inadequate public health services, and limited access to mental health resources.

Between 2016 and 2017, the suicide rate in the US increased by 3.7%2 The surge in suicides was seen predominantly in one group—young adults aged 21 to 34 years. The incidence also increased in youths ages 9 to 14 years. Other characteristics linked with this increase were persons who had a history of violence, adults with anxiety and depressive disorders, and persons with lower socioeconomic status.

Gun-related suicides are a large part of the suicide statistics. The 2015-2016 rise in firearm suicides continued a 10-year trend, according to the CDC. From 2006 to 2016, suicides by firearm increased 21%, after declining 7% from 1999 to 2006.7

Numerous solutions have been suggested to prevent suicide-related mortality, including effectively treating depression and other mental health disorders, which are significant risk factors for suicide. In addition, restricting access to firearms and pesticides, which are common methods used, may result in fewer completed suicides. Internationally, increasing awareness around suicide prevention and implementing suitable data registration programs are key goals for the future.

Alzheimer disease Another area of concern is rising mortality in patients with Alzheimer disease (AD), which after adjusting for age, rose 2.3% from 2016 to 2017.1 This disease affects more than 5 million Americans each year. AD has a particularly severe impact on persons afflicted with the disease, their caregivers, and society, which is largely attributable to the significant costs associated with care.5 With no existing disease-altering treatment options, and few drugs to manage symptoms, prevention strategies are key to reducing the morbidity and mortality of this condition.

Clinicians and researchers are searching for better strategies to manage AD.7 Recent advances in biomarker technology have transformed the way the disease is diagnosed. Using specific biomarkers, such as measures of brain volume and amyloid plaque levels, clinicians are now able to differentiate AD from other dementias.

Current preventative strategies for AD involve lifestyle modifications and other risk reduction approaches.5 These modifications include eating a healthy and balanced diet, high in vegetables, fruits, fish, and olive oil.10 Recent findings suggest that these foods contain high levels of unsaturated fatty acids, polyphenols, and vitamins, which exhibit positive effects on disease prevention. Other important risk reduction strategies include managing cardiovascular risk factors, such as hypertension and dyslipidemia.

Dietary changes are thought to reduce oxidative stress, which is known to be a key component in the underlying pathophysiology of the disease.10 In addition, consuming unsaturated fatty acids has positive effects on in-vivo inflammatory pathways, which may reduce the expression and production of pro-inflammatory signalling molecules. Numerous studies on the effects of diet on the prevention of AD are ongoing.

Infant mortality The CDC report also highlighted key findings related to infant mortality in the US.1 One important measure, “the ratio of infant deaths to live births in a given year,” is often considered to be a key marker of overall population health.

[“Infant mortality] changed from 587.0 infant deaths per 100,000 live births in 2016 to 579.3 in 2017, but this change was not statistically significant. . . The 10 leading causes of infant death [Table] in 2017 accounted for (CONTINUED ON PAGE 25)
A MESSAGE FROM THE EDITOR

Embracing Changes

Natalie Timoshin | Executive Editor

On behalf of the editorial staff, I am very pleased to welcome Dr John J. Miller as the new Editor in Chief of Psychiatric Times. Dr Miller knows Psychiatric Times well, he was a contributing author for many years before joining the Editorial Board. Having worked with him over the past few years, I know that his standards are high, but he is a joy to work with.

Dr Miller is Medical Director of Brain Health in Exeter, NH, staff psychiatrist at Seacoast Mental Health Center, consulting psychiatrist at Exeter Hospital, and psychopharmacology consultant to psychiatric nurse practitioners, psychiatrists, and physicians. He has delivered more than 2700 lectures nationally on topics related to the pharmacokinetics, pharmacodynamics, and pharmacogenomics of psychiatric medications.

He earned his medical degree at the University of Massachusetts Medical School in Worcester, where he completed his residency in adult psychiatry. Why psychiatry? “I studied biochemistry in college, which I continue to study to this day. A course in molecular evolution lit a fire of passion to understand the nature of the universe at multiple levels, which still burns in my soul. I initially planned to obtain a PhD in genetics, but ultimately decided to attend medical school. As a psychiatrist, I continue to learn about consciousness through both my love of biochemistry and mindfulness. I have worked part time for the past 11 years at our local community mental health center, where I enjoy treating patients. I feel fortunate to spend most of my time learning, lecturing, writing, and consulting. This is my 27th year as the volunteer psychiatric consultant at the Insight Meditation Society in Barre, MA, which provides me with a constant reminder of the importance of my own practice of meditation.”

In his spare time, Dr Miller enjoys spending time in nature, hiking and boating, and exploring different countries and cultures. He has lived for the past 20 years in the sea coast area of New Hampshire with his wife Deborah and 23-year-old son Jason.

As Editor in Chief, Dr Miller will be heading a distinguished group of psychiatrists who serve on our Editorial Board. Our Board plays a key role in guiding the editorial direction of Psychiatric Times—they write articles and columns, serve as peer reviewers, and provide feedback on everything we publish.

I also welcome Dr Scott L. Zeller who recently joined our Editorial Board. Dr Zeller is Vice President for Acute Psychiatry at Vituity and a leading expert in emergency psychiatry. He played an integral part in the development of guidelines for the evaluation and treatment of agitation. He is a past president of the American Association for Emergency Psychiatry, and he was elected Chair of the Coalition on Psychiatric Emergencies in 2019.

Dr Zeller lives in the San Francisco Bay area with his wife of 23 years and their teenage son. In his spare time, Dr Zeller enjoys travelling and spending time in the outdoors.

Dr Allan Tasman and Dr Michelle Riba have stepped down from their roles as Editor in Chief and Deputy Editor, respectively, of Psychiatric Times. They now join the ranks of the distinguished Editors in Chief Emeriti of Psychiatric Times. We thank them for their contributions and look forward to their continued support and guidance.
Treatments over 6 weeks.

This hypothesis was investigated for trauma-induced long-term memory in a double-blinded, randomized placebo-controlled trial by Brunet and colleagues (2018). They looked at the impact of pre-reactivation propranolol therapy on PTSD symptoms in weekly treatments in patients with histories of depression, and found significantly associated with delayed progression to Alzheimer dementia by 3 years. This effect was not seen with short-term SSRI treatment, treatment with antidepressants other than SSRIs, or no antidepressant treatment. It is not known why this effect was only observed with SSRIs and not with other antidepressants.

**Cannabidiol as a potential treatment for schizophrenia**


Cannabidiol (CBD), the second most active ingredient in marijuana, has been hypothesized to have antipsychotic effects—in contrast to tetrahydrocannabinol (THC), which may promote or worsen psychosis. McGuire and colleagues undertook an 8-week, multicenter, double-blind, parallel-group study to explore the efficacy and safety of 1000-mg CBD daily as adjunctive treatment to oral antipsychotic medication in 88 patients with schizophrenia.

CBD significantly reduced psychotic symptoms (PANSS difference −1.4 score, 95% CI = −2.5 to −0.2), and more patients on CBD were rated as being improved by their clinicians on the Clinical Global Impressions scale compared with the placebo group. There was also a trending improvement in cognition. Moreover, CBD was well-tolerated without significant adverse effects. Pending replication in larger phase-3 trials, CBD could very well emerge as a novel treatment for psychosis in the future.

**Long-term SSRI treatment may delay progression from mild cognitive impairment to dementia**


An analysis of data from the Alzheimer Disease Neuroimaging Initiative—a multicenter, prospective, longitudinal cohort study of subjects with Alzheimer disease—examined the impact of SSRI treatment in patients with mild cognitive impairment (MCI). Participants (N=755) in the study did not have active symptoms of depression (per study criteria), but researchers looked at prior history of depression and history of antidepressant treatment. They discovered that long-term treatment with SSRIs (treatment duration longer than 4 years) in MCI patients with histories of depression was significantly associated with delayed progression to Alzheimer dementia by 3 years. This effect was not seen with short-term SSRI treatment, treatment with antidepressants other than SSRIs, or no antidepressant treatment. It is not known why this effect was only observed with SSRIs and not with other antidepressants.

**Polygenic risk score for schizophrenia and response to lithium in bipolar disorder**


Individual genetic variants associated with schizophrenia have very small effect sizes; however, collectively, these variants determine the genetic susceptibility to schizophrenia. Schizophrenia polygenic risk score is the quantified sum of schizophrenia-associated alleles across many different genetic loci. The genetic overlap between bipolar disorder and schizophrenia has been well-documented.

It is also known that response to lithium in bipolar disorder can be variable. Amare and colleagues investigated whether polygenic risk score for schizophrenia (determined from a genome-wide association study) would be associated with treatment responses to lithium in bipolar disorder. Almost 2600 patients with bipolar disorder who had been treated with lithium were genotyped and assessed for lithium response.

The polygenic score for schizophrenia was inversely associated with lithium treatment response, with low schizophrenia polygenic load being associated with odds ratio of response up to 3.5 compared with high polygenic risk score. Interestingly, genetic variants related to human leukocyte antigen (HLA) complex and inflammatory cytokines appear to be involved in mediating this relationship. This suggests that in patients with bipolar disorder, determination of genetic loading for schizophrenia risk variants could potentially help individualize lithium treatment.

**Pre-reactivation propranolol therapy for PTSD**


Reactivation of a consolidated memory appears to change it from a stable to labile state, where it could potentially be influenced by pharmacologic agents. This hypothesis was investigated for traumatic memories in a double-blind, randomized placebo-controlled trial by Brunet and colleagues who looked at the impact of pre-reactivation propranolol therapy on PTSD symptoms in weekly treatments over 6 weeks.

Adults (N = 61) with PTSD were randomly assigned to treatment or placebo. Participants were asked by therapists to write a narrative of their trauma with associated bodily sensations in the present tense 90 minutes after propranolol or placebo. Compared with placebo, pre-reactivation propranolol therapy led to statistically significant improvements in the Clinician-Administered PTSD Scale as well as patient-rated PTSD Checklist with a large effect size on these clinical measures.

**Antipsychotic plasma levels in treatment-resistant schizophrenia**


Inadequate response to antipsychotics is commonly seen in clinical practice in patients with schizophrenia, and it is often undetermined to what degree this is a result of medication ineffectiveness or medication underexposure due to non-adherence or rapid metabolism. The answer to this question was explored in a British study by examining antipsychotic plasma levels in 99 patients who had received a provisional diagnosis of treatment-resistant schizophrenia.

Patients were receiving: olanzapine, aripiprazole, amisulpride, risperidone, quetiapine, sulpiride, and haloperidol. Just over one-third (35%) of the total sample had subtherapeutic antipsychotics plasma levels, including 12% of patients who had undetectable levels. Rates of hospitalization were higher in individuals with a subtherapeutic plasma level (31% vs 11%).

Black ethnicity and lower dose were significantly associated with subtherapeutic/undetectable plasma levels. Therefore, a substantial percentage of patients clinically identified as treatment-resistant may not truly be treatment-resistant given the lack of therapeutic plasma levels of antipsychotic agents. This highlights the utility of plasma antipsychotic levels in the assessment of treatment-resistant schizophrenia, because patients with subthreshold levels could be managed with long-acting injectables (if adherence is an issue) or with appropriate dose modifications (if there is rapid metabolism of antipsychotic medication).

**Transcranial magnetic stimulation approved by FDA for OCD**


In August 2018 the FDA permitted marketing of the Brainsway Deep Transcranial Magnetic Sti-
ulation (TMS) System for treatment of obsessive compulsive disorder (OCD). This approval was based on results of a randomized, multicenter study of 100 patients with OCD (49 active treatment, 51 sham treatment), 25-min sessions, 5 times a week, for 6 weeks. Over one-third (38%) of patients experienced a response to the TMS device (response was defined as greater than 30% reduction in Yale-Brown Obsessive Compulsive Scale score), compared with 11% of patients in the control group. No serious adverse effects were reported. The Brainsway TMS device uses a special magnetic coil with a broader target reach than other TMS devices. The treatment protocol was also unique because it involved a brief psychotherapy session before each treatment where a therapist encouraged patients to think about their anxieties and compulsions. TMS has been successfully utilized in clinical practice for the treatment of depression since 2008; now this treatment modality can be extended to the treatment of OCD.

**Intranasal esketamine for treatment-resistant depression**


Brexpalone (SAGE-547) is a positive allosteric modulator of GABA-A receptors. It had shown promise in phase 2 trials for the treatment of moderate to severe post-partum depression. In 2018, results of two large placebo-controlled phase 3 trials were published in *Lancet*. A total of 246 women with post-partum depression were randomized to brexpalone or placebo. Brexpalone was administered in a single intravenous injection of 60 or 90 μg/kg per hour over 60 hours. In both trials brexpalone led to a significant and clinically robust reduction in depression scores at 60 hours while being clinically safe and well tolerated. Brexpalone is expected to receive FDA approval for post-partum depression in the near future. An infusion lasting 5 times a week, for 6 weeks. Over one-third (38%) of patients experienced a response to the TMS device (response was defined as greater than 30% reduction in Yale-Brown Obsessive Compulsive Scale score), compared with 11% of patients in the control group. No serious adverse effects were reported. The Brainsway TMS device uses a special magnetic coil with a broader target reach than other TMS devices. The treatment protocol was also unique because it involved a brief psychotherapy session before each treatment where a therapist encouraged patients to think about their anxieties and compulsions. TMS has been successfully utilized in clinical practice for the treatment of depression since 2008; now this treatment modality can be extended to the treatment of OCD.

**Brexpalone: a rapidly acting novel treatment for post-partum depression**


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**Dr Afath is a Geriatric Psychiatry Fellow at University of California San Diego in La Jolla, CA. He is also a member of the psychiatric Times Advisory Board. □**
The Year in Bipolar Disorder: Practice-Changing Articles

Chris Aiken, MD

Are mood stabilizers causing strokes? Can we treat bipolar II without medication? When is it best to use olanzapine, lurasidone, or lithium? The past year brought answers to these questions and added two natural options to the menu for bipolar disorder.

When to use olanzapine


Olanzapine is one of the more effective medications for acute mania, but tolerability problems steer many away from it. So, when to use it? Judging from this meta-analysis from the tail-end of 2017, it’s in severe mania that this antipsychotic has the biggest effect (Figure). The study drew from five double-blind, randomized controlled trials of acute mania. Olanzapine reduced Young Mania Rating Scale (YMRS) scores by 2.6 points in mild mania (YMRS 20-25), 4.7 points in moderate mania (YMRS 25-35), and 8 points in severe mania (YMRS 35-60). Although the benefits differed, all groups suffered the same rate of adverse effects. The average dosage across the trials was 13 mg daily.

What it means for practice. Olanzapine is a high-risk, high-yield mood stabilizer, and its use is more justifiable in severe mania. It works quickly, which raises the possibility that olanzapine could be started for acute mania along with lithium or an anticonvulsant, and then tapered off after 3 to 6 months. That switch may lower the risk of tardive dyskinesia and metabolic syndrome, but whether it will prevent new episodes in olanzapine responders is an open question.

Can psychotherapy alone treat bipolar II disorder?


Psychotherapy without a mood stabilizer is a risky option in bipolar I, where manic episodes can have destructive effects. But what about bipolar II? In this pivotal trial, psychiatrist Holly Schwartz and colleagues randomized 92 adults with bipolar II depression to therapy + placebo or therapy + quetiapine. The therapy utilized was Interpersonal and Social Rhythm Therapy (IPSRT), which encourages regular habits of activity and sleep while addressing the conflicts in identity and relationships that arise in life with bipolar.

Improvement was faster in the medication group, but after 20 weeks the rates of response were about the same in the two groups. Those who underwent psychotherapy alone were spared a number of adverse effects, particularly weight gain and sedation.

How it changes practice. This study gives needed, but preliminary, answers for patients with bipolar II who can’t or won’t take long-term mood stabilizers. IPSRT’s mood-stabilizing effects are documented in studies lasting up to two years. It may not be a medication, but therapy can stabilize neuroactive hormones in bipolar disorder, and IPSRT addresses a biological mechanism that’s central to this disorder: circadian rhythms.

A probiotic and antioxidant for bipolar disorder


Two small but well-designed studies found impressive results for natural therapies in bipolar disorder. A probiotic strain reduced the rehospitalization rate three-fold after a manic episode, and the antioxidant coenzyme Q10 improved bipolar depression with a large effect size (0.87).


Probiotics are the healthy bacteria in the gut flora, and increasing their count seems to improve mental health by altering neurotransmitters, neurotrophic factors, and hormonal and inflammatory signaling. Can an unhealthy flora worsen mood? Two studies from 2018 suggest the answer is yes. The first compared stool samples from bipolar patients with healthy controls and found an association between illness duration and inflammatory strains of bacteria. The second study found alarming elevations of mania when bipolar patients ate nitrate-rich foods like beef jerky. Animals tests confirmed the pro-manic effect and showed that nitrate-rich meats were shifting the flora toward bacteria with ill effects on mental health.

How it changes practice. There are good reasons to wait for more confirmation before using these...
therapies, but there are also good reasons to use them now. Many patients prefer natural treatments, and patient preference in itself can influence response. Probiotics and coenzyme Q10 have established safety records in other conditions, and both have medical benefits that are relevant to many bipolar patients. For specifics on dosing and product selection, check our 2018 columns on probiotics and coenzyme Q10.1-4

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**Pediatric bipolar disorder: lithium makes a comeback and lurasidone enters the playing field**


In March 2018 the FDA granted approval for the atypical antipsychotic lurasidone (Latuda) in children and adolescents with bipolar depression. Meanwhile, three papers came out with renewed support for lithium in childhood bipolar. Both treatments are FDA-approved in youth (lithium in ages 12 and up; lurasidone in ages 10 and up), but they address different phases of bipolar disorder. Lurasidone is for acute depression, while lithium treats and prevents all poles of the illness.

**A take-home message from this research.** Lithium requires similar serum levels, and lurasidone similar dosing, in children as in adults. They also have similar adverse effect profiles in both populations.

**How it changes practice.** Lurasidone joins olanzapine-fluoxetine combination as the only FDA-approved options for bipolar depression in youth. Whether adult or child, lithium works better in classic bipolar disorder, where there’s a clean separation of manic and depressive symptoms, while atypicals like lurasidone work better when mood states, rapid cycling, and/or comorbid disorders predominate.

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**Good News for Lithium**


Three studies brought new reasons to consider lithium in bipolar disorder. Compared with other mood stabilizers, lithium led to the lowest rate of rehospitalization in a cohort of 18,000 bipolar patients followed for an average of 7 years. Lithium’s superiority held up for psychiatric as well as all-cause hospitalizations. Long-acting antipsychotics were a close second. This finding was backed up by two large studies from 2017, in which lithium lowered hospitalization rates more than other medications in both unipolar and bipolar disorder (total n = 158,000).1-4

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**Why is one of the most effective treatments for bipolar disorder also the most underutilized? Although it reduces rehospitalization and suicide, lithium is slower to act than an antipsychotic, which may impede its adoption on psychiatric wards.**

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**The next result may raise alarms**


All mood stabilizers except lithium and lamotrigine were associated with an increased risk of stroke in a case-controlled study of 19,000 bipolar patients (risk ratio = 1.2-1.76). This finding did not come out of nowhere. It has been seen with carbamazepine and valproate in epilepsy and with antipsychotics and even antidepressants in general. The mechanism is not known, although it may involve coagulation and, in the case of hemorrhagic stroke, anti-coagulation.

Lamotrigine’s neutrality is a novel finding, but earlier research has found a lower risk of stroke with lithium and numerous cardioprotective effects with lithium.1-4


The final study is the bottom line. Lithium outperformed other mood stabilizers in the long-term maintenance of bipolar disorder in 8 out of 9 observational studies, including over 14,000 patients, in this meta-analysis by Lars Vedel Kessing and colleagues.

**What it means for practice.** Why is one of the most effective treatments for bipolar disorder also the most underutilized? Although it reduces rehospitalization and suicide, lithium is slower to act than an antipsychotic, which may impede its adoption on psychiatric wards. Its renal risks are another deterrent, but that needs to be weighed against lithium’s growing list of health benefits, which include prevention against heart disease, stroke, cancer, neurologic illnesses, and dementia. There is also a belief that lithium is hard to tolerate, but in areas that matter most to patients, lithium is more tolerable than most mood stabilizers.1

Unlike other psychiatric medicines, lithium has been generic since its inception. That translates to a lack of sponsorship for lithium education, so I’m grateful for the opportunity to rediscuss it through this column. I hope to bring you more in 2019.

Dr Aiken is the Director of the Mood Treatment Center, Editor in Chief of The Carlat Psychiatry Report, and Instructor in Clinical Psychiatry at the Wake Forest University School of Medicine.

Dr Aiken does not accept honoraria from pharmaceutical companies but receives royalties from W.W. Norton & Co for Bipolar Not So Much, which he coauthored with Jim Phelps, MD.

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**References**


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Anxiety Disorders in Children and Adolescents: New Findings

Karen Dineen Wagner, MD, PhD

Anxiety disorders are the most common psychiatric condition in youth. Lifetime prevalence rates for any anxiety disorder in adolescents is 31.9%. Anxiety disorders occur early in childhood with a median age of onset of 6 years. These disorders lead to significant impairment in academic, social, and family functioning. In clinical practice, it is common to see children who are homeschooled because of severe untreated anxiety disorders. Untreated anxiety disorders may also be a precursor for MDD. There have been some recent studies and meta-analyses that address mental health hospitalization, optimal treatment, and long-term outcome for children and adolescents with anxiety disorders.

SSRIs have earlier and greater efficacy than SNRIs for the treatment of children and adolescents with anxiety disorders.

Mental health hospitalization

In a recent study, Bushnell and colleagues examined the incidence of mental health-related hospitalization, treatment for self-harm, and emergency room visits in children and adolescents who had a new diagnosis of an anxiety disorder. The sample included 198,450 youths aged 3 to 17 years who were included in the MarketScan claims database that contains health plan data for those covered by employer-sponsored private health insurance across the US. Youths were followed for up to 2 years after diagnosis of an anxiety disorder, and youths without anxiety diagnoses were included as comparators.

The median age of the youths with anxiety disorders was 12 years old and 55% were female. The incidence of new anxiety diagnoses were as follows: unspecified anxiety disorder (53%), generalized anxiety disorder (25%), obsessive-compulsive disorder (5%), and posttraumatic stress disorder (4%). Within a one-year period from diagnosis, 2% of these youths had a mental-health related hospitalization, 1% had a recorded suicide ideation claim, and 0.8% had inpatient treated self-harm. Emergency room visits were high (20%), and 1.4% had an anxiety-related emergency room visit within one year of a new anxiety disorder diagnosis. The two-year incidence of these events was similar.

Rates of these events were highest in older children with baseline comorbid depression. Rates were lower in the comparator group (mental health-related hospitalization 0.5%, treated self-harm 0.01%, and emergency room visits 13%). Findings from this study further demonstrate the significant adverse effects of anxiety disorders in children and adolescents.

Antidepressant treatment

Strawn and colleagues examined the magnitude of antidepressant response and the effect of antidepressant class and dose on improvement in pediatric anxiety disorders. The anxiety disorders included generalized anxiety disorder, social anxiety disorder, and separation anxiety disorder. Data were obtained from 9 trials of antidepressant medications, which included 5 SSRIs and 4 SNRIs for 1,673 youths with anxiety disorders who were randomly assigned to an antidepressant or placebo. The median duration of the treatment was 10 weeks. The SSRIs included fluoxetine, fluvoxamine, paroxetine, and sertraline. SSRIs included atomoxetine, venlafaxine, and duloxetine.

By week 2 there were statistically significant differences between medication and placebo, and by week 6 there were clinically significant treatment differences between antidepressant medication and placebo.

There were also class differences in effectiveness between SSRIs and SNRIs. Compared with SNRIs, SSRIs showed significantly greater improvement by the second week of treatment, which was maintained through week 12.

There was no difference in response over time between high- and low-dose SSRI treatment; however high dose resulted in statistically significant improvement earlier (week 2) compared with low dose. The results of this study demonstrate that response occurs early with antidepressant treatment of pediatric anxiety disorders and that SSRIs have earlier and greater efficacy than SNRIs for the treatment of children and adolescents with generalized anxiety disorder, social anxiety disorder, and separation anxiety disorder.

Psychotherapy

A meta-analysis was undertaken to compare different types of psychotherapies for the treatment of children and adolescents with anxiety disorders. The study comprised 101 randomized clinical trials with a total of 66,259 patients in the analyses. There were 11 different psychotherapies including:

- Group behavioral therapy (BT)
- Individual and group BT
- Individual BT with parental involvement
- Group cognitive behavioral therapy (CBT)
- Group CBT with parental involvement
- Individual CBT
- Individual and group CBT
- Individual CBT with parental involvement
- Internet-assisted CBT
- Parent-only CBT
- Bibliotherapy CBT

The 4 control conditions included wait list, psychological placebo, no treatment, and treatment as usual.

All of the psychotherapies were found to be more effective than the wait list control. Of all the therapies, only group CBT was significantly more effective in treating anxiety symptoms than the other psychotherapies or the control conditions at both posttreatment and at short-term follow up (the median duration of acute treatment was 12 weeks and the longest follow up was 6 months). Based on these findings, the researchers suggest that group CBT may be the initial treatment for youth with anxiety disorders; however these findings require further research.

Long-term outcome

The Child/Adolescent Anxiety Multimodal Extended Long-Term Study provides information about long-term outcome for youths who received acute (12 week) treatment for pediatric anxiety disorders. The study included 319 children and adolescents with separation anxiety disorder, social anxiety disorder, and/or generalized anxiety disorder. Study participants were randomized to either 12 weeks of sertraline, CBT, sertraline plus CBT, or placebo. They were assessed annually over 4 years. Across all 4 years, 21.7% of youth were in stable remission, 30% were chronically ill, and 48% relapsed. Those youths who responded to acute treatment were more likely to be in remission during the course of the follow-up. There was no association between the initial treatment group and remission status. These findings indicate that anxiety disorders in children and adolescents are often chronic and may require longer-term or intermittent treatment beyond acute treatment.

Dr. Wagner is Professor and Chair, Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch, Galveston, TX. She is President of the American Academy of Child and Adolescent Psychiatry.
Our understanding of schizophrenia has deepened and evolved, although perhaps not as much in its treatment as in its neurobiology. The Special Report articles on schizophrenia illustrate well this current state of play. Much is known about the biology and pharmacodynamics of drug metabolism, which has influenced the choice of many drugs and has pointed out greater risks and synergies with drug-drug interactions based on inhibitory effects on the P450 system. While some studies suggest that this approach might be beneficial in the clinical treatment of schizophrenia, the effect remains limited and the results from other studies have been modest at best.

The results from recent studies suggest that the neurobiology of schizophrenia converges more with other psychiatric conditions than might otherwise be considered. The historical antecedents of this are described in a fascinating “re-read” of the original writings of Emil Kraepelin from 1870 through 1920 by one of today’s luminaries in psychiatric genetics, Dr Kenneth Kendler.1 A contemporary evaluation of neurobiological overlap among schizophrenia, bipolar disorder, major depression, autism, and alcoholism suggests a shared genetic vulnerability across these conditions rather than an independence for genetic effects for schizophrenia.2 These findings are reflected in a large genetic analysis of 25 neurological conditions—The Brainstorm Consortium—comprised of psychiatric and neurological disorders, which showed even greater congruence among mental health disorders than neurological disorders.3

There has been much written recently of the legalization of cannabis use and also the use of cannabidiol oil in medicine. It is well known that cannabis use heightens the risk for schizophrenia as well as worsening its course.4 Yet, it is intriguing that cannabidiol oil is being tested as a potential treatment for schizophrenia. In an 8-week, placebo-controlled study, McGuire and colleagues5 found a modest beneficial effect of cannabidiol oil as an adjunct to antipsychotic therapy. Equally importantly, there were no significant adverse effects from this “neuroscience-informed” innovative treatment approach.

The quest for individualized treatments continues. A seminal European study of first episode schizophrenia shows how far we have come and how far we have yet to go.6 Findings from the OPTMiSE trial of 450 patients with first-episode psychosis suggested a 76% remission rate through 3 phases of antipsychotic treatment that spanned 3 months: with initial exposure to low-dose amisulpride; randomization, if needed, to either higher-dose amisulpride or olanzapine; and thereafter, if needed, treatment with clozapine. The overall remission rate is similar to earlier US first-episode treatment studies. The second phase of treatment with either higher dose of amisulpride or olanzapine was deemed redundant with the recommendation that clinicians should go directly to clozapine once an appropriate first-line therapy has failed—a provocative and important conclusion from this study.

We hope this collection of articles in this two-part Special Report is helpful to you in illuminating contemporary themes in schizophrenia.

Dr Buckley is Dean, School of Medicine, Virginia Commonwealth University, Richmond, VA.

References
Immunotherapy as Personalized Medicine for Schizophrenia?

Brian J. Miller, MD, PhD, MPH

The investigation of immune system abnormalities in schizophrenia, though ongoing for decades, has received significant renewed interest, stimulated in part by our increased understanding of brain-immune interactions that occur in other chronic medical disorders. Two compelling case reports provide additional evidence for potential mechanistic associations between the immune system and schizophrenia.

Immune dysfunction in schizophrenia

Sommer and colleagues described the case of an elderly male with leukemia but no psychiatric history who presented with new-onset psychosis after undergoing an allogenic peripheral blood stem cell transplant from a brother with chronic schizophrenia. Conversely, Miyao and colleagues reported on a young male who experienced prolonged remission of treatment-resistant psychosis, in the absence of antipsychotic medication, after a bone marrow transplant for leukemia. Of course, it is challenging to establish a causal link between the immune system and schizophrenia, but the bidirectional nature of these case reports provides new lines of evidence supporting the plausibility of such an association.

Indeed, schizophrenia is associated with immune system abnormalities throughout the lifespan (see Goldsmith and Miller for a comprehensive review). Briefly, genes involved in the regulation of the immune system are associated with increased risk of schizophrenia. Prenatal maternal infection with a variety of different infectious agents is a replicated risk factor for the development of schizophrenia in the offspring. Moreover, there is evidence for bidirectional associations between schizophrenia and severe infections and autoimmune disorders.

Patients with schizophrenia have immune abnormalities in the blood, cerebrospinal fluid, and CNS, including immune cell numbers, inflammatory markers, and antibody titers. There is also evidence for immune abnormalities in the blood and an increased prevalence of autoimmune disorders in the relatives of patients with schizophrenia. Acutely ill patients with schizophrenia appear to have an increased prevalence of certain comorbid infections (eg, lower urinary tract infections). Schizophrenia is also associated with increased mortality from infectious diseases, including pneumonia and influenza.

Although there are a number of well-replicated findings in this area, the effect sizes are small to moderate for many associations, and there are also negative studies. There are many potential explanations for these discrepancies, including small sample sizes, stage of illness, medication status, comorbid conditions, and potential confounding or moderating factors such as obesity and smoking. Another important potential explanation for these heterogeneous findings is that immune system dysfunction occurs in only a subset of patients with schizophrenia. This may reflect an inherent limitation of our phenomenologically based nosology.

Adjuvant anti-inflammatory agents in schizophrenia

Importantly, findings indicate that treatment with NSAIDs as adjuncts to antipsychotics may be associated with significant improvement in psychopathology in schizophrenia. Additionally, baseline blood levels of cytokines—key signaling molecules that regulate inflammation—may predict treatment response to these agents.

Nitta and colleagues analyzed 8 studies (N = 774 patients) of adjunctive NSAIDs (6 trials of celecoxib and 2 trials of aspirin), including 3 unpublished reports. They found that NSAIDs were associated with a small, trend-level reduction in total psychopathology, and a small, significant reduction in positive psychopathology. The effects of adjunctive NSAIDs were greater in inpatients and patients with first-episode psychosis.

In an analysis of 26 double-blind trials of various agents with anti-inflammatory properties, Sommer and colleagues found significant effects for aspirin, estrogen, and the antioxidant N-acetylcysteine in patients with schizophrenia.

Results from an analysis of 8 randomized controlled trials (N = 548 patients) show that adjunctive monoclonal antibodies offer promise for the hypothesis that immune dysfunction, namely increased inflammation, may be involved in the pathophysiology of schizophrenia.

The small-to-moderate effect sizes for the efficacy of adjunctive NSAIDs most likely reflects that immune dysfunction occurs in only a subset of patients with schizophrenia. Two important limitations of these studies are that: NSAIDs have relevant off-target (ie, non-immune) effects and evidence of immune dysfunction (eg, the presence of increased inflammation in the peripheral blood, as measured by C-reactive protein [CRP]) was not an inclusion criterion, which may have decreased the signal-to-noise ratio in these trials.

Immunotherapy

In contrast with NSAIDs, monoclonal antibodies, also termed biologic agents or “biologics,” target specific inflammatory cytokines or cytokine receptors. These agents are used in the treatment of certain chronic diseases, including hepatitis C, malignant melanoma, and autoimmune disorders such as rheumatoid arthritis and multiple sclerosis. Intriguingly, monoclonal antibody immunotherapy for these chronic medical disorders has been associated with a range of neuropsychiatric adverse effects, most commonly depression and psychosis. That immunotherapy may be associated with psychosis (albeit rarely) indirectly supports the plausibility that immunotherapy with other, different cytokines may be a potential treatment for psychosis.

There are several major potential advantages of monoclonal antibody immunotherapy over NSAIDs or other anti-inflammatory agents as adjuvant treatments for schizophrenia (Table). Monoclonal antibodies do not have any off-target effects, they act only on specific cytokines. Therefore, improvements in psychopathology in response to monoclonal antibody immunotherapy would further (and directly) implicate these inflammatory pathways in the pathophysiology of schizophrenia.

Compared with NSAIDs, monoclonal antibodies have more potent anti-inflammatory properties. Indeed, NSAIDs have minimal efficacy in conditions with significant inflammation, such as autoimmune disorders. The small-to-moderate effect sizes for improvements in psychopathology with adjunctive NSAIDs may also suggest that more potent anti-inflammatory agents are needed for more robust effects. Presently, most monoclonal antibodies are administered by intravenous (IV) infusion (although some agents can be given subcutaneously or orally), typically once a month. From a research perspective, this is advantageous in terms of obviating issues of medication adherence that may confound findings.

Early studies of adjunctive monoclonal antibody immunotherapy in schizophrenia

In parallel with the evolution of monoclonal antibody immunotherapy in other chronic disorders, there are nascient studies of these agents in schizophrenia. Grüber and colleagues reported that two patients with treatment-resistant schizophrenia had significant improvement in psychopathology during open-label adjunctive treatment with recombinant human interferon gamma-1b (IFN-γ-1B).
In an 8-week open-label trial of adjunctive tocilizumab (an anti-interleukin [IL]-6 receptor [IL-6R] mAb) in 6 stable outpatients with schizophrenia, our group found significant improvements in cognition. 14

A randomized controlled trial in 36 patients found that adjunctive tocilizumab did not improve psychopathology or cognition in stable patients with schizophrenia. 15 Several aspects of this very important negative trial warrant further consideration.

Although the authors found that baseline CRP did not predict treatment outcome, evidence of inflammation was not an inclusion criterion. Therefore, the number of subjects with evidence of inflammation who received tocilizumab was small, and the study may have been underpowered to detect such an association.

Subjects in this trial were clinically stable at study entry. Previous meta-analyses suggest that response to adjunctive NSAIDs may be more robust in acutely ill patients.

Baseline assessments were completed within 2 weeks of the first infusion of study drug. It is possible, therefore, that some clinical improvement in this trial was not captured due to this modest delay in assessment.

**TABLE. Considerations for adjunctive monoclonal antibody immunotherapy in schizophrenia**

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No relevant off-target (ie, non-immune) effects, which permits direct testing of a role for immune dysfunction in the pathophysiology of schizophrenia</td>
<td>• Uncertainty regarding optimal phase of illness and duration of treatment with these agents</td>
</tr>
<tr>
<td>• More potent anti-inflammatory properties than other agents, which may increase the signal-to-noise ratio in clinical trials</td>
<td>• Serious potential adverse effects due to profound immunosuppression, including life-threatening infections, demyelinating disorders, ulcers, and malignancy, with long-term use</td>
</tr>
<tr>
<td>• Intravenous route of administration obviates issues of medication adherence that may confound findings in research clinical trials</td>
<td>• High cost (potentially &gt;$1000 per dose) may limit more widespread use</td>
</tr>
<tr>
<td>• The use of biomarkers (eg, blood CRP levels) may identify a subset of patients with schizophrenia who are more likely to respond to this treatment approach</td>
<td>• Intravenous route of administration poses a myriad of logistical issues for patients and clinicians</td>
</tr>
</tbody>
</table>

**Conclusions**

The available data do not support the widespread clinical utility of measuring inflammatory markers such as blood CRP levels in patients with schizophrenia and prescribing adjunctive NSAIDs or monoclonal antibody immunotherapy for those with evidence of abnormality. Nevertheless, there is a compelling rationale for well-designed, carefully conduct ed trials of monoclonal immunotherapy in schizophrenia, which will permit direct testing of the hypothesis that immune dysfunction, including inflammation, plays a causal role in psychopathology. It will be interesting to observe whether such highly selective strategies will pay off and whether the therapeutics of schizophrenia will broaden to encompass immune-based approaches. These studies, regardless of outcome, will provide valuable insights into the effects of the immune system on brain and behavior, and represent an important potential step towards more personalized medicine for patients with schizophrenia.

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Dr Miller reports that he receives research support from Augusta University, the National Institute of Mental Health, the Brain and Behavior Research Foundation, and the Stanley Medical Research Institute.

**References**

Antipsychotic drugs are the cornerstone in the management of psychotic disorders, but most patients fail to have a “good” response in short-term trials. Therefore, alternative strategies including dose escalation, switching to another antipsychotic, or co-treatment with polypharmacy are often necessary. At any given time, more than 20% of the patients receive antipsychotic polypharmacy in an attempt to manage suboptimal response to monotherapy (Figure 1). Because of the limited evidence supporting the efficacy of this practice, far from being approved, decreasing it is considered a key performance improvement and quality of care target in various states. Nevertheless, to this day this practice is still prevalent in clinical care.

Surveys reveal that most of the patients treated with antipsychotic polypharmacy were in fact inherited from other prescribers, yet most clinicians are reluctant to convert these patients to antipsychotic monotherapy (Figure 2). Although switching from polypharmacy to monotherapy is generally safe, data suggest a greater likelihood of dissatisfaction by patients or prescribers with the switch to monotherapy.

Beyond adding a second antipsychotic, adjunctive treatment with other types of drugs is also common. A recent overview of meta-analyses showed that 42 different compounds had been studied, which shows how extensive this practice is. The addition of other compounds to antipsychotics is often studied in the context of managing symptoms such as negative symptoms or cognition, which are known to respond poorly to antipsychotic drugs.

The common use of polypharmacy contrasts with the relatively limited attention that is paid to usual drivers of insufficient treatment response. As with any chronic condition that involves taking drugs on a daily basis, psychotic disorders are associated with high rates of treatment non-adherence. However, this is often challenging for clinicians to recognize and may result in changes in the treatment plan. For example, about one-third of patients deemed to be poor responders and in need of a management strategy change may not have therapeutic antipsychotic serum levels.

Another likely driver of poor response is treatment-resistant schizophrenia (TRS). A diagnosis of TRS and a trial with clozapine are indicated for patients who have had 2 antipsychotic monotherapy trials fail; however, both are often delayed. Data show that patients with TRS may undergo more than 5 antipsychotic trials before they receive clozapine, and that it may take a median of 5 years between meeting criteria for TRS and the onset of a clozapine trial. Some clinicians prefer to use polypharmacy over clozapine, and many patients may never have a clozapine trial. The utilization rate of this drug in the US is about 5% of antipsychotic initiations among patients with TRS, which indicates that this drug is largely underutilized.

The benefits of polypharmacy

to date, no combination strategy has been approved for the management of psychosis. In fact, proving that a combination of 2 drugs in polypharmacy works better than either of those drugs in monotherapy is particularly challenging. The combination needs to be tested independently against each individual drug in monotherapy, to confirm that the combination, and not the augmenting drug only, is superior to the augmented drug—this trial design is rarely done. Instead, most of the data come from studies that only compare the augmented drug to the combination, or directly compare co-treatment to monotherapy without confirming that monotherapy is not efficacious in a particular population.

With these caveats, hundreds of randomized controlled trials have been conducted to test the efficacy of the multiple forms of polypharmacy in various symptom domains of psychosis. These trials are often meta-analyzed as a way of obtaining unique pooled effects, which are often considered more reliable than those obtained from individual studies.

In a recent overview our team looked at the recommendations that resulted from the meta-analyses. Out of 42 co-treatment strategies that had been included, 14 combination treatments were found superior to antipsychotic monotherapy. Unfortunately, there was meaningful risk of bias in most of the randomized trials. This risk was even higher for the studies of combinations that showed large benefits compared with monotherapy.

Our team concluded that none of the recommended combinations had a meaningful benefit compared with their monotherapy counterparts. Those that showed benefit, had important risk of bias that did not justify the recommendation of drug combination for any of the symptom domains in schizophrenia. This is particularly disappointing for cognitive or negative symptoms that show limited benefit from antipsychotics monotherapy, yet are very burdensome. Our findings suggest that large high-quality trials are still necessary to address this issue.

Neurobiological research is also looking at the effects of augmenting antipsychotics with other drugs. For example, in a trial of antipsychotics augmented with N-acetylcysteine, researchers have found small improvements in measures of white matter integrity, and decrements in glutamatergic concentration in the anterior cingulate over the course of treatment.

Similarly, when the effects of fatty acids augmentation have been studied, preliminary results showed lower cortical thickness in individuals who received augmentation with placebo rather than fatty acids. To our knowledge there have not been neurobiological studies that compared the effects of combining different types of antipsychotics. These findings are deemed to be incipient due to the limitations with sample size and duration of follow up.
The implications of the described neurobiological effects in the pathophysiology of psychotic symptoms is unknown. Furthermore, this type of research is challenged by the simultaneous action of more than one drug intervention at once, which makes it difficult to disentangle the neurobiological effects of each one. There are insufficient data from clinical or biological research that indicate the benefits of polypharmacy compared with antipsychotic monotherapy.

The risks of polypharmacy

In general, the use of antipsychotic polypharmacy has been associated with a greater burden of adverse effects, although some of these effects seem to be specific to the combination of antipsychotics. For example, when the effects of transition from various types of antipsychotic combinations to monotherapy were studied, individuals randomized to monotherapy lost weight compared with individuals who continued in polypharmacy.

Specific drug combinations, particularly those that include aripiprazole may have particular adverse effect profiles. For example, in randomized studies that added aripiprazole to clozapine or olanzapine polypharmacy was associated with weight loss.

Non-randomized studies, mostly derived from chart review or claims data, are more consistent in showing associations between polypharmacy and adverse effects across most domains. Studies of augmentation with drugs other than antipsychotics have not been systematic in addressing the impact of adverse effects, yet it is very possible that adding other agents may increase the likelihood of adverse effects compared with monotherapy.

Altogether, the adverse effect burden of antipsychotic polypharmacy seems to be specific to the type of combination, with aripiprazole having some possible advantages in selected domains. However, in general findings suggest that most combinations of antipsychotics may have greater adverse effect profile than monotherapy. Most importantly, this practice may result in patients being labelled “poor responders” unnecessarily by preventing the utilization of more effective treatments, such as long-acting injectable or clozapine.

Evidence-based recommendations

The risk-to-benefit ratio seems to favor the use of antipsychotic monotherapy over polypharmacy in general terms, given the best consistent results that favor combination treatment as <20% of change in a rating scale) within 2 weeks may be sufficient to recommend a change in the treatment strategy. Monitoring the response to a clinical trial using rating scale such as the PANSS-6 for at least 2 weeks is recommended.

Long-acting injectable formulations have substantial advantage over oral formulations because they minimize interruptions to the continuity of treatment. As a next step, consider a diagnosis of TRS. If a diagnosis of TRS is warranted, clozapine is the only approved treatment for this patients.

Conclusion

Clinicians and patients should keep in mind the risk-to-benefit ratio considerations before initiating polypharmacy, especially if they have patients with polypharmacy prescriptions inherited from other providers. Special consideration should be given to the use of long-acting injectables and clozapine for patients with poor response to antipsychotics.

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Dr Rubio has received honoraria from Lundbeck.

References

Coaching Families to Address Addiction


“He’ll just have to hit bottom.”

That bit of outdated advice terrifies the family and friends of the person with an addiction who refuses treatment, because they know that “bottom” may be serious injury, overdose, or death. Although well-described methods are available for managing the person with an addiction who agrees to come into treatment with a support group of family members and/ or friends, sometimes an in-office evaluation is refused out of hand. So how do we, as clinicians trying to help the person with an addiction who refuses to set foot in our office, render assistance?

First, the message to the concerned family and friends should be that the time to act is now—whether or not the person with addiction comes in to the office. Second, we should model for loved ones of the person with an addiction an attitude of urgency combined with an acknowledgement of the situation’s complexity, because barring an immediate threat, there is little possibility for legally coerced treatment.

Those who care can push the person with an addiction towards treatment, while still maintaining an attitude of respect for his or her autonomy, life choices, and preferences.

Psychoeducation

Psychiatrists can teach the family and friends how to recognize an immediate danger and access the appropriate level of care for a threat to the life of the person with an addiction. For instance, helping loved ones understand what an opioid overdose looks like, how to use naloxone, and when to call 911, would be the first orders of business for someone with an opioid addiction. Or, for the individual who may or may not be in withdrawal from alcohol, informing the family about the signs and symptoms of alcohol withdrawal and alcohol poisoning educates them about what a true emergency is, and what presentations may be dealt with less urgently. The bottom line, however, is that any immediate threat to the person’s life should result in a call to 911.

Once the immediate threats are delineated, family and friends should be educated about the typical course of addiction, available treatments, and the best way to convince their loved one to accept an evaluation and eventual treatment. It is usually helpful to find out how those who care about the person with an addiction think about the addiction problem, and what they have tried up to this point. Often, families will have unrealistic or simply inaccurate views about addiction, or express (understandable!) anger if the person with an addiction has lied to them. Once these matters are on the table, the clinician can support any productive strategies already in place, counter any mistaken understandings, and suggest a specific plan for advancing treatment.

Family members who have been manipulated by a person with an addiction for money or other support are often angry and resentful. But by providing the family with psychoeducation—specifically, approaches that are likely to be helpful but also protect the family from being further abused—one can reassure family members and bring them into a make-shift “treatment team.” For example, offering to drive a family member to AA, or arranging insurance for a detox stay, or simply providing a hot meal and a chance to talk are all effective in supporting a recovery-focused view, but do not endanger the giver. By contrast, handing the person with addiction cash, allowing him or her to stay in one’s home, or even paying for an expensive treatment stay can all lead to families feeling taken advantage of and needing to protect themselves.

The “Intervention” model

Families sometimes believe that the best, and sometimes only, way to confront the person with addiction is via the “Intervention” model they have seen on television. ‘Although based on the influential work of Vernon Johnson,’ this model is hardly the only way to address an addiction problem in the family and can be counterproductive. Rather than using the dramatic and sometimes complicated “Intervention,” family and friends can be coached to ask about the particular problems they observe and explore possible avenues for help.

Clinicians should disabuse the family and friends of the fantasy that they can control whether their loved one enters treatment.

Motivational Enhancement

After this initial approach is discussed, family members and friends can be coached to approach the person with addiction as non-judgmentally as possible, with initial offers of a listening ear, and with initial statements about the person’s recovery payment preferences. The most challenging aspect of this intervention style can be a revelation for family members and friends trying to help the person with addiction non-judgmentally, because the family and friends believe that the best, and sometimes only, way to confront the person with addiction is via an expensive treatment stay can all lead to families feeling taken advantage of and needing to protect themselves.

The essential point for family members to understand is that they are trying to build a therapeutic alliance with the person with addiction—and this is a skill that can be taught, even to non-clinicians, and even in the heat of a deteriorating clinical situation. Family members and friends can be coached to approach the person with addiction as non-judgmentally as possible, with initial offers of a listening ear, and with particular treatment goals in mind. The attitude must be that “we are together and we’re going to get through this,” rather than “you need to stop acting like a child,” or (even worse!) “Just say NO!”
EDWARD: Mom, I can’t go to rehab and live there. I just don’t agree with all that God-stuff they talk about in AA. It’s not me. I’m not religious.

SALLY: Well, I certainly understand that, and you’re a grown-up who can decide what you believe and what you don’t.

EDWARD: Good. You get it. The whole thing is ridiculous and there is no way I’m going to go into that place. Those freaks can’t help me with my relationship with Lexi and the kids.

SALLY: Your relationship with Lexi and the kids?

EDWARD: Yeah, you know. She won’t let me see them any more until I stop drinking.

SALLY: Oh honey, I know you love those kids.

EDWARD: I do. It’s messed up.

SALLY: We have to figure out a way for you to get back into their lives.

In this role-play, Sally has been coached to avoid the bait of arguing about AA philosophy, or confronting directly Edward’s dislike for the treatment facility. Rather, she waits for Edward to give his own personal reason to stop drinking, which he quickly does: his love for his children. This should be the driving force in his desire for sobriety and can be used by Sally and the rest of the family for motivating him to enter treatment. The family can now emphasize Edward’s reasons, rather than their own, for beginning treatment and the eventual goal of sobriety.

Of course, in real-life situations, attempts to motivate the person with an addiction rarely go quickly, or smoothly. Families should be coached to focus on the eventual intended goal, with the understanding that the path will likely include setbacks and relapses. While keeping the safety of the person with an addiction in mind, families and friends can learn to accept—although not like—giving up ground in the service of remaining engaged and ready to help. For instance, a family may have to accept their child dropping out of school, or moving out of the house, or taking public assistance funds, all in the hopes of pushing the goal of treating the underlying addictive disorder.

Other interventions

The most painful situations occur when a family must withdraw resources from their loved one, in the form of declining to underwrite a drug-using lifestyle, and/or asking the person with addiction to leave the family home. If the family is unintentionally supporting the drug or alcohol use, these painful decisions must be made. However, barring any actual danger to those who love the person with addiction, family and friends can remain available to arrange treatment, help with applying for Medicaid, or driving to an AA meeting.

Clinicians should disabuse the family and friends of the fantasy that they can control whether their loved one enters treatment. Instead, a realistic understanding of their abilities can allow the group to function as effectively as possible, without the fantasy that they are omnipotent and can force the person with an addiction to accept treatment.

Families and friends often misperceive the range of available addiction treatments and venues. Contrary to public perception, a standard 28-day rehab is not the only, or even the best treatment available for addictive disorders. Families should learn about, and be able to promote, a wide variety of possibilities for their particular loved one, such as intensive outpatient programs, individual therapists, Medication-Assisted Treatment (MAT), and a range of peer-led support groups such as AA. It is important that all persons involved know that addiction treatment at a reasonable cost is becoming increasingly available, although it may not seem so from the glossy ads for high-end inpatient treatment centers.

Finally, families and friends should be coached to remain optimistic, persistent, and unwavering in their support for their loved one, and in their loving confrontations of the destructive alcohol or drug use. By helping the family and friends keep themselves emotionally and physically safe, while still promoting treatment, a clinician can advance the cause of treatment and an eventually solid recovery.

References


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When It Comes to Sleep, Perception Is Everything

Heidi Moawad, MD

Beauty sleep is an old concept, and there is evidence that getting adequate sleep can have an impact on a person’s appearance. It turns out that sleep deprivation has an effect not only on the traditional concept of beauty, but also on whether a person is perceived as being socially desirable.

Sleep and attractiveness
A study by Axelsson and colleagues1 in Sweden asked observers to rate the health, attractiveness, and fatigue of a group of participants based on photos of their faces. The study participants, who were equally divided among men and women, were photographed after a normal night of sleep and after a night of deliberate sleep deprivation. The subjects were instructed not to wear makeup for any of the photos and to maintain the same facial grooming standards and hairstyles for their sleep-deprived photos as they did for their well-rested photos.

The 65 observers who rated the photos were blinded to the purpose of the study. The observers perceived that each individual had a 6% decrease in health, a 4% decrease in attractiveness, and a 19% increase in tiredness in the sleep deprived condition when compared with their well-rested condition.

Given that a person generally looks about the same from one day to the next, this degree of decline in health and attractiveness rating can have a major impact on how a person is perceived by others. While physical attractiveness may be considered as a feature that primarily influences romantic appeal, the change in a person’s appearance that results from sleep deprivation can affect other interpersonal issues as well.

Sleep affects social appeal and trust
In another study, volunteers were asked to rate photographs of participants, but this time on several additional characteristics.2 The participants were photographed after a night of adequate sleep and after two nights of sleep deprivation. Those who rated the photographs were asked how much they would like to socialize with the people in the photos, as well as to rate them on perceived health, attractiveness, sleepiness, and trustworthiness.

The 122 volunteers who rated the photos perceived the participants as less healthy, less attractive, and sleepier when looking at sleep-deprived photos. This is similar to the results of the previous study. But this group of observers also said that they would be less likely to want to socialize with the sleep-deprived people in the photographs, despite the fact that they rated them as equally trustworthy regardless of their amount of sleep. This is a surprising result, given that trustworthiness has long been considered one of the important qualities that people consider when deciding who they want to socialize with.

Are there benefits of excess sleep?
A population-based study that included 24,671 people between the ages of 15 and 85 used sleep logs to assess sleep duration.3 Prolonged sleep was defined as an average of longer than 10 hours per night. The long sleepers did not have any advantages when compared with the short sleepers (who slept less than 5 hours per night) or to those who slept between 5 to 10 hours per night. In fact, the long sleepers were more likely than the other two groups to be obese and/or to have psychiatric disorders.

A few nights of normal restorative sleep can reverse the superficial effects of brief periods of sleep deprivation, but excess sleep has not been shown to alleviate the effects. Prolonged sleep is most likely a consequence of health problems, and there has not been any evidence that people can force themselves to gain additional restorative sleep once the required daily amount is achieved.

Dr Moawad is a neurologist and teaches medical students and undergraduates at Case Western Reserve University and John Carroll University in Cleveland, Ohio. She teaches physiology courses as well as writing courses. Dr Moawad is also a medical writer and medical content editor and has been writing about medical issues and health care careers for over ten years. She is the author of Careers Beyond Clinical Medicine.

References

NeurologyTimes

A few nights of normal restorative sleep can reverse the superficial effects of brief periods of sleep deprivation, but excess sleep has not been shown to alleviate the effects.

Muses

Richard M. Berlin, MD

Sing to me of the man, Muse, the man of twists and turns driven time and again off course.

Homer, The Odyssey

I’ve been waiting for one of those nine bare-breasted sisters to land by my side and inspire a sonnet, but when I sit down to write, I’m visited by vets from a demolished VA hospital, man-breasted brothers in arms from Nam, Korea, and WWII dressed in brown seersucker johnnies, sporting cirrhosis-bloated bellies, hemorrhaged varicosities, air hungry, oxygen-propped men who steal away to smoke Camels and Kents. They’re blind diabetics with pulseless feet, alcoholics in withdrawal who don’t know the date or the D-Day president, who sport gangrenous toes, purple puncture wounds, bodily fluids in every color of an oil-slick rainbow. Marooned in beds far from family and friends, they sing stories about their twists and turns when driven off course by Pentagon brass, my clipboard like Calliope’s tablet cradled in my lap, their songs shaping me with every word.

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Trouble in Paradise: Carbon-Fuel Air Pollution Linked to Disorders Across the Lifespan

Elizabeth Haase, MD

The flames that swept through Paradise moved at the speed of a “football field per second.” Visiting San Francisco (ironically, to hear my beautiful daughter present her environmental research at an academic meeting), I could avoid air quality in the “hazardous” range by at most 30% by staying indoors. But we could not hike together or have a café lunch without burning pain in our heads, skin, and lungs. Day after day, the air remained an ugly yellow-grey, thick with air pollution particles.

What is air pollution?
The particles that make up air pollution are organized by size, from ultrafine particles (UFPs) 1 micron in diameter to PM 2.5 and PM 10, which are 25 and 100 times larger, respectively. They share a similar structure: various (poly) circular (aromatic) hydrocarbons (PAHs) with a high surface charge bind to a core of organic carbon—the carbon naturally in the air—that attracts heavy metal ions and oxidative elements, which allows them to aggregate into the particles of various sizes (Figure). Ultrafine particles and PM 2.5’s enter the brain by mechanisms that include vascular uptake and transport across the blood-brain barrier and retrograde neuronal transport similar to the herpes virus, along both pulmonary nerves that track to the vagal system and through the olfactory bulb. Ultrafine particles can penetrate the cell nucleus, causing both epigenetic changes and oxidative damage.

Air pollution and children
Studies of the effects of these air pollution particles show dramatic effects across the lifespan, including impaired fetal growth in utero and smaller head circumference at birth, decreased scores for verbal and nonverbal intelligence, memory restriction, and poor performance on tests of visual reaction time, pursuit aiming, and others by ages 8 to 11 years.1,2 There are associations with a wide range of developmental disorders including autism, ADHD, learning disorders and other disorders of child behavior.3 Frederica Perera and her colleagues studied infants born near high-polluting coal plants in Beijing, Krakow, and New York.4 Their work demonstrated that these babies had developmental delay, lower IQs, more anxiety, depression, and inattention, and reduced brain white matter, all of which correlated with levels of PAH-DNA.

In parallel to Perera’s work on the topic, Lilian Calderon-Garcidueñas and colleagues,5 noting that dogs in Mexico City developed dementia-like behaviors at an early age, began a series of autopsy studies of children killed in traffic accidents in Mexico City and compared them with children who died in less polluted areas. Their findings indicate a wide variety of neuropathological changes similar to those seen in Alzheimer disease.

In a second study, her group found that compared with children from clean air environments children in Mexico City exhibit systemic and brain inflammation and low cerebrospinal fluid Aβ1-42 as well as the breakdown of nasal, olfactory, alveolar-capillary, duodenal, and blood-brain barriers.6 Volumetric and metabolic brain changes, attention and short-term memory deficits, and hallmarks of Alzheimer and Parkinson disease were also seen.

Using transmission electron microscopy, the researchers documented UFPs—strongly magnetic combustion derived nanoparticles (CDNPs)—present in the neurons, glia, choroid plexus, and neurovascular units of young Mexico City residents compared with matched clean air controls. CDNPs were associated with pathology in mitochondria, endoplasmic reticulum, mitochondria-endoplasmic reticulum contacts (MERCs), axons, and dendrites. The researchers concluded that “exposed children and young adults need early neuroprotection and multidisciplinary prevention efforts to modify the course of Alzheimer disease at early stages.”

General health impacts
With the frequent fires and increasing carbon in the air, many American adults now also have urgent questions for their doctors about how air pollution may be affecting their health, and for their psychiatrists, their brains. Fortunately, there is a beautifully curated and frequently updated source for all the articles documenting these effects, run by Utah Physicians for a Healthy Environment.

The systemic inflammatory reaction to air pollution is similar to that to cigarette smoke and raises mortality at any level of the air pollution index, even those rated acceptable by the EPA.7 Air pollution increases the risk for pulmonary illnesses, particularly asthma and COPD.8 Moreover, it is associated with stroke and myocardial infarction; cancers such as breast, lung, prostate, stomach, and childhood leukemia; and other physical illness. Increasingly, the psychological stress of being unable to escape exposure to air pollution contributes to morbidity. The total mortality burden of particle and ozone pollution is estimated at 5.5 million premature deaths per year.9 In the US, the cost of air pollution damage has been estimated at $131 billion per year, most due to health effects, and would be expected to climb this year.10

Air pollution and dementia
The link between air pollution and dementia is similarly dire, with further evidence of impact found in several large studies published in 2017 and 2018. Previous studies have established strong associations between air pollution exposure and cognitive decline in older adults. Weuve and colleagues11 assessed the rate of cognitive decline in 19,409 women. Serial assessments were done every 2 years over 7 years. For every 10-point increase in EPA air quality score, there was a .02 point decline on global cognitive score.
How can it be that many psychiatrists do not routinely educate patients about this, let alone work with them on strategies to participate in the reduction of air pollution in their homes, their communities, and their country?

Conclusion and recommendations

Comparible risk factors for dementia include lower education, hearing loss, isolation, depression, hypertension, diabetes, obesity, smoking, and inactivity (Table). Air pollution is bad for your brain to this level of significance. How can it be that many psychiatrists do not routinely educate patients about this, let alone work with them on strategies to participate in the reduction of air pollution in their homes, their communities, and their country?

Patients should know about the importance of air pollution for the brain. They can learn to track local air quality levels through sites such as airnow.gov or purpleair.org. Airnow.gov shows air pollution data through color-coded maps and the air quality index (AQI). Purple air is a website promoting the sale of air purifiers in highly exposed PM 2.5 urbanites: the risk of Alzheimer and Parkinson diseases in young Mexico City residents. J Alzheimer Dis. 2016;54:597-613.

At a professional level, we must advocate for clean air policies that reduce fossil fuel combustion as avidly as we work for smoking cessation. While it can be harder to conceptualize one’s oil heater as a toxin comparable to a cigarette, we must find ways to connect these dots in our own minds and in those of our patients, so that the mental image associated with the word “inhale” is as closely connected to fossil fuel use as to the puff of smoke at the end of a cigarette. These conceptual changes can be difficult to make but are facilitated by concrete visible measures such as tracking AQI data in one’s home. Such measures shift awareness and begin a process of reflection that precedes personal change.

Air pollution is inextricably linked to climate change, which is the result of fossil fuel combustion and the cause of temperature and wind and weather changes that make large fires even more likely. We cannot protect our patients without protecting our planet. This means a personal and professional commitment to green our activities by considering the carbon effects of how we do our work. We can reduce the carbon footprint of our inpatient units, through smaller units, efficiencies of staff transport, and other measures. We can consider alternatives when we use medications with particularly large carbon footprints or changing medications often. We can lessen the distance and frequency of travel both for ourselves and for our patients by living closer to our work sites and by taking ourselves to rural settings rather than having each patient come to us. We can bring our personal and our profession’s financial practices in line with this awareness, divesting of assets that worsen patient health in direct and significant ways.

Dr Haase is Associate Professor of Psychiatry, University of Nevada School of Medicine at Reno, and Medical Director, Carson Tahoe Outpatient Behavioral Health.

TABLE. Risk factors for dementia14

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>RR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>1.6</td>
<td>(1.16-2.24)</td>
</tr>
<tr>
<td>Obesity</td>
<td>1.6</td>
<td>(1.34-1.92)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.9</td>
<td>(1.55-2.33)</td>
</tr>
<tr>
<td>Smoking</td>
<td>1.6</td>
<td>(1.15-2.20)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.6</td>
<td>(1.33-1.79)</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>1.4</td>
<td>(1.16-1.67)</td>
</tr>
<tr>
<td>Air pollution15</td>
<td>1.4-3.95</td>
<td></td>
</tr>
</tbody>
</table>

RR: relative risk; CI: confidence interval; HR: hazard ratio.

References
4. Perera F. Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change. Env Health Perspect. 2012;120:141-156.
EXCLUSIVE CLIMATE CHANGE COVERAGE

The Changing Face of Psychiatry in the Age of Climate Change

>> Elizabeth A. Varas, MD

This article is not meant to disparage the climate change platform or diminish the importance of the role psychiatrists play as advocates for our patients; it is, rather, a commentary to provoke thought and open discussion regarding the scope of the changing ethical and social concerns of psychiatry in the age of climate change. Is there room on this topic for open discussion?

Psychiatrists have always been on the front lines helping survivors and their families cope with the devastation of the human spirit after a catastrophic event: the Haitian earthquake (2010); the Armenian earthquake (1999); the World trade Center attack (2001). Psychiatrists have also been on the front lines to address far reaching social changes that have affected our patients’ lives: deinstitutionalization and the creation of the community mental health system (1963).

There is, however, a fine line between advocacy for our patients and activism. If we are to be foot soldiers in the climate change campaign, are our boundaries clear and our loyalty to the therapeutic alliance with our patients unencumbered?

We have been asked by our psychiatric educators to act as leaders in the climate change movement. In the article “Psychiatric Educators Issue ‘Call to Action’ on Climate Change,” Dr John Coverdale cites the fiduciary responsibility that every member of the psychiatry profession has towards the public.1 Dr Lise Van Susteren2 in her 2017 commentary on climate change calls for psychiatrists to use their skills of persuasion to confront denial and resistance in the public. This is a subtle shift as we move from the fiduciary duty and “duty to warn” our patients of a imminent threat to the much broader concept of our duty to warn the population at large of a looming diffuse climate-related process.

The climate change movement is a global issue with far reaching consequences not only for our mental health patients but also for citizens within and outside of our borders. The steps required for a meaningful reduction in carbon emissions are encompassing and will touch upon many ethical issues that have not been addressed by psychiatry in the past: population growth, migration, and redistribution of wealth from richer to poorer countries.

The steps required will have far reaching socioeconomic and political ramifications. Half of the world’s population does not have electricity and, as a result, the switch to alternative fuels will not be swift. Compounding the hurdles in the US is the political nature of the climate change movement. The Pew research findings on “The Politics of Climate,” show that,

The political fissures on climate change issues in the US extend far beyond beliefs about whether climate change is occurring and whether humans play a role … these divisions reach across every dimension of the climate debate, down to people’s basic trust in the motivations that drive climate scientists to conduct their research.3

As psychiatrists embrace the mental health aspects of climate change, it is increasingly important to separate the advocacy for our patients from our own personal and social activism. The desire to understand more deeply the effects that climate-related disasters have on our communities and how to work to prevent them are well within the purview of psychiatric leadership.

Looking to decrease consumption as well as utilize low carbon alternative fuels within our psychiatric environments is also laudable. However, how do we manage to respect the therapeutic boundary with our patients when our own fears for survival are heightened?

In her commentary Dr Van Susteren urges psychiatrists to use their professional standings and good will to access emotional barriers in the general population to activate behavioral change. The use of confrontation as the door to the unconscious to attack defenses and resistance is part of the psychotherapist’s tools. However, we are now being asked on a unified level to confront resistance and denial in the general population to bring about a societal behavioral change. First, is an ethical boundary crossed in this situation? And if so, does the severity of the threat of climate change mitigate boundaries? Outside of the psychiatrist’s toolbox, the implication of “one who denies” is pejorative; psychiatrists need to be wary of the use of their influence to label a certain subset of the population.

Now more than at any other time, climate change raises previously unseen moral and ethical challenges. The use of the terminology “duty to warn” which had a specific use in Tarasoff is openly used in the climate change movement to remind us of our duty to protect the public from harm. The transformation of the original intent of “duty to warn” to its present global use is daunting and may have unforeseen legal consequences down the road. Are we obligated as psychiatrists in the present climate of litigation to warn our patients of the threat of global warming?

As psychiatric experts in the field for professional communities to embrace a greater role in the initiative of climate change, caution needs to be exercised to avoid the worsening of political fissures that extend throughout our political system. Psychiatrists must remain cognizant that climate change is indeed a political issue and avoid the mistake of alienating a percentage of the population.4 Respect and an attempt to understand the beliefs of others are necessary to comprehend the complexity of the ethical issues yet to be raised. Blind adherence to leadership without taking the time to work through the substantial moral and ethical issues independent-ly is not the answer; independent thinking needs to be encouraged.

With the elevation of the importance of climate change, the emphasis has been shifted from the patient to the health of the planet. The earth has morphed into a giant but ailing planet that has failed its toxicology screen and needs our collective energy to nurse it back to health. Psychiatry, as well, continues to evolve. A new ecological psychology around climate change has emerged from the groundswell and gained popularity among its followers. New theories are emerging regarding the planet’s role in ego and personality development. The treatment of anxiety related to climate-related disasters continues to evolve as we learn to live with the threat of impending doom and sensory and media overstimulation.

The enemy/hero narrative in the climate-change movement is not an effective one; rather cooperation, a search for common aspirations and solutions, and the acknowledgement that we are all in this together is a more effective agenda.5 The global agenda of climate change will continue to advance; however, patience must be exercised until the political

(CONTINUED ON PAGE 25)
Project Untangled

A Journey of Hope and Healing

Omar Reda, MD

At the tender age of 6, after losing my 14-year-old sister to brain cancer, my dream was to become a neurosurgeon. I would, however, faint every time I entered the operating room, pushing me to my true calling—taking care of emotional needs. I was meant to work in psychiatry. It is my delicious cup of tea. There is nothing I love more than healing invisible wounds, mending broken hearts, wiping children’s tears, and helping families build bridges of trust, open channels of communication, to reconnect and heal. Here is how I got there.

Psychiatry born from trauma

In July of 1999, I was returning home from a typical day of work as an emergency department physician in my hometown of Benghazi, Libya. I found my father waiting at the front door. He handed me cash and urged me to flee the country immediately. He discovered that my name had ended up on the government’s “blacklist” because of my humanitarian activities and psychosocial work with trauma survivors and their families. Confused and heartbroken, I had only minutes to say goodbye to my family. I never thought it would take me 12 long years to return to my home country, under very different circumstances, trying to help heal the wounds of war and interpersonal violence.

I crossed the Mediterranean in a boat, eventually landing in the United Kingdom. The judge rejected my application for asylum due to “lack of evidence for physical torture.” That theme—to ignore the psychosocial impact of forced displacement—struck me as I continued my journey to the US and became a psychiatrist. Many people dismiss mental anguish and emotional pain as “real” out of ignorance and stigma. Stories of trauma are often hidden behind closed doors and eventually morph into the elephant in many of our rooms.

In February of 2011, I was horrified to learn of a bloody war on the streets of Benghazi. Unable to reach my family, I felt like I was losing my whole family to my family, I felt like I was losing my streets of Benghazi. Unable to reach the police in many of our rooms. The voice of my mom and what I thought were her last words haunted me in my dreams—I understood what PTSD must feel like.

I asked my wife and three children to let me go on a medical mission. With heavy hearts we said our goodbyes, not knowing if we would ever see each other again. I was fortunate to connect with Medical Teams International, a nonprofit organization in Portland, Oregon, that provided me with about half a million-dollar’s worth of medications to take with me. I took multiple flights and entered Libya through the border in Egypt. The minute Mom saw me, she almost fainted. I last saw her in 2006 in Egypt where she was undergoing treatment for a minor heart attack, and she now looked decades older—a result of the war. I delivered the medications and we do a lot of damage if we fail to listen to patients’ stories. This brings to mind one young woman admitted to my unit who was prescribed antipsychotics for schizophrenia. When I asked her about the nature of the voices, it turned out that she was reliving the memory of “hearing” two women screaming as her father drove drunk and killed them in a car crash. At a young age, she told herself to find the families of these women and apologize on her father’s behalf. It turned out that the diagnosis was indeed PTSD. Ultimately, treatment of therapy combined with a short course of medication management significantly lessened the voices.

In another case, a Syrian boy witnessed his father shot by a sniper, rending him quadriplegic. The young patient made progress in therapy but continued to fidget with his fingers. When I asked him about it, he shared that he feels like the man of the house...

Confused and heartbroken, I had only minutes to say goodbye to my family.

Many trauma survivors do not enjoy their life due to their daily struggles with memories in the aftermath. Wounded healers are no exception. For psychiatrists, self-care is vital to prevent vicarious trauma, commonly referred to as burnout or compassion fatigue. We cannot care for others unless we take care of ourselves first. Healers need to know their limits and be assertive and mindful not to carry a load heavier than what they can realistically handle.

In addition to my loving family I use academic writing as a means of catharsis, which helps me cope with the graphic stories I hear of atrocities and the dark side of humanity. My wife and three daughters are the driving force behind the work I do, and they are also heavily involved in the refugee cause.

In October of 2016, I was heartbroken as I flew to Benghazi to spend one final week with my mother in the ICU before she died. I was glad to be next to her in her last hours. I am very much a mama’s boy—she is the one who made me who I am today. She told me to stay busy mending broken hearts. If I cannot be the source of someone’s joy and delight, I should never be the cause of their pain and distress. Rest in peace Mom; I hope to make you proud.

Concluding thoughts

My goal is to help untangle the deadly web of dysfunction and to break the cycle of trauma. I founded Project Untangled (https://projectuntangled.org), a model of psychosocial care for refugees and trauma survivors to help families bond and empower the youth. The objective is to celebrate inner strength, culture, coping styles, and resilience, so they become an active part of the solution rather than part of the problem. Untangled helps heal traumatized individuals, families, and communities through education and training, providing access to safe spaces and culturally sensitive resources and clinical care.

Dr Reda is a psychiatrist at Providence Health & Services, Portland, Oregon.
Do I know anyone who is autistic, perhaps mildly affected but nevertheless, significantly disabled? Take this case (but not literally—the following are made up scenarios).

My neighbor, a loner, is still living in the same home that his deceased parents raised him in. He is impossible to converse with. But he is harmless; habitual and regular as clockwork. He wears the same clothes all year round, regardless of weather or occasion. There are no visitors.

Or take the case of my cello teacher. She rarely looks me in the eye and is hard to read—expressionless at most times. She has an extraordinary memory for minute details and a distinctly mannerist performance style. Once she starts on her hobby horse (J.S. Bach) she rambles on and is unstoppable, doesn’t even glance at you as you say goodbye and leave.

Or take this patient whom I’ve been treating for schizophrenia—or I think it’s schizophrenia (yet shows no distress). Appears socially deteriorated but, to be truthful, I don’t know what his childhood functioning was like, or when that began. Should I be thinking maybe autism (or as some still prefer the term, “Aspergers?”) If so, what am I to do?

Recognizing autism
Autism was first described by child specialists and even today most autism-specific health and education services are designed to cater only to children. Until recently childhood prevalence seemed to be constantly increasing (Table 1). Community surveys indicate that autism in adulthood is just as common as it is in childhood, although research findings go against the prevailing assumption that autism is on the rise. Astonishingly and, importantly for us in clinical psychiatry, most cases identified in our community surveys are “invisible”—undiagnosed and unrecorded.

Contrary to previous (untested) assumptions, findings suggest that only about one in 10 adults with autism has moderate to profound intellectual disability. Also contrary to supposition, many autistic adults are in paid employment and living independently. However, there are also signs of poor quality of life. Adults with autism are less likely to be in a long-term stable relationship, more likely to be living in government supported or rented accommodations, and less likely to have achieved a higher level of education. More is known about autistic adults seen by social services. These cases
are often more complex, are more likely to have comorbid mental disorder, particularly depression, anxiety, and possibly borderline personality disorder. In adults with a diagnosis of autism spectrum disorder (ASD) a pooled estimate of any current anxiety and depression was estimated as 27% and 23% respectively. This is considerably higher than would be expected based on estimates from the general population. But how often does autism come into our adult psychiatry differential diagnosis in such cases?

It is estimated that 1 in 100 of all adults meet criteria for autism (Table 2), in a recent, as yet unpublished, study my colleagues and I found that about 1 in 20 adults being seen in adult psychiatry services has autism—and that most cases are unrecognized. If correct, this places autism at the heart of adult general psychiatry. And it calls into question whether our discipline has kept up. If not what is there to do?

Diagnostic assessment

DSM-5 criteria for ASD require “onset in early childhood,” that manifests as persistent deficits in social communication and social interaction across multiple contexts; together with restricted, repetitive patterns of behavior, interests or activities, or variations in sensory sensitivities. It appears to be far more common in males than in females (although under-recognition in females is a growth topic). It can lead to long term social isolation and difficulties in fitting in, especially in school and employment settings throughout life. Moreover, the criteria are childhood focused and hard to apply to adults (whose developmental history may be unobtainable). Again, one might ask what to do?

It is unclear why clinicians so often to miss the diagnosis of autism in adults. One possible reason is the mistaken idea that we should only think about autism in conspicuously disabled individuals who are essentially nonverbal and display a wide range of deficits in living skills (eg, Rainman). DSM-5 rightly recommend two additional, separate, ratings in any person meeting criteria for ASD: level of impairment in every day functioning and level of general, including intellectual, ability. Other reasons why autism is missed by adult psychiatrists may be lack of on-the-job training and the lack of an effective pharmacologic treatment. (The first textbook on adult autism for psychiatrists has only just been published; Figure 1.)

A quick and simple test for autism in adulthood would help but is still in the starting box. The UK National Institute for Clinical and Care Excellence systematic review of such tests has found nothing that could be clearly recommended as cost effective.

The standard clinical diagnostic assessment in adult mental health is the clinical interview with the patient. Autism assessments, however, have until now been guided by approaches used in childhood, of which an interview with a key informant, such as a parent is regarded as essential. Because current childhood derived diagnostic criteria require it, this presents a challenge when assessing adult patients. Particularly difficult is when the adult patient refuses to involve an informant such as a parent or, indeed, impossible because there is no longer anyone still living who observed the patient’s childhood social development. Therefore, adapting adult autism direct-interview approaches, such as those that work well in adult ADHD, is a necessary requirement.

Where possible, one should always also interview a parent or child-development informant such as an older sibling. For the time-priced clinician this can quickly yield highly salient information. Key early child-developmental markers that point to autism include poor development of nonverbal communication skills, including limited use of eye gaze and gesture, prior to speech development in the child. A classic sign is the failure of a child to communicate that he or she wants to be picked up and cuddled (Figure 2). Failing to pay attention when his or her name is called may have led to a hearing test (which turned out to be normal).

Other known family informants may be able to recall how the child adapted to initial contact with peers on commencing nursery or preschool. Peers vary widely in their response to the child who may be autistic. While the autistic child may make an effort to join in, he or she will soon become isolated in solitary activities including play behavior. The child’s playing is often repetitive and lacking in make believe, ie, pretend elements (these warning signs were featured in DSM-IV but were removed in DSM-5).

Characteristics

Communication tends to be infrequent and lacking in reciprocity—if the child talks to peers it is often in a controlling, even demanding, inflexible way. Friendship formation is rare and the autistic child finds social expectations, for example at birthday parties, extremely difficult to make sense of, in spite of the efforts of parents to be supportive.

Autistic children can have exceptional concentration skills in specific areas, impressive rote learning abilities, as well as particular skills in constructional and other fine motor activities. Teachers can admire the child’s exceptional academic skills and willingness to “work away quietly.” Parents can recall the child as the best behaved of their offspring (there are also of course children with autism whose behavior is strikingly disruptive, demanding, challenging).

During the teen years and into adulthood many more-able persons on the autism spectrum dispute the concept of autism as a disorder. They contend that it is a different way of being, of thinking, and of viewing the world—neither better nor worse. One does not “have autism,” rather one is “autistic.” Their term for a non-autistic person is “neurotypical.” Neurotypicals, ie, most of us, are equally deserving of critical comment and are viewed as inconsistent, not meaning what
A crucial issue for adult psychiatry is the differentiation of autism from other possible comorbid mental disorders and the approaches to management in such situations. For example, is the approach to assessing depression the same or different in an autistic adult?

The psychiatrist’s role
Any interventions for autism, whether prevention or treatment based, need to pay attention to its causes and underpinning mechanisms. Epidemiologically verified twin studies show autism is substantially inherited. Based on my clinical experience, with just a little interviewer probing, almost every case will reveal a relative (suspected if not having a verified diagnosis) as being “somewhere on the autism spectrum” — clearly more so than for bipolar disorder. But the mechanisms of inheritance are highly complex with little prospect of early “easy” breakthroughs in genomically designed prevention or treatment.

Developmental brain abnormalities are implicated but there is little certainty as to what these are. A compelling theory in neuropsychology research proposes that autism is explained by a deficit in connectivity of neural circuits within different brain regions, which result in inadequate integration of information from the environment. Equally compelling are neuropsychological theories that point to deficits in “mirroring” to explain impaired theory of mind ability.

Environmental causes (from conception onwards) are also poorly understood and no one cause has been found with substantial, specific, and preventable effects. This somewhat discouraging appraisal places autism in the same place as other lifelong disabilities with few early, foreseeable, prospects of treatment.

The psychiatrist’s role must therefore be to help identify autistic individuals and to advocate changes that make their life better. Foremost is to enable them to live independent lives according to their own choices and preferences.

It is becoming apparent that the majority of the adults on the autism spectrum are not complex, multimorbid, or otherwise extremely disabled persons. Therefore, the time has come to devote some of our energies and resources to them as other lifelong disabilities with few early, foreseeable, prospects of treatment.

The psychiatrist’s role must therefore be to help identify autistic individuals and to advocate changes that make their life better. Foremost is to enable them to live independent lives according to their own choices and preferences.

It is becoming apparent that the majority of the adults on the autism spectrum are not complex, multimorbid, or otherwise extremely disabled persons. Therefore, the time has come to devote some of our energies and resources to them, until now ignored, large group who, with a modicum of understanding and support, could live better, safer (less vulnerable), and more productive lives.

This requires a more precise diagnosis (for example, not mixing up autism, chronic depression, anxiety). For patients and for those, if any, who continue
to care for them, there is the relief of knowing that there is an explanation for their odd un-social existence and preference for time spent on seemingly obsessive fascinations in an unshared company. For autistic adults who are employed, there is the prospect of acceptance; and following a few reasonable workplace adjustments could lead to reduced absenteeism.

Conclusion

Accepting and adapting society around an emerging, increasingly recognized disability is a mark of civilization. Several European countries are taking note of this and beginning to respond with public policies that aim to make reasonable, society-wide adjustments for autism. In England, the UK Autism Act 2009, makes provision for the needs of adults on the autism spectrum. It was the first ever disability-specific legislation to be passed. 

In March 2010 the London Government produced an adult autism policy: “Fulfilling and Rewarding Lives: The Strategy for Adults With Autism in England.” The implementation group, chaired by a government health minister, has been working with both health and non-health government departments (education, welfare, labor, housing, criminal justice). The goal is to ensure that public-service workers are aware of autistic adults and are able to point them to appropriate resources. Similar legislation and government-wide policy change is being developed in other countries including Ireland, Scotland, and Wales.

In the US, Hillary Clinton advocated for an epidemiological survey of adults to be undertaken by the Centers for Disease Control. She was the driving force behind the first-ever adult autism prevalence study in the US, “so that we improve our understanding of how to identify, verify, and serve adults on the autism spectrum.” This call to action is mirrored in the widespread concerns of parents who have an autistic child moving inexorably into an adult world with few if any appropriately adapted services. However, there is much that we as clinicians can do to respond to this burden of unmet need.

References


Climate Change

and economic shifts that are required emerge, driven by successful business models that lower our carbon footprint and improve the health and welfare of all citizens. The recent yellow jacket riots in Paris demonstrate the potential consequences of a less than carefully thought out plan regarding access to electricity or fuel in a financially stressed population.

Dr Varas has been in solo private practice in Westwood, NJ since 2007. She is a veteran in the US Navy Reserve, having recently completed her 8-year commitment as an officer in the Medical Corps, as a critical wartime specialist in the field of psychiatry. Before starting her private practice, she was the Medical Director of a mental health center in Paramus, NJ for more than 10 years and served as the director of the PACT program for patients with chronic psychiatric illness. Upon completion of her fellowship in consultation/ liaison psychiatry she was an attending psychiatrist at Bronx Lebanon Hospital in New York City in the consultation/liaison service.

Dr Varas reports no conflicts of interest concerning the subject matter of this article.

References

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- Outpatient Child & Adolescent Psychiatrist: Jersey Shore University Medical Center (Neptune, NJ), Riverview Medical Center (Red Bank, NJ), and Raritan Bay Medical Center (Perth Amboy, NJ)
- Medical Director of Adult Inpatient Unit Riverview (Red Bank, NJ)
- Emergency Psychiatry: Raritan Bay Medical Center (Perth Amboy, NJ)
- Geriatric Psychiatry – Hackensack University Medical Center (Hackensack, NJ)
- Outpatient/Consultation Liaison Psychiatrist – JFK (Edison, NJ)
- Per Diem/Tele-psychiatry – Hackensack University Medical Center (Hackensack, NJ)
- Staff Consultation Psychiatry – Bayshore Medical Center, (Holmdel,NJ)

In addition to our collegial work environment, we offer a highly competitive compensation package which includes: medical/dental plans, 403(b) retirement plan, and relocation assistance.

For immediate consideration, please contact Renee Theobald, at: Renee.Theobald@hackensackmeridian.org or call: 732 751-3597

Please direct all applications to Amy Myers in Human Resources at amyers@omhs.l1.com

with CA license for several outpatient sites
Contact Sandra Williams at 818-814-7790 or email me your current CV to swilliams@alignedhealth.com
To be considered for these great opportunities.

Psychiatrists: Looking for freedom and flexibility

Join an exciting and lucrative practice which gives you flexibility to work in inpatient, outpatient, telepsychiatry and research settings Flexibility to work from home office is possible. For interested individuals, opportunities in teaching medical students, supervising staff, becoming a principal investigator, ECT and TMS are also available Competitive salary and benefits Malpractice and license assistance J-1 & H-1 visa’s welcome

Locations in Southern California, Nebraska & Florida
CV/Resumes may be submitted via email to HR@asclepes.com or by fax to 747-998-0383.

ARIZONA

Private Psychiatry Practice for Sale in Arizona
Relocate or start your practice in sunny Phoenix, Arizona. This is a thirty year old, well-established, smoothly run practice with approximately 300 current patients. Currently seeing patients for both medication management and psychotherapy. Practice also comes with a strong relationship with the community, and a solid referral base.

For more information, send an email to azpsychmd@gmail.com

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- Comprehensive Psychiatric Services
- Mansoor Zuberi, M.D.
- P) 925-944-9711 F) 925-944-9709
druzuberi@psych-doctor.com
www.psych-doctor.com
Child and Adolescent Psychiatrist – Outpatient Consultation Position
Full Time * Multiple locations in New Jersey

Hackensack Meridian Health is seeking a Board Certified/Board Eligible Child and Adolescent Psychiatrist to join this growing team. With 4 hospitals in the top 10 ranking in New Jersey, this is an outstanding opportunity to join the area's largest healthcare network.

Highlights:
- Academic Affiliations with the new Hackensack Meridian Health School of Medicine at Seton Hall University.
- Collaborations among multiple sites (statewide).
- Call is not required.
- Outpatient/Consultative setting.
- Competitive Salary.
- Comprehensive Benefits Package.

In addition to our collegial work environment, we offer a highly competitive compensation package which includes: medical/dental plans, 403(b) retirement plan, and relocation assistance.

For immediate consideration, please contact Renee Theobald, at: Renee.Theobald@hackensackmeridian.org or call: 732-751-3597

HackensackMeridianHealth.org

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Santa Barbara, CA

Enjoy flexible scheduling, tele-psychiatry, world-class benefits, incredible work-life balance, all while receiving a signing bonus and relocation assistance. Go from your office right to either the beach or the mountains in minutes! Treat patients in serious need while treating yourself to paradise. Live the good life in Santa Barbara County!
Visit: http://www.getpsychchelpsb.com/
Contact Tom Widroe at 805.680.7772 or tomwidroe@icloud.com

SAN DIEGO – PsyCare, Inc. is seeking a P/T or F/T child and adult psychiatrist to join a thriving group practice. For Inquiries, contact Robert A. Friedman, M.D. at: (858) 279 – 1223 ext. 412; or email: rfriedman@psycare.org

Fax CV to Bernardo Mora, MD at (209) 558-4326 or Email: bmona@stanbrhs.org

Psychiatrist Position
J-1 Visa Opportunity in California
Imperial County Behavioral Health Services is currently recruiting for a full time psychiatrist. Imperial County is located 90 miles by freeway to the city of San Diego to the west, and 90 miles to Palm Springs to the north. Located in a rich farming area, Imperial County has a population of 180,000 and borders with Yuma, Arizona and with the cosmopolitan city of Mexicali, Mexico population 1.2 million. San Diego State University maintains a satellite campus in Calexico and there are a number of private and public universities located in Mexicali, the state capital of Baja California Norte. Imperial County’s location and diversity make it the perfect place for a psychiatrist to relocate under the J-1 Visa program or for any reason.

The position pays a highly competitive salary, including health benefits for you and your family, and requires to hospital work and minimal after hours work freeing you up for more leisurely activities.

The successful candidate diagnoses and treats patients with mental, emotional, and behavioral disorders. Qualified candidate must have CA medical license or ability to obtain.

Send CV to Imperial County Behavioral Health Services, 202 North 8th Street, El Centro, CA 92243.

J-1 applicants welcome.

For additional information, please contact:
Kristen Smith (442)265-1606
kristensmith@co.imperial.ca.us
Butte County Behavioral Health Department is seeking a Medical Director based in Chico, California to manage department programs. The incumbent will perform approximately 50% direct services and 50% administration work. In collaboration with the Assistant Director – Clinical Services, directs, evaluates, plans, establishes, and implements the medical services component and all clinical services of the department; participates in coordination of services across county departments and agencies; provides medical direction and consultation to contracted agencies; particularly in the areas of quality improvement, medication monitoring, and peer review.

Starting salary is dependent on experience and is negotiable. The Department will also consider a Medical Director on a contract basis. Salary for a contracted Medical Director is negotiable. For additional information please contact Geoff Davis, at (530) 891-2986
gdavis@buttecounty.net for a recruitment packet and appointment to speak with the Behavioral Health Department Director. Please visit the Butte County Human Resources Department website for more information, to review the recruitment packet, and to apply for the opportunity.

http://www.buttecounty.net/human resources/Employment.aspx

INDIANA

NORTHWEST INDIANA!!

Excellent opportunity for adult psychiatrist interested in optimal setting for practice of community psychiatry: commutable from downtown Chicago.

Regional Mental Health Center is a private non-profit mental health center that has successfully served Indiana for over 30 years. Experienced and collegial group of 12 mostly full-time psychiatrists, an extremely favorable malpractice environment. OP work, call q 12 wks. Regional is a leader in psychiatrist-directed integrated care services. Incentive bonus available, full benefits.

Please contact Kobie Douglas, MD:
kobie.douglas@regionalmentalhealth.org
219 736-7232

TLC Telecare Physician Services Organization

BE or BC psychiatrist needed. Following locations have immediate openings:

• Modesto/Ceres, CA: Schedule: 40hrs per week. Pay Rate: $291,200 - $364,000

• Modesto/Ceres, CA: Schedule: (Saturday/Sunday). Pay Rate: $2,978 per weekend!

• Oakland, CA: Schedule: 20 hours per week Pay Rate: $140 - $150 per hour

• Oakland, CA: Schedule: 40 hours per week Pay Rate: $319,000 - 360,000 per year. Medical Director Duties

• Herald, CA (South of Sacramento): Schedule: 15 hours per Month. Pay Rate: $170 - $187 per hour (Contractor);

• For additional listings, please visit: www.telecarecorp.com/physician-jobs/

You will work as part of a multidisciplinary team. The staff is all very friendly and it is a supportive working environment.

Please email your resume to tlcrecruiting@telecarecorp.com

EOE M/F/V/Disability

203 523-7026

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- Generous defined-benefit pension
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- Medical, dental and vision benefits
- Private practice permitted
- Retiree healthcare
- Psychiatrist-led treatment teams
- Patient-centric, treatment first environment
- Relocation assistance may be available

To find out more, please contact
Laura Dardash, MD.
at (916) 654-2609.

You can also email us at DSH.Recruitment@dsu.ca.gov or visit our website at www.dsu.ca.gov

We are currently recruiting psychiatrists at our five locations:

California Department of State Hospitals

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Join us! Are you a psychiatrist looking for a team-oriented, collegial practice supported by leading experts in psycho pharmacology such as Stephen Stahl, MD., Ph.D.? Look no further than the California Department of State Hospitals.

We operate the largest forensic psychiatry hospital system in the nation, offering an unparalleled quality of practice while providing care to some of the most complex patients found anywhere. Email your curriculum vitae to DSH.Recruitment@dsu.ca.gov.
Sparrow

Psychiatry Position with Sparrow Medical Group

Sparrow Medical Group (SMG), a multi-specialty physician group and the premier physician organization of Sparrow Health System (SHS), located in Lansing, Michigan, is seeking a dynamic BC/BE psychiatrist for an adult inpatient position. Position is hospital-employed and offers excellent compensation and benefits including relocation assistance, 401(k) with matching funds, generous CME benefits and malpractice insurance that includes tail coverage. Learn more about this position by contacting: Barbara Hibborn, Manager Provider Recruitment Office: 1.800.968.3225 Email: barbara.hibborn@sparrow.org

Visit our website at www.sparrow.org

More information on the Lansing area can be obtained at www.lansing.org

J

on a team of 35, highly qualified behavioral health consultants, psychiatric NPs and psychiatrists, who offer evidence-based treatment options including: DBT, CBT, EMDR and MAT for substance-abuse disorders. Erie values and promotes the education of its staff and includes six behavioral health interns on its team. We are a national leader in the full integration of behavioral health into the primary care model. All Erie sites qualify for NHSC with a HPSA score of 17.


Board Certified/Eligible Psychiatrist Needed

Need a board certified or eligible psychiatrist to assume a part time general psychiatric practice and build up to full time practice rapidly. Immediate income with good growth potential. One other psychiatrist here to cover vacations, etc. Later, buy the building if desired.

Contact: piersonju@gmail.com

MASSACHUSETTS

Psychiatrist Opportunities

Cambridge Health Alliance (CHA), a well-respected, nationally recognized and award-winning public healthcare system is seeking Psychiatrists in our Inpatient and Outpatient services. CHA offers a wide variety of Psychiatry services for all ages. Our system is comprised of three hospital campuses and an integrated network of both primary and specialty outpatient care practices in Cambridge, Somerville and Boston’s Metro North Region. Exciting opportunities are available in our Adult, Child/Adolescent and Consultation-Liaison services. We are proud to offer a collaborative practice environment with an innovative clinical model. CHA is a teaching affiliate of Harvard Medical School (HMS) and academic appointments are available commensurate with medical school criteria. CHA offers competitive compensation and a comprehensive benefits package.

Qualified candidates may submit their CV through our website at www.CHAproviders.org, or by email to Melissa Kelley at melissakelly@chaliance.org.

The Department of Provider Recruitment may be reached by phone at (617) 665-5555 or by fax (617) 665-3553.

CHA is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

MICHIGAN

MEDICAL DIRECTOR POSITION IN LANSING — Seeking Psychiatrist for Medical Director position of Sparrow Hospital’s Behavioral Health Service line which consists of an adult inpatient psychiatry unit, geropsych unit, PHP and Outpatient Clinic. The hospital is offering an attractive employment compensation package. Lansing is about an hour from Ann Arbor, Battle Creek, Jackson and Grand Rapids. It is an hour and a half from Detroit.

Please contact Terry Good, Horizon Health, at 804-663-5661. Email: terry.good@horizonhealth.com; Fax #: 1-804-664-5663.

MISSOURI

Compass Health Network is a large non-profit health system delivering Behavioral Health services in multiple settings, both inpatient and outpatient in forty-nine Missouri counties. We have immediate openings for full and part-time Psychiatrists in multiple locations in Missouri. Candidates must have MD or DO degree, be ABPN board-certified or eligible in Psychiatry and possess or obtain a Missouri license. We offer a competitive compensation and benefit plan. Apply online at www.compasshealthnetwork.org or send your CV to crigg@compasshn.org. Candidates with J-1 or H-1b visa statuses are welcome to apply.

EOE

BRAND NEW ADOLESCENT 15-BED INPATIENT PSYCHIATRY UNIT OPENING IN 2019 — Small Town, Big Opportunity — Medical Director position available. Be in on the beginning of a new unit helping to mold and develop the program. Open to employment, or independent contractor arrangement. Located in southeast MO near Cape Girardeau, this is a low cost of living, low crime rate area but close to a local airport that has direct flights to Chicago. It’s also only two hours from Memphis and St. Louis. This designated underserved area is also located in the Delta Regional Authority so J1 Waivers can also be obtained through the DRA as well as the state. Position can be inpatient, or inpatient and outpatient.

Please contact Terry Good, Horizon Health, at 804-663-5661. Email: terry.good@horizonhealth.com; Fax #: 1-804-664-5663.
Southwestern Virginia Mental Health Institute is located in Marion, Virginia, sitting in the heart of the Blue Ridge Mountains. Our 179-bed behavioral health facility offers an exciting career in a wide range of interesting pathology in psychiatric treatment while providing a highly desirable work-life balance.

We have opportunities in our inpatient setting for Psychiatrists for our Adult Admissions and Geriatric Units. These positions are employed positions offering a competitive salary with generous state benefits and paid malpractice insurance, loan repayment, CME stipend/leave, sign-on bonus, and relocation allowance. No on-call required, with compensated on-call available.

If you are licensed or eligible for licensure in Virginia, and have completed a psychiatric residency, please send your current CV to kim.sayer@dhs.virginia.gov or you may contact a member of our Human Resources staff at 276-783-1204 to discuss this opportunity.

We invite you to join a team of dedicated physicians and loyal staff who are committed to promoting a life of possibilities for all Virginians.

For more information, please visit:

www.swvmhi.dhhs.virginia.gov;
www.smythcounty.org;
www.abingdon-va.gov;

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Pennsylvania

The Penn State Hershey Medical Center Department of Psychiatry is currently recruiting board eligible/certified psychiatrists for inpatient and outpatient positions in both adult and child psychiatry. We are a growing, vibrant department in a strong academic medical center. We host specialty clinical and research programs, including research that crosses the translational spectrum. Our educational programs include adult psychiatry residency, child fellowship, psychology internship, externship and post-doctoral fellowships. We have a strong collaboration with basic and clinical science in other neuroscience disciplines across several Penn State campuses. With our clinical partner, the Pennsylvania Psychiatric Institute, the Department staffs several outpatient and partial hospital programs for children and adults, 89 inpatient beds, ECT and other neuromodulation services, specialty sleep and eating-disorders programs, and expanding psychiatric consultation and integrated care programs for Hershey Medical Center. Successful candidates should have strong teaching as well as clinical skills and, optimally, potential for scientific and scholarly achievement. We offer an attractive compensation package commensurate with qualifications. Tenure-track positions are possible.

For consideration, send your CV to:
Jenna Spangler Physician Recruiter Phone: 717-531-4271 Email: jsparnger2@pennstatemedicine.psu.edu

The Penn State Milton S. Hershey Medical Center is committed to affirmative action, equal opportunity and the diversity of its workforce. Equal Opportunity Employer – M/W/D

Wisconsin

PSYCHIATRIST

Clinical excellence and quality living! Winnebago Mental Health Institute (WMHI) is a 280 bed psychiatric facility associated with Medical College of Wisconsin’s North East Wisconsin Psychiatry Residency. We are seeking a Board Certified/Board Eligible Psych-iatrist who wants to work with a Multidisciplinary Treatment Team to treat acutely ill Civil Patients and/or Forensic Patients. A strong commitment to excellence in clinical care and education of Residents, Medical Students and students/ interns of all clinical specialties makes WMHI a great place to practice. Excellent fringe benefit package, strong collegial support, paid call, and a beautiful campus enhance your work days.

WMHI is located near Oshkosh, Wisconsin, which is the center of the Fox River Valley, one of the fastest developing areas of Wisconsin. Four seasons with all the outdoor opportunities of each, cultural and sports venues, outstanding public and private schools and three universities in the area make this a great place to raise a family. In 1 1/2 hours you can be in Milwaukee, Madison, the Wisconsin Dells or “up north”.

Information on WMHI can be found at http://www.dhs.wisconsin.gov/ MH_Winnebago.

For application instructions, go to www.wisc.jobs and search for Psychiatrist (Job Announcement Code:17-02966).

EOE
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