Mixed features are common in practice but poorly described in DSM. They are caused by the overlap of depressive and manic symptoms, but it’s hard to understand them by reading separate descriptions of these two states. It would be like trying to imagine green by studying yellow and blue. Classic hypomania is difficult enough to detect. These euphoric states are brief, rare, and easily forgotten. Mixed cases bring a different set of challenges. Mixed features cause intense desperation. Rather than missing their appointments in a carefree, hypomanic bliss, these patients often call for urgent appointments. The issue is not that these states will be forgotten, but that they’ll present with symptoms that resemble those of many other psychiatric disorders.

How to Diagnose Mixed Features Without Over-Diagnosing Bipolar

Mixed features can look like anxiety, ADHD, borderline personality disorder, or depression with an agitated edge. The Table contrasts the features of hypomania as they appear in mixed and pure forms. Unlike euphoric hypomania, mixed symptoms are not pleasurable, and the interview needs to be adjusted to capture that.

Ask a patient with mixed features, “Do you have times when you don’t need much sleep” and he or she may report a difficulty in sleeping, which is common in hypomania but not typically in mixed features.

ISSUE HIGHLIGHTS

Understanding and Treating Co-Occurring Bipolar Disorder and Substance Use Disorders
Ming Ma, Alexandria S. Coles, and Tony P. George, MD

Antipsychotic Discontinuation: Two Decades Later
Brian Miller, MD, PhD, MPH

Issues Pertaining to Misuse of ADHD Prescription Medications
Lisa L. Wyandt, PhD, and Stephanie Bjorn
Is Kansas a Real Place?

Allan Tasman, MD || Editor in Chief

O ver my summer vacation, I found myself thinking a good deal about the nature of reality, more than usual, because of two books I read. The first, *Dark Matter* by Blake Crouch, is a sci-fi novel about a scientist who becomes trapped in a series of alternate universes trying to find his way home. The second, *Is What Real?*, aptly titled by Adam Becker, PhD, an astrophysicist. This non-fiction work explores the century-old debate among theoretical physicists about the nature of the universe (or universes). On one side were the adherents of Einstein’s theory of special relativity and on the other were the quantum mechanics group led by Niels Bohr.

The debate focused in part on whether phenomena that are not observable, but only hypothesized, should be used in theory building and testing. The evolution of these discussions led to sophisticated mathematics support for theories about the existence of alternate co-existing realities (universes). The questions about knowable reality clearly resonated with me as a psychiatrist dealing with such questions in the clinical setting.

Physics was my least favorite subject in college, which is somewhat surprising to me since I’ve been a fan of science fiction since I was in fourth grade. I guess discussions about the nature of the universe and reality turn out to be more enjoyable to me when my grade in physics isn’t affecting my acceptance into medical school. After all, the question of whether light is a wave or a particle is still pretty fascinating. At times it behaves like a wave and sometimes like a particle but doesn’t behave like both simultaneously, at least according to Dr Becker.

This duality of light’s nature has allowed me to spend many hours over the years watching TV, the technology of which relies on light functioning in both ways at different instants. My TV viewing has included annual screenings of *The Wizard of Oz* both with or without my kids. I mention the Wizard of Oz in case you’re wondering about the title of this column.

I’m doing my best to make sense of the current preoccupation with what actually is consensually determined reality as embodied in our current political and communications environment. But, I’ve about given up on this major cultural phenomenon, which is affecting anyone with a TV, cell phone, computer, or who reads print media. I find myself turning instead to thinking about something that makes sense to me, the work we do to understand our patients’ internal realities and how in our own work we try to discern clues about that internal reality only from what we learn from them since we have no other tools available.

The work continually involves thinking about the tension between consensually agreed-upon external reality and our patients’ internal reality. That task usually requires a good deal of effort on our part. And, we often rely on research findings to help us have a frame of reference from which to work. But even that turns out to be complicated, and we can’t always assume those research findings are real.

A recent brief report in *Science* emphasizes this point. The report highlights recent studies, which reveal that published results of research are often influenced by the investigators inappropriately altering the research protocols or the initial hypotheses during the research study. The motivation was found tied to the researchers’ wishes to produce results that reached statistical significance in support of their hypotheses—whether they were actually the initial ones or added later during the research.

While I’m unaware that his theory has been tested using modern research techniques, David Winnicott’s 1965 article, “Ego Distortion in Terms of True and False Self;” highlights an intrinsic quality of human behavior that makes it so difficult to fully understand another person’s internal world. To Winnicott, social adaptation involves the evolving development of boundaries between what is revealed to one that allows them to think, feel, and/or behave in ways that are more adaptive for them. Of course, unlike in sci-fi or spy novels, we have no unusual powers, complicated machinery, or the ability to alter the physical world to accomplish these changes.

But we do listen carefully and use our empathic ability to both understand and provide support. This work is often at the heart of helping our patients become more reflective and gain the capacity to make adaptive changes in their internal realities. It’s incredibly gratifying but arduous, and it’s a good thing that we can usually take some time in the summer to relax.

By the way, before anyone starts posting on our website that I’m biased against Kansas, let me assure everyone that’s not my belief. My mom was born in Kansas City (of course you’re asking which Kansas City, the one in Missouri or the one in Kansas), and I’ve spent a lot of time there over the years visiting my grandmother, aunts and uncles, and cousins. I’m as certain as can be that by any common experience of reality, it’s a real place.

For those of you who know *The Wizard of Oz*, movie (spoiler alert for those who don’t—if there are any), Oz turns out to be just a dream of Dorothy’s. And that dream is full of day residue, and manifest and latent content, with a happy ending that makes every child and most psychanalysts happy.

What seems to be Dorothy’s reality turns out not to be real at all unless our dream worlds are real outside our minds. Phillip K. Dick, the science fiction writer whose ongoing concern was the nature of reality, often wondered about the reality of our internal world and how it could alter external reality. He would be having a field day in our current world were he alive and still writing. It is, though, entirely possible that, in an alternate reality, he still is.

“Toto, I’ve a feeling we’re not in Kansas anymore.”
—Dorothy, in *The Wizard of Oz*


to another person, what he called the false self, and the internal mental reality of the individual, what he called the true self.

Although using the term “false self” might imply pathology, Winnicott didn’t see this aspect of mental function as innately maladaptive; in fact, he believed the opposite. He believed the false self was, except in situations of significant psychopathology, the adaptive socially interactive aspect of our selves we present to others. From this perspective, it’s easy to see why psychotherapeutic work is so difficult: It involves finding the hidden true self, often hidden not just from the therapist but to some extent from the patient as well.

Our work with psychotic patients also requires a good deal of work in discerning the internal reality hidden by the veil of psychotic cognition. A patient I’ve discussed and written about before told me, in response to my question about his current life, that he spent all his time travelling in outer space in his invisible (to others) one-person space ship.

In my interview with that specific patient, it didn’t take much time or effort to understand that he was telling me that in his real life he felt lonely and isolated. We know that often it’s much harder to decipher a communication from someone who is psychotic.

The psychotherapeutic work we do with our patients involves helping them alter their internal mental reality

Dr Tasman is Professor and Emeritus Chairman, Department of Psychiatry and Behavioral Sciences, and Schwab Endowed Chair in Social, Community, and Family Psychiatry, University of Louisville School of Medicine, Louisville, KY.

References

YOUR THOUGHTS
Send your comments to Dr Tasman at editor@psychiatrictimes.com
The Poet

Elizabeth M. Tully, MD

Dr. Tully is Clinical Associate Professor, in the Department of Psychiatry and Neuroscience at the University of California, Riverside, School of Medicine.

Editor’s note: The patient described here is the author’s mother, who has signed a consent form to appear in this piece.

First, I have to find The Poet. Past the pots of spring flowers outside and the lobby of the skilled nursing facility by the beach. I look for her in her wheelchair. She might be eating lunch in the dining room, sitting near the nurses’ station, or in her small bedroom in the back. The nurses glance as I hurry by and say, “Hello, Doctor.” I am not one of the facility’s physicians, so my arrival is greeted without fanfare or demands.

When I stand in front of her, she peers at me and a knowing smile spreads across her thin, lined face. She listens happily to my greeting, and she stares incredulously at the baby being fed his first solid food, “How are your girls?” she suddenly asks me, although I know she usually doesn’t remember her grandchildren’s names.

“My name is Flynn. Your granddaughter’s firstborn.”

“No,” she chides me, “Growing like sunflowers.”

“Growing like weeds.”

“Growing like sunflowers!” He waves his hand in the air and places it near her bed. He is mild-exasperated. “Miss Evelyn won’t have to pry it gently from her fingers and she stares incredulously at the baby being fed his first solid food, “How are your girls?” she suddenly asks me, although I know she usually doesn’t remember her grandchildren’s names.

“No,” she chides me, “Growing like sunflowers!”

“Yes, growing like sunflowers. Growing up beautiful and brilliant like their wonderful grandmother, the poet and writer!” She smiles again, content, but her eyes are reddening.

She clenches the device in her hands, and after several viewings, I have to pry it gently from her fingers when the screen goes dark. A nursing assistant walks in with her lunch tray and she stares incredulously at the baby being fed his first solid food, “How are your girls?” she suddenly asks me, although I know she usually doesn’t remember her grandchildren’s names.

“No,” she chides me, “Growing like sunflowers!”

“Yes, growing like sunflowers. Growing up beautiful and brilliant like their wonderful grandmother, the poet and writer!” She smiles again, content, but her eyes are reddening.

She clenches the device in her hands, and after several viewings, I have to pry it gently from her fingers when the screen goes dark. A nursing assistant walks in with her lunch tray and places it near her bed. He is mild-exasperated. “Miss Evelyn won’t eat, Doctor. She pushes food away. Nothing!” He waves his hand in the air and waits to see my reaction. “I’ll (CONTINUED ON PAGE 4)
2018 PRECONFERENCE

New Perspectives in Advanced Psychopharmacology: Improving the Quality of Care for Patients with Depression

Wednesday, October 24
7:00 AM–4:30 PM | Credits: 6.0 | Price: $199

Understanding the mind-body connection is an essential part of selecting the appropriate treatments for patients with mental health disorders. Join members of the Psych Congress steering committee for a full day of clinically relevant information designed to transform your approach to caring for patients suffering from depression.

Register for Psych Congress today and add the preconference to your schedule!

psychcongress.com/2018 | 800.205.8233
The Poet

Continued from page 2

try,” I tell him. I manage to get several spoonsfuls in while she obedi- enly opens her mouth and swallowed. She urges me to eat the food instead, but bit by bit she finishes all of it. I feel victorious.

I suggest that we watch the video again of Seamus Heaney, reciting his poem Digging, but she says no, not now. She is preoccupied, quiet. She picks up a novel I put on her lunch tray and strokes it with tremulous fingers, turning it over in her hands but not opening it.

I go in search of the nurses. How is she doing? What is the last weight? Blood count? Is she sleeping? Medi- cation changes? Is anyone getting her up to stand in the morning, not sitting all day? “She’s okay. Doctor, doing okay,” they say and turn back to their charting.

The Poet is gazing at the window when I return, silent. I hand her a souvenier tea towel showing a brightly colored map of Wales. I point out Llandrindod Wells in the middle of the map. “You were such a brave girl, separated from your parents during the war. Do you remember how you and Aunt Joan found Grove Lodge? Do you remember Lady Llewellyn and her housekeeper, Mabel? Do you remember all those great stories you told us?”

The Poet nods and smooths out the linen with her hand. “Of course I remember,” she says.

She is stable for now, but I remember that terrible night her nurses called to inform me that there was a change in her condition and they were calling an ambulance. I flew down the freeway along the ocean to the hospital emergency department (ED). The waves were a long flat line of white foam on the sand in the pitch darkness. We put our heads together around the gurney, the young ED doctor and the nurses. I told the story, reciting lab values and the medica- tion list, as somehow no records had arrived with her. She suddenly woke up and smiled when I called her name. “I thought this was going to be full basic lifesaving,” said the nurse, relieved, pulling machines out of the room.

There was a time when I never set foot in a skilled nursing facility, be- fore I was also her caregiver and pro- bate conservator. Now I am a daugh- ter on different terrain, without the luxury of ignorance.

Another nursing assistant is clear- ing her meal tray in her room and unfastening her bib when I walk back in. The Poet asks her, “Did I intro- duce you to my daughter? The doc- tor?” “Yes,” nod the assistant. “Oh yes, you have, thank you.”

Then it is time to go. The Poet has raised six children, and I know she is used to comings and goings in a busy household. “Drive safely. Be careful. Get some rest,” she says. She is say- ing something indistinct, picking at the sheets, so I walk back to her bed- side and take her hand. I kiss her gen- tly, hoping it won’t be the last kiss. “I’ll be back soon. You know I will always find you.” She looks up at me and says firmly, “You’re my daugh- ter. I know what you can do.”

The Perfectionist

Richard M. Berlin, MD

Rotten teeth, dirt creased face, he’d come in for a hot and a cot and collapsed with DTs, this old English professor who survived like a bass you catch and release—hooked in June and again in September. He’d drink his way back up and smiled when I called her name. “Thought this was going to be full basic lifesaving,” said the nurse, relieved, pulling machines out of the room.

There was a time when I never set foot in a skilled nursing facility, before I was also her caregiver and probate conservator. Now I am a daughter on different terrain, without the luxury of ignorance.

Another nursing assistant is clearing her meal tray in her room and unfastening her bib when I walk back in. The Poet asks her, “Did I introduce you to my daughter? The doctor?” “Yes,” nods the assistant. “Oh yes, you have, thank you.”

Then it is time to go. The Poet has raised six children, and I know she is used to comings and goings in a busy household. “Drive safely. Be careful. Get some rest,” she says. She is saying something indistinct, picking at the sheets, so I walk back to her bedside and take her hand. I kiss her gently, hoping it won’t be the last kiss. “I’ll be back soon. You know I will always find you.” She looks up at me and says firmly, “You’re my daughter. I know what you can do.”

POETRY OF THE TIMES

“...in the gutter but some of us are looking at the stars.”

Yeah, yes I know that sounds like BS. People walk over me like I’m a sack of shit, but I’m laughing inside because I know they can’t see how, deep down, I’m a total perfectionist. ❑
THE QUIZ/Cognitive-Behavioral Therapy and Chronic Pain

>> Steven A. King, MD, MS

Although it is still widely believed that the management of chronic pain usually requires medications or physical interventions such as injections or surgery, a growing body of research has demonstrated the efficacy of psychological therapeutic modalities, most notably cognitive-behavioral therapy.

1 Cognitive-behavioral therapy (CBT) has only been found to be effective for chronic pain when there is a comorbid mental disorder also present.
   A. True  B. False

2 Although CBT appears to be a promising treatment for chronic pain, as of yet there is insufficient evidence to recommend its use for this.
   A. True  B. False

3 A recent review of the literature on management of low back pain reported that CBT should be considered a first-line treatment for chronic low back pain (pain lasting for more than 12 weeks).
   A. True  B. False

4 When managing chronic low back pain, the recommendation is to:
   A. Use NSAIDs before proceeding to CBT
   B. Use opioid analgesics before proceeding to CBT
   C. Use skeletal muscle relaxants before proceeding to CBT
   D. All of the above
   E. None of the above
   A. True  B. False

5 The benefits of CBT for chronic low back pain appear to last for at most a few months.
   A. True  B. False

6 In addition to providing reduction in pain among patients with chronic low back pain, CBT also appears to improve function.
   A. True  B. False

7 CBT for chronic pain has been studied only in and found to be effective only for certain socioeconomic groups.
   A. True  B. False

8 To be effective for chronic low back pain, CBT must be provided on an individual basis.
   A. True  B. False

9 Research indicates that for patients with chronic pain who are misusing opioid analgesics CBT may be:
   A. Effective for reducing the pain but have no effect on the misuse of opioids
   B. Effective for managing the misuse of opioids but have no effect on the pain
   C. Effective for both managing the pain and the misuse of opioids
   A. True  B. False

10 Reflecting concerns about the overprescription of opioid analgesics for the management of low back pain, most insurance carriers are not only increasing utilization management of these medications in order to reduce their use but are also promoting the use of non-opioids and non-pharmacologic therapies such as CBT.
   A. True  B. False

For answers to this quiz, please see page 11.

Dr. King is in private practice in Philadelphia, and he is Clinical Professor of Psychiatry at the New York University School of Medicine.

---

Complex case? We can help.

If complex cases or incomplete histories of past treatment are complicating your treatment planning decisions, consider Menninger as your partner in providing a thorough diagnostic assessment.

Our physician-led team of specialists provides clarity and treatment recommendations to support you and your client.

Assessments can be scheduled within 2-3 weeks on an outpatient or inpatient basis, depending on the needs of your client.

713-275-5140

Refer a client today or request a consultation.

Learn more at MenningerClinic.com. Menninger is affiliated with Baylor College of Medicine.
Opioid Epidemic

Continued from Cover

Q: Does making naloxone (Narcan, the drug that immediately reverses an opioid overdose) easily available encourage drug users to keep using? Is it a “moral hazard”?
A: No. People with addiction continue to use drugs (and alcohol) because they have a disease. They use to escape physical and emotional pain or to mitigate the distinctly awful state of withdrawal. They are not thinking of someone being handy with a dose of Narcan.

Q: What treatments can a doctor offer?
A: Doctors, advance practice nurses (APNs), and physician assistants (PAs) can prescribe one of three FDA-approved medications that can save lives, reduce cravings, and enable a more productive life: methadone, buprenorphine (Suboxone), and naltrexone (Vivitrol). Maintenance methadone requires a special program, so patients can’t get it in a general practitioner’s office. Prescribing is not limited to addiction experts however. Once they have a waiver from the DEA (after taking an 8-hour training), physicians, NPs, and PAs can prescribe buprenorphine for a month as daily film tabs or give weekly or monthly subcutaneous injections. Doctors can also prescribe and administer by injection intramuscularly a monthly dose of the non-opioid (so, not addicting) naltrexone, which reduces craving for opioids and alcohol.

Q: Many chronic pain patients are on opioids (eg, OxyContin, Percodan), some on high doses. What should doctors do?
A: Patients with addiction are seen in every doctor’s office. I would start by asking how well is the medication working in relieving their pain. Many will say, “not so well.” We know that opioids can be effective for acute but often not for chronic pain. That’s the start of the conversation. Patients, not doctors, must start believing they are not getting what they need, and that higher doses are not the answer. If the patient says, “not so well,” I would follow that by asking is it causing you problems, like constipation, sleepiness, imbalance? If it is, the patient then has told you the treatment is not working and he or she is paying a price because of the adverse effects. Your last question can be, “Do you want to try to do something about it, and if so, what might that be?” This is the clinical moment when getting off opioids and trying alternative pain management treatments becomes possible.

Q: Do you support needle exchange programs and safe injection sites?
A: Yes and yes. These are both forms of harm reduction; they keep people from contracting HIV/AIDS and hepatitis C. They keep people alive until they turn the corner into recovery, as many people eventually do—we’re just not good at predicting when.

Q: Many clinicians see recidivist patients in their emergency rooms and crisis services—opioid users who overdose or are drug-seeking. Some doctors come to resent them: after managing their overdose or refusing to write a new prescription, they’re back within days. What’s your advice?
A: That dilemma is felt by ER doctors around the country, especially in epicenters of the opioid epidemic. In many ways, these return visitors are like people with diabetes and asthma who don’t manage their illness. Our job is to help them see a different, more successful way of living. But there is one important difference with opioid addiction—the patient is in withdrawal and if that is not treated they will leave the ER seeking a fix. Some ERs prescribe a few days of buprenorphine to quiet the withdrawal so that a drug dependent person can stay away from immediate drug seeking and overdose, and perhaps even enter treatment.

Q: There’s some recent research about using the psychedelic psilocybin to treat addiction. Is that using a drug to treat a drug problem?
A: Yes and no. It is a drug, but it has no addictive properties and usually it takes only one, maybe two, psychedelic trips. In other words, it is not a maintenance “treatment,” as we use with so many chronic illnesses. The trip is a means, for some, of profoundly changing their perspective on life, of finding meaning, a sense of wonder and the universal nature of our lives. We need new and different treatments for addiction, and this is a promising one to research.

Conclusion
For a long time, doctors thought prescribing an opioid for pain was the right thing, that opioids did not have the addictive power they have. We have learned differently since then. As a profession, we now need to be part of reversing the epidemic we inadvertently helped to foster. That will and can happen every day in medical offices, clinics, emergency rooms and hospitals. And the more information the public has about what works and doesn’t work in combating addiction, the better.

Our country has overcome many an epidemic. Doctors, nurses, and other medical professionals can be part of making that happen for today’s opioid epidemic. The sooner, the better.

Dr Lloyd Sederer is a psychiatrist, public health doctor and medical journalist. His new book is The Addiction Solution: Treating Our Dependence on Opioids and Other Drugs (Scribner, 2018). www.AskDrLloyd.com.

Mixed Features

Continued from Cover

she will answer “No.” In truth, these patients do keep going with little rest, but they usually have a strong desire to sleep. Often the desire is not to sleep but to “turn my mind off,” a dangerous wish that can lead to sedative overdose when sleep does not come.

Ask a patient with mixed features, “Do you feel unusually confident, happy, or euphoric” and you’ll get a big “No.” How does confidence look when mixed with depression? Self-esteem is low, but patients are also demanding and aggressive, asserting themselves in a way that’s not consistent with the usual passivity of depression. Euphoria is replaced by lability, and most of these patients recall only the aversive turns of that emotional carousel. Relatives, on the other hand, may notice rare bursts of giddy excitement.1 DSM-5 made an important advance in understanding mixed states: it removed the word “pleasurable” from the impulsivity criteria. Sometimes these patients do pursue hedonic pleasures, but they are quick to point out that they only shop, binge on carbs, or masturbate excessively to “relieve the depression” and “not because I’m manic.” More often, the impulsivity is destructive. They will quit jobs, end relationships, break television sets, fire their psychiatrist, and tragically turn to self-harm and suicide, the rates of which are higher in mixed states than they are in depression.2

Substance abuse is also elevated. The association between depression and addiction may be entirely explained by mixed features, according to three studies involving more than 12,000 patients followed for at least 10 years. However, most of the mixed features in those studies would not be classified as bipolar, as we’ll see next.3-5

Clinical implications
Mixed hypomania is more common than the purer form, and it’s more likely to bring patients into treatment. It also counts toward a bipolar diagnosis. As long as the hypomanic symptoms are long enough in duration (4 or more days) and sufficient in number, the diagnosis is bipolar,
even if the patient never has an episode of pure hypomania. Often, these symptoms don’t cross the bipolar threshold and are due to a form of unipolar depression newly recognized in DSM-5 as Major Depressive Episode with Mixed Features. This diagnosis is surprisingly common, occurring in up to 25% of patients with unipolar depression.3

### Mixed unipolar disorder

Is mixed unipolar a form of bipolar disorder? Yes, and no. It falls somewhere between bipolar and unipolar in terms of family history, course of illness, associated features, and treatment response.7 Those four areas are the non-manic markers of bipolar disorder, and they are useful legs to stand on when faced with the non-specific symptoms of a mixed state.8 The Bipolarity Index is a quick tool that gathers and ranks these markers. It is available free online (www.moodtreatmentcenter.com/measurement) and has proven useful in distinguishing bipolar disorder from unipolar depression as well as from conditions that resemble mixed states such as borderline personality disorder.8,9

### The bottom line

In the end, this is a diagnosis that matters. Antidepressants are a two-edged sword that can make these states better in some and worse in others. The latest treatment guidelines recommend minimizing antidepressants, even in the unipolar form of mixed features and argue instead for mood stabilizers and atypical antipsychotics.2

---

**Dr Aiken** is Director, Mood Treatment Center, Editor-in-Chief of The Carlat Psychiatry Report, and Instructor in Clinical Psychiatry, Wake Forest University School of Medicine, Winston-Salem, NC.

---

**References**


---

### TABLE. Features of hypomania as they appear in mixed and pure forms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Pure hypomania</th>
<th>Mixed hypomania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevated energy</td>
<td>Motivated, driven, productive</td>
<td>An uncomfortable, anxious energy that feels “wired, restless, crawling out of my skin”</td>
</tr>
<tr>
<td>Elevated mood</td>
<td>Euphoric, excited, giddy, good humored, a spiritual sense of connection</td>
<td>Labile, with rapid swings between irritable, sad, anxious, despairing; rarely giddy or euphoric</td>
</tr>
<tr>
<td>Irritable</td>
<td>Impatient, quick to anger, starting arguments or isolating to avoid fights; there’s often a mild paranoid sense that “people have it out for me,” and the patient is quick to cut off relationships or split others into good or bad</td>
<td></td>
</tr>
<tr>
<td>Increased confidence</td>
<td>More certain of the ideas or abilities, optimistic, self-important, arrogant, ignoring risks</td>
<td>When mixed with depression, the heightened confidence doesn’t make patients feel too good about themselves; instead they come across as demanding, intimidating, or stubborn; depressive self-doubt is replaced by an undue certainty in their beliefs, leading to frequent arguments</td>
</tr>
<tr>
<td>Increased need for sleep</td>
<td>Sleeping less that 6 hours while still carrying on their usual activities</td>
<td>Even when decreased in quantity, patients still feel they need sleep, either because of depressive fatigue or because they dread consciousness; sleep is reversed (up all night and asleep during the day) or random</td>
</tr>
<tr>
<td>Rapid or pressured speech</td>
<td>Rapid, loud, interrupting and talking over people, difficult to follow</td>
<td>Speech is often rapid or loud, but what is more apparent is the urgent, emotional tone of desperation</td>
</tr>
<tr>
<td>Racing thoughts</td>
<td>Lots of ideas, mental clarity, or multiple trains of thought that are hard to follow</td>
<td>Patients’ minds are crowded with depressive or anxious thoughts, imagining worst-case scenarios; patients complain that they “can’t shut my mind off,” particularly at night</td>
</tr>
<tr>
<td>Distracted</td>
<td>Changing tasks frequently, thoughts shift from topic to topic, easily distracted by external stimuli</td>
<td>Shifting tasks in a directionless manner, disorganized, hard to think, thoughts shuffle from one anxious topic to another</td>
</tr>
<tr>
<td>Hyperactive</td>
<td>Exercising or moving more, restless, socializing more, making lots of plans or starting many projects</td>
<td>Agitated, tense, and “driven to do something but don’t know what”; the patient paces from room to room or goes on random walks or drives</td>
</tr>
<tr>
<td>Impulsive</td>
<td>Spending more money, driving faster, sudden travel, starting new relationships or projects, saying things they regret, sex, gambling, drug use, crossing social, moral, or legal lines</td>
<td>Reckless, destructive actions; suddenly leaving relationships or jobs, breaking things, aggressive driving; when pleasure is pursued patients explain away the impulsivity as an attempt to lift their mood (overspending through “retail therapy,” binge eating, pornography); rates of addiction, self-harm, and suicide are elevated</td>
</tr>
</tbody>
</table>

*The mixed features specifier in DSM-5 requires three manic symptoms during an episode of depression, but irritable, distracted, and hyperactive, cannot count toward that diagnosis because they are so common in other disorders.*
Understanding and Treating Co-Occurring Bipolar Disorder and Substance Use Disorders

Ming Ma, Alexandria S. Coles, and Tony P. George, MD

Bipolar disorder is a disabling psychiatric disorder that presents in approximately 1.5% to 2.5% of the population. It is characterized by mood instability (hypomania/mania), depression, or mixed manic and depressive episodes. Fluctuations in mood are frequently accompanied by changes in energy levels and sleep patterns.

Substance use disorders (SUDs) are common among individuals with BD. Findings from a large meta-analysis indicate that the lifetime prevalence of alcohol and cannabis use disorders in BD is 42% and 20%, respectively. The lifetime prevalence of tobacco smoking in BD is as high as 60% to 80% compared with approximately 15% in the general US population. Co-occurring substance use is associated with earlier illness onset, suicidality, rapid cycling and mixed features, and more severe symptoms. Several different explanations have been offered.

First, there appear to be genetic associations between BD and SUDs. A recent study estimated that 47% to 57% of the genetic variance in bipolar illness predisposition is linked to alcohol use disorder, which supports the idea that the two disorders may be genetically correlated.

Second, BD and SUDs share common neurobiological pathways, and behavioral sensitization (eg, “kindling”) may be a common mechanism. Repeat exposure to alcohol and drugs sensitizes neurons and is associated with increasingly rewarding effects. Interestingly, the course of BD follows a similar pattern (ie, episode sensitization). Therefore, individuals with a tendency to sensitization may be at greater risk of developing both bipolar illness and SUDs. This has led to the proposal that co-occurring BD and SUDs may respond better to anticonvulsant mood-stabilizers rather than lithium.

CASE VIGNETTE
John is a 22-year-old white single male with a history of bipolar I disorder. He was a student at a local community college until a month ago when he dropped out abruptly. Since age 16, he has been taking valproate sodium (1000 mg daily) and sertraline (100 mg daily), but he is only partially responsive to these medications (frequent mood instability, currently experiencing depressed mood). Over the past year, he admits to regularly drinking beer (3-4 times per week, 2-3 standard drinks per session). Although he rarely drinks to intoxication, his parents and friends consider him increasingly unreliable. He has also been smoking cannabis and crack cocaine in the past 6 weeks and says that he has “never felt better.” He thinks that he has no real drug problems and regards drinking as his way of coping.

Possible explanations for co-occurring BD and SUDs

A bidirectional relationship exists between BD and SUDs. Compared with individuals without psychiatric disorders, those with bipolar illness may be more vulnerable to initiating substance use; moreover, chronic substance users may be at greater risk of mood disorders than non-substance users. Although the exact mechanism underlying these co-occurring disorders remains largely unclear, several different explanations have been offered.

Treatment should integrate pharmacotherapy (eg, mood stabilizers, adjunctive addiction medication) and psychotherapy (eg, integrated group therapy, CBT, psychoeducation, MI).

Third, certain traits associated with BD may elevate the risk for patients to engage in substance use. These include impulsivity, poor coping strategies for stress, and excessive pleasure-seeking associated with the manic or hypomanic phases of the illness. These findings are compatible with the hypothesis of addiction vulnerability in patients with psychiatric disorders.

An alternative explanation for co-occurring BD and SUDs is the self-medication hypothesis, which proposes that patients use substances to help alleviate BD symptoms. Empirical evidence regarding this hypothesis is mixed. Notably, mood symptom improvement is generally observed once abstinence is initiated, which is inconsistent with the self-medication hypothesis of SUDs in bipolar illness.

Assessing and diagnosing co-occurring BD and SUDs

Assessment and diagnosis of patients with co-occurring BD and SUDs can be challenging for a number of reasons. First, bipolar illness itself is a heterogeneous disorder with different subtypes and presentations. In fact, it is not uncommon for it to be misdiagnosed as unipolar depression.

Second, symptoms of alcohol and drug intoxication and withdrawal may resemble BD symptoms, making it often difficult to distinguish between the two. For instance, acute administration of central nervous system stimulants such as cocaine and amphetamines can lead to euphoria and increased energy, which overlap with symptoms of mania and hypomania. Alternatively, misuse of alcohol and benzodiazepines can mimic depressive symptoms. Symptoms of withdrawal (eg, depression, dysphoria, sleep disturbances) also parallel BD symptoms in the depressed or mixed phases. Moreover, there is some evidence that BD comorbid with SUDs more commonly presents clinically with rapid cycling (eg, > 3 cycles per year between mania and depression) and mixed (dysphoric) manic features, which further complicates the diagnostic process.

Integrated treatment for co-occurring BD and SUDs

Diagnosis is the first challenge in the care of patients with co-occurring bipolar illness and SUDs; finding effective treatment is arguably just as challenging. Although there is no one single optimal treatment strategy, the management of these co-occurring disorders should integrate both pharmacological and psychosocial interventions.

A number of different pharmacotherapies have been efficacious in treating co-occurring BD and SUDs. In early studies, lithium was found to improve BD symptoms and reduce levels of substance use. Valproate has also been found to be effective at improving affective symptoms, decreasing substance craving, and reducing alcohol and drug use. Compared with valproate, lithium is associated with lower suicide risk during treatment, but it may be less effective in treating bipolar illness associated with SUDs.

A number of studies have examined quetiapine in treating patients with co-occurring disorders. While quetiapine may reduce depressive symptoms, it did not reduce alcohol use. Findings indicate that lamotrigine and topiramate are not particularly useful in treating comorbid bipolar illness and SUDs. Thus, while the use of anticonvulsant mood stabilizers and second generation antipsychotics for co-occurring bipolar disorder and SUDs is an attractive concept and may have some clinical utility, further research to substantiate these observations is warranted.

In addition to mood-stabilizing agents, adjunctive addiction pharmacotherapies should also be considered in treating dual diagnosis patients. Naltrexone has been shown to significantly reduce both manic and depressive symptom severity and decrease alcohol use in patients with bipolar disorder and alcohol dependence.

Psychotherapy should also be included in the treatment plan to support pharmacotherapies. Psychosocial interventions are important for addressing issues such as diagnosis acceptance, treatment compliance, and relapse prevention. Integrated group therapy, for instance, has been shown to be effective at reducing drug problem severity, encouraging abstinence, and decreasing the risk of mood episodes. This type of group therapy typically consists of five to eight patients for approximately 20 weekly ses-
sions, and focuses on themes common to both BD and SUDs, such as identifying and dealing with triggers.

Cognitive behavioral therapy (CBT), which involves identifying and changing biased thoughts and beliefs, also shows promise in the treatment of co-occurring BD and SUDs. Patients who received CBT treatment had reduced symptom severity, decreased substance use, and longer abstinence periods.20

Psychoeducation is effective at improving mood symptoms and reducing relapse in patients with bipolar illness. Because it enables patients to develop a more objective understanding of the disorder and learn strategies to manage mood symptoms, it should also be suitable for individuals with co-occurring disorders. Finally, motivational interviewing (MI) should be used to engage patients with co-occurring BD and SUDs into initial treatment.

Conclusions
Co-occurring bipolar illness and SUDs are associated with adverse clinical, social, and economic consequences. They are not only difficult to diagnose, but are linked to increased symptom severity, poorer treatment outcomes, and greater suicide risk. Treatment should integrate pharmacotherapy (mood stabilizers and adjunctive addiction medication) and psychotherapy (integrated group therapy, CBT, psychoeducation, MI).

Neuromodulation methods such as repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS) have shown promise in treating mood disorders and SUDs.21 While many challenges remain in the accurate and timely assessment and treatment of patients with co-occurring BD and SUDs, considerable progress has been made towards improving the care of these complex patients.

More research into this important area, particularly on clinical differences in bipolar illness with and without SUDs, and on matching treatments to SUD comorbidity (eg, pharmacological, behavioral), is needed if we are to make further improvements in treatment outcomes and quality of life for patients.

ACKNOWLEDGMENTS—This work is supported in part by NIDA grant R21-DA-043949 to Dr George.

References

The largest pharmacogenomics clinical trial in mental health found that using GeneSight® Psychotropic to aid in prescribing resulted in a 50% improvement in remission rates for depression after 8 weeks versus treatment as usual in treatment-resistant depression patients. By 24 weeks, 30% of patients were in remission.1

Understanding your patients’ genetics with the GeneSight® Psychotropic test allows you to choose more optimal medications and helps more patients achieve remission.

Learn more at genesight.com/rct
Antipsychotic Discontinuation: Two Decades Later

Brian Miller, MD, PhD, MPH

Dr. Miller is Associate Professor, Department of Psychiatry and Health Behavior, Augusta University, Augusta, GA. He is the Schizophrenia Section Editor for Psychiatric Times.

A n important question that patients might ask clinicians is, “How long should I continue antipsychotic treatment after the first episode of schizophrenia?” Many current treatment guidelines recommend 1 to 5 years of antipsychotic treatment if relapse does not occur.1 A classic study found that antipsychotic discontinuation was associated with a 5-fold higher risk of relapse over 5 years following a first episode of psychosis.2 However, it is not known whether relapse risk remains elevated after 2 to 5 years of stability.

Tiihonen and colleagues1 used a large electronic database to assess risk of treatment failure (rehospitalization or death) as a function of the duration of antipsychotic treatment prior to discontinuation in a nationwide cohort of patients with first-episode schizophrenia. They first identified all persons hospitalized for schizophrenia (ICD-8, -9, and -10 diagnoses) in Finland from 1972 to 2014 using the Finnish Hospital Discharge register. The median age of subjects in the study was 29 years. The majority of patients were male. The authors reported that theirs is the first study of how risk of relapse after discontinuation more difficult.

Comparing risk of treatment failure significantly increased with the duration of antipsychotic treatment after discontinuation. The authors reported that theirs is the first study of how risk of relapse in first-episode schizophrenia is modified by the duration of antipsychotic treatment (ie, the later the antipsychotic is discontinued, the greater the risk of treatment failure). Study findings suggest that there is no “safe” timepoint for discontinuation following initiation of antipsychotic treatment. One potential explanation is that long-term antipsychotic exposure modifies brain homeostasis, making discontinuation more difficult.

Study strengths included nationwide coverage of first-episode schizophrenia and follow-up based on register data, as well as the long follow-up period. One limitation is not knowing whether antipsychotic discontinuation was a patient decision or guided by the treating physician.

The bottom line
If antipsychotic treatment has been used continuously for several years, it is risky to discontinue treatment. Risk of illness relapse does not decrease as function of time during the first 8 years of illness. Continuous use of antipsychotics for up to 20 years is associated with lower mortality compared with early discontinuation. Long-lasting continuous antipsychotic treatment appears to be beneficial for the majority of patients with first-episode schizophrenia.

References
The Quiz/Cognitive-Behavioral Therapy and Chronic Pain (continued from page 5)

1. **Answer:** B. False
   There is no evidence that a comorbid mental disorder must also be present for CBT to be effective for the management of chronic pain. However, in patients with chronic pain and comorbid depression, CBT can be beneficial for both.7

2. **Answer:** B. False
   In its report released in 2018, the task force on pain of the Academic Consortium for Integrative Medicine and Health, an organization of 72 North American academic medicine centers and health systems, found that there is sufficient evidence to recommend the use CBT for chronic pain and to accept it as a valid treatment.2

3. **Answer:** A. True
   A comprehensive review of the treatments for low back pain reported that there is sufficient evidence to recommend that CBT be considered as a first-line treatment for chronic low back pain.3

4. **Answer:** E. None of the above
   The comprehensive review recommended that CBT should be considered a first-line treatment for chronic low back pain, NSAIDs should be considered a second-line treatment; that opioids should be considered only for limited use for a select group of patients; and stated that there was insufficient evidence to recommend the use of skeletal muscle relaxants. The only other first-line treatment for persistent low back pain recommended by the review is exercise.4

5. **Answer:** B. False
   Studies have found that the benefits of CBT for chronic low back pain are still present at one- and two-year follow ups.3

6. **Answer:** A. True
   This is an important point as the efficacy of treatments for chronic pain is generally evaluated both on reduction in the level of pain and improvement in function.4

7. **Answer:** B. False
   CBT appears to be effective as a treatment for chronic pain among all socioeconomic groups and education levels.5

8. **Answer:** B. False
   In fact, most of the studies that supported the use of CBT for chronic low back pain employed group therapy.1,4

9. **Answer:** C. Effective for managing both problems
   Although there is only limited research on the efficacy of CBT for patients who have chronic pain and are misusing opioids, findings so far indicate that it may be efficacious for the management of both problems.6

10. **Answer:** B. False
    Although many insurance carriers including Medicaid, Medicare Advantage, and commercial insurers have instituted policies to try to reduce the amount of opioid analgesics prescribed, there is little evidence that they have done much to promote the use of other treatments including CBT.7

References
A New Treatment for Bipolar Depression: Part 1

My goal in Part 1 of this 3-part series is to open your thinking. I’ll admit, I myself am having trouble with this. I’m writing in part to convince myself, or at least explore my hesitations. If this is such a great treatment, I ought to have been using it a lot myself and I have not. I’m still not certain what’s holding me back. But old data have recently been gathered and systematically presented—reinforced by one new study, but perhaps contradicted by another. So it’s time to revisit this story.

There is no evidence of increased atrial fibrillation, nor decreased bone density, with this well-tolerated treatment.

What treatment am I talking about? Good old thyroid hormone. With only one randomized trial in bipolar depression when the recent guidelines were prepared, it keeps getting overlooked—almost. The CANTAM trial treatment guidelines list adjunctive thyroid hormone as a third-line treatment option for bipolar depression, down there along with monotherapy using divalproex, fluoxetine, and tranylcypromine.

Thyroid hormone has been under study in mood disorders since at least 1981 when Dr Peter Whybrow pointed out the connection between thyroid hormone and catecholamines. He and colleague Dr Michael Bauer went on to demonstrate that even mild elevations in thyroid stimulating hormone (TSH) were associated with rapid cycling in bipolar disorder. In 1990 they presented 11 cases of refractory rapid cycling they had treated with high doses of thyroid hormone. ‘‘Levothyroxine was added to the baseline medication regimen, and the dosage was increased until clinical response occurred or until side effects precluded further increase.’’ TSH was suppressed; and T4 levels went to around 150% of normal, Whybrow reported. In the randomized trial, the dose was 300 mcg daily, with a starting dose and weekly increases of 100 mcg.

You’re asking yourself: ‘‘How come these patients don’t just become hyperthyroid, if you’re giving them supraphysiologic doses of thyroid hormone?’’ Of course that’s a key question. Whybrow and Bauer and colleagues have found that patients with rapid cycling bipolar disorder ‘‘respond differently to the hormone and tolerate it better than healthy individuals.’’ In other words, despite their TSH of less than 0.1, patients who respond do not develop tachycardia, palpitations, tremor, GI hypermotility, or weight loss.

This will prove critical. Endogenous hyperthyroidism is associated with decreased bone mineral density and increased rates of atrial fibrillation. Are patients on supraphysiologic thyroid for bipolar depression subject to the same risks?

Suppose they aren’t. Suppose there were no evidence of increased atrial fibrillation, nor decreased bone density, with this well-tolerated treatment that is inexpensive and doesn’t cause weight gain or other metabolic consequences? Would you use it, given one positive randomized trial?

We physicians and psychiatric nurse practitioners are human. We closely monitor social norms, including how our colleagues are treating patients. I suspect that the lack of a psychiatric norm around using supraphysiologic thyroid is the limiting factor here, not an adverse risk-to-benefit ratio. But if you’ll even contemplate this ‘‘new’’—old—treatment, then I have a book recommendation for you. After publishing detailed reviews of the putative risks of arrhythmias and decreased bone density with supraphysiologic thyroid, Dr Tammas Kelly has written a guide to this approach: The Art and Science of Thyroid Supplementation for the Treatment of Bipolar Depression. Kelly’s book may help lower the barriers that impede the use of supraphysiologic thyroid. In any case, it’s a fascinating and well-written summary.

Dr Phelps stopped accepting honoraria from pharmaceutical companies in 2008 but he receives royalties for his books.

References
$150,000 TO DEFEND YOUR LICENSE AND LIVELIHOOD

PRMS knows that psychiatrists are more likely to face an administrative action than a lawsuit. That is why our comprehensive malpractice policy includes a separate $150,000 defense limit for license proceedings at no additional cost.

JUSTIN E. PRUETT, JD
LITIGATION SPECIALIST

Defense you can depend on is just one component of our comprehensive professional liability insurance program. Contact us today.

(800) 245-3333 | PsychProgram.com/150 | TheProgram@prms.com

10 Factors to Consider When Assessing PTSD
This slideshow presents cases of a war veteran and a grieving mother who witnessed the murder of her son. These cases illustrate some of the finer points of PTSD, which is relatively unique among psychiatric disorders in requiring a specific etiology. Treatment must first address the specific individualized aspects of the trauma itself and contextualize its role in the patient’s life. Certain types of trauma can reduce the likelihood of spontaneous recovery (eg, PTSD due to medical illness) or response to treatment: childhood abuse-related trauma, repeated or prolonged trauma, more severe trauma, and trauma associated with marked impairment of self-regulation. Combat PTSD is frequently regarded as less responsive to standard treatments than single-event civilian trauma-associated PTSD.

http://www.psychiatrictimes.com/ptsd/10-factors-consider-when-assessing-ptsd

5 Reports on Depression
Despite the scope and magnitude of rising rates of depression and suicide, the field of psychiatry may be witnessing a turning point. With an introduction by James R. Murrough, MD, PhD, this 5-part report gives witness to a complete mechanistic understanding of depression as well as from a therapeutic portfolio that is only partially effective. Only one in three patients will achieve remission following up to 12 weeks of treatment with a first-line antidepressant medication. These factors reinforce a lack of clarity regarding the causes of depression and appropriate treatment strategies both within and outside of the medical community. This in turn unwittingly contributes to the stigma and confusion surrounding the world’s largest health problem.

http://www.psychiatrictimes.com/major-depressive-disorder/5-reports-depression

Treating Adolescent Depression With Psychotherapy: A Quiz
What are the most effective strategies to cultivate communication and problem-solving skills in adolescents struggling with depression? Scroll through the slides for quiz questions and answers on the psychotherapeutic “three T’s” for depression: cognitive-behavioral therapy (CBT), interpersonal psychotherapy (IPT), and dialectical behavior therapy (DBT).

http://www.psychiatrictimes.com/quizzes/treating-adolescent-depression-psychotherapy-quiz

In Case You Missed It Check out these features at www.psychiatrictimes.com
ADHD is a neurodevelopmental disorder commonly occurring in children and adolescents. However, it has recently become accepted that the symptoms of ADHD can often continue into adulthood with an estimated lifetime prevalence of ADHD in US adults of 8.1%. It is thought that the earliest accounts of inattention as a disorder, in children and adults, were recorded in a medical textbook by Melchior Adam Weikard in the early 1700s. “Weikard described adults and children who were inattentive, distractible, lacking in persistence, overactive and impulsive, which is quite similar to today’s description of ADHD.”

It has taken decades of research to show that some children with ADHD will continue to have symptoms into adulthood (DSM-5 provides a description of the symptoms in adults). ADHD was first documented in DSM-II, and the disorder was referred to as Hyperkinetic Reaction of Childhood and described in one sentence. With DSM-III, the classification of mental disorders progressed from a simple description to the definition of disorders with specific diagnostic criteria. Hyperkinetic Reaction of Childhood was renamed Attention Deficit Disorder and the subtypes of “with and without Hyperactivity” were introduced. The term as we know it today, Attention Deficit Hyperactivity Disorder, was not introduced until DSM-III-R, with the controversial elimination of ADD without Hyperactivity. Subsequent editions of DSM further described specific subtypes/presentations of ADHD (predominantly Inattentive, predominantly Hyperactive-Impulsive, and Combined) with modifiers, 18 primary symptoms, and symptom thresholds necessary for a diagnosis of ADHD. DSM-5 addresses adults with ADHD to help guide psychiatrists and other mental health providers in the diagnosis and treatment of ADHD.

The evolution of ADHD has not come without controversy. Controversial topics around ADHD have been presented in medical history and continue today. In this two-part Special Report, the authors provide evidence-based information to guide our assessment, diagnosis, and treatment of ADHD across the lifespan. In Part 1, Julia Rucklidge, PhD, Mairin Taylor, PhD, and Jeanette Johnstone, PhD, provide a review of the role of diet and nutritional supplementation in the manifestation of symptoms and the treatment of ADHD in their article “Do Diet and Nutrition Affect ADHD? Facts and Clinical Considerations.” This topic comes up frequently in the clinical setting, especially by parents who are leery of treatment with psychotropic medications such as stimulants.

While there are various reasons why a parent, guardian, or patient might be hesitant to take a stimulant medication, Lisa L. Weyandt, PhD, and Stephanie Bjorn, the authors of “Issues Pertaining to Misuse of ADHD Prescription Medications” challenge the psychiatrist’s (and other mental health professionals’) role in stimulant misuse. They stress the importance of a comprehensive clinical evaluation with collateral information before making a diagnosis of ADHD and treating individuals for ADHD with psychostimulants.

As we further consider the utility of a comprehensive clinical evaluation in the diagnosis and treatment of ADHD, Gail A. Mattox, MD, and Sarah Y. Vinson, MD, outline a comprehensive, culturally competent method to evaluate symptoms of ADHD in the African-American population using a Case Vignette in “Culturally Competent Approaches to ADHD: Issues in African-American Populations.” They include practical ways we, as psychiatrists, can help to decrease the stigma towards seeking mental health treatment and minimize barriers to treatment for this population.

In Part 2 of the Special Report in the October issue, Ciro Marangoni, MD, discusses ADHD differential diagnoses and highlights core clinical features that distinguish ADHD from bipolar disorder and borderline personality disorder in “ADHD, Bipolar Disorder, or Borderline Personality Disorder: Getting to the Right Diagnosis.”

When we think about ADHD differential diagnoses it is vital that we include sleep disorders. Not only can symptoms of sleep disorders mimic those of ADHD, but sleep disorders can be comorbid with ADHD. Margaret D. Weiss, MD, PhD and Nicole McBride, MPH, the authors of “ADHD: A 24-Hour Disorder” urge psychiatrists to acknowledge the reciprocal relationship between disordered sleep and ADHD outcomes. Optimal patient outcomes require treatment and management of ADHD and sleep.

Philip Shaw, BM BCh, PhD, provides a narrative review of the most recent literature on the complex challenges with neuroimaging and the heterogeneous nature of ADHD in “Neuroimaging in ADHD: What’s New?” He offers insights into how neuroimaging might eventually translate into clinically useful tools.

Dr Griffin reports no conflicts of interest concerning the subject matter of this Special Report.

References
The work of Feingold,1 a pediatric allergist since the 1970s, beginning with elimination diets have been a consideration in managing ADHD symptoms since the 1970s, beginning with the work of Feingold,1 a pediatric allergist, who recommended eliminating food additives such as dyes and preservatives alongside other foods. Feingold theorized that highly antigenic foods (those often associated with allergies and intolerance) negatively influenced the behavior of children with ADHD (hyperkinesis). Despite anecdotal reporting from many families that the elimination of these foods, based on Feingold’s diet, significantly improved their children’s behavior, initial results from effectiveness studies were inconclusive. In the decade that followed these mixed results, stimulant medication came to the fore as a primary treatment for ADHD, which likely contributed to diminished scientific interest in dietary interventions for ADHD.

Over the past two decades there has been renewed scientific interest in dietary interventions for ADHD. In randomized, double-blind, placebo-controlled studies from the University of Southampton, the consumption of food coloring and preservatives was found to be associated with hyperactive behavior in community samples of 3 year olds and 8 and/or 9 year olds.2 Although the study comprises a community rather than a clinical sample, the findings led to a reconsideration of the theoretical underpinnings of Feingold’s diet, at least for some hyperactive children.

Further investigation into the genotypes of the Southampton study participants highlighted possible mechanisms that may contribute to individual responses to food additives. Stevenson and colleagues3 suggest that in children with ADHD, histamine gene polymorphisms associated with alterations in the histaminergic system, explain differential responses to certain food additives. Meta-analyses have shown that for about 8% of children, elimination of certain foods, additives, and food colors resulted in significant improvement in ADHD symptoms.4 In response to these findings, several European nations have banned the use of certain artificial food colors due to the strength of the evidence that these colors may have adverse effects on childhood behavior, while offering no nutritional value to the child. It is important to note though that in the study by Nigg and colleagues,4 effects were not significant on teachers’ reports and observer measures.

Overall, the clinical utility of removing food dyes and additives should be weighed against difficulty and expenses. Ideally ingredients such as food dyes and preservatives should be minimized in the food supply rather than expecting families to navigate the exclusion of these food additives, especially dyes. While removing food dyes and additives requires patient burden, these ingredients confer no health benefit and are purely “aesthetic” used by food manufacturers to entice children to eat more processed food.

One study that went further than investigating the effects of food additives and colors on ADHD symptoms is The Impact of Nutrition on Children with ADHD (INCA) study.5 The study also included the effects of full oligoantigenic diets or a “few foods diet” (the elimination of other potential allergens as well, such as wheat, dairy, certain meats, carbohydrates, fruits, and vegetables). In few foods diets, food restrictions remain for some weeks (2-5 weeks) in which the individual is only allowed to eat a few different hypo-allergenic foods (eg, rice, turkey, lettuce, peppers, water), then a broader range of foods are gradually reintroduced.

Administering such diets is problematic because the food restrictions render blinding difficult. In addition, providing support or guidance for such an intervention is outside the expertise for most mental health professionals. For families, this level of dietary restriction can be challenging to maintain. Nevertheless, the INCA study demonstrated significant symptom reduction in individuals with ADHD. The mechanisms are uncertain however, as the study was unable to demonstrate a relationship between immunoglobulin E (IgE) and IgG levels and exposure to the highly restrictive diet.

An effect size of 0.29 was reported for the elimination/oligoantigenic diets across 6 controlled trials that included 195 participants.6 Findings indicate that about one-third of the children with ADHD had an excellent (>40% symptom reduction) response. However, according to Catalá-López and colleagues,8 the elimination diet research is significantly hampered by methodological heterogeneity rendering small or imprecise effect sizes that need to be interpreted with caution. While few foods diets may result in behavioral and/or cognitive changes for a minority of children with ADHD, identifying the subgroup for whom this treatment works is proving elusive and again, the diet represents a significant burden to families.

Casein or gluten free diets
Despite anecdotal reports of an increased prevalence of food allergies among ADHD patients, systematic reviews examining the association between ADHD and dairy or casein intolerance have been inconclusive. Similarly, despite an association between gluten intolerance and hyperactivity symptoms in those with celiac disease, evidence does not support a clear link between ADHD and celiac disease.9 As part of oligoantigenic diets, behavioral improvements have been found from the exclusion of dairy and wheat/gluten. However, it is not clear whether these effects are the result of removing these or other antigenic foods themselves, or due to secondary factors such as an alteration of gut microbiota.

The role of sugar
Consideration of sugar’s role in the expression of ADHD symptoms arose from observations of increased hyperactivity among children after consuming sugar. Cross-sectional studies show a linear association between consumption of sugar-containing soft drinks and hyperactivity.10 However, given the context for this association (eg, children’s birthday parties), the true relationship between sugar consumption and hyperactivity may be influenced by the environmental and situational factors in which large amounts of sugar are consumed.

While it is reasonably well established that short-term consumption of sugar is not associated with ADHD symptoms, Johnson and colleagues11 theorize that chronic overconsumption of sugar may influence dopamine regulation and therefore may be an

**SIGNIFICANCE FOR PRACTICING PSYCHIATRISTS**

The importance of nutrition in reducing ADHD symptoms can often be overlooked in a busy practice. The evidence to date clearly demonstrates the significant contribution poor nutrition can make to the severity of ADHD symptoms. Addressing nutritional status, either through dietary change, supplementation or both, can have substantial positive effects for some children.

» A patient’s diet represents a modifiable target for improving mental health, and for some people, changing one’s diet may improve ADHD symptoms.

» Evidence suggests that supplementation with omega-3s and/or a broad spectrum of micronutrients (for those not taking medication) may be beneficial for ADHD symptom reduction.

» Patients should consult with their primary care provider before starting any supplement and with a dietician before changing their diet.
etiological factor in ADHD. Indeed, the American Academy of Pediatrics recommends limiting sugar to less than 10% of total calories per day (roughly 6 teaspoons per day for children ages 2 to 19 years) to support good mental and physical health.

Whole diet approaches
Many families ask whether simply eating a healthy diet will help ADHD symptoms. For some, that may be true. Certain dietary patterns have been associated with ADHD symptoms. Adolescents who consume a Western diet, characterized by a high intake of refined carbohydrates, sugars and sodium, total and saturated fats, and lower intake of omega-3 fatty acids, fiber and folate, showed a higher prevalence of ADHD, even after controlling for confounding variables. The observed relationship between ADHD and poor diet quality may be bi-directional in that individuals with ADHD may make poorer dietary choices compared with non-affected peers as a result of higher impulsivity and reward preference.

While eating a healthy diet is one consideration, another factor to consider is the nutrient composition of the foods consumed in the 21st century compared with 50 or 100 years ago. The mineral composition of 20 fruits and vegetables in the 1940s compared with the same fruits and vegetables in the 1990s, was significantly lower. High yield crops produced with fertilizers, pesticides, and heavy irrigation may lead to significant changes in the foods consumed in the 21st century compared with the 20th. While eating a healthy diet is difficult because of inaccessibility of supermarkets that sell unprocessed foods including fresh produce. “Food deserts” are geographic regions where residents, typically in lower socioeconomic brackets, are limited by the selection available at convenience stores and fast food restaurants. In food deserts, dietary options tend to be limited to processed foods that are high in sugar, unhealthy fat, and salt, with low or no availability of fresh fruit, vegetables or whole grains. As such, even well-meaning parents may struggle to address poor diet. This is where the supplementation research may be of particular interest.

Supplementation with individual nutrients
Lower serum levels of omega-3 and omega-6 in children with ADHD suggest either poorer absorption and/or increased metabolism of polyunsaturated fatty acids (PUFAs). Because of their neurophysiological properties, PUFAs may have a protective or modulatory role in neurological processes including neural signaling, synaptic function, and neurotransmitter regulation.

Findings from controlled treatment trials of PUFAs in individuals with ADHD indicate that the symptom changes appear to be significant for a sizeable minority, regardless of the overall small effect sizes for this population. Given that research has shown a reduction in omega-3 fatty acids in children with ADHD and a modest improvement (effect size estimates range from 0.18 to 0.31) in symptoms, it is a reasonable option alongside established therapies. The results for other micronutrient supplements such as single vitamins, minerals, amino acids have been inconsistent. A number of researchers have concluded that single nutrient interventions may not be effective for improving ADHD symptoms, perhaps due to the complex interplay between aberrant biochemical pathways in people with ADHD. Considering the range of nutrients that are necessary to sustain a highly metabolically active brain, it is logical to supplement with a combination of nutrients to provide the building blocks required for optimal brain function.

Multi-ingredient, broad spectrum micronutrients
Historically, trials of broad spectrum micronutrients (BSM) in the treatment of ADHD have been surrounded by controversy, likely resulting from the administration of very small doses resulting in nonsignificant effect; or mega-doses, leading to problems with toxicity and adverse effects. However, over the last decade a number of trials have utilized BSM in doses that were both adequate enough to treat core ADHD symptoms, and also below toxic levels. Although the trials varied in BSM composition and duration, all resulted in significant improvements in behavioral functioning, including core ADHD symptoms and/or emotional regulation. Reassuringly, very few adverse effects (AEs) were reported, with no differences in AEs between active and placebo treatment. Two randomized clinical trials demonstrated significant improvements with small to medium effect sizes in multiple areas of functioning, including ADHD symptoms (particularly inattention) as well as emotional regulation for adults and children with ADHD. Follow up at one year of the adult participants with ADHD revealed that among the 20% who continued with the BSM formula, ADHD symptoms were in the nonclinical range—a significant improvement from baseline.

Regarding the effectiveness of BSM for ADHD, it is important to note that the majority of BSM trials for ADHD have been conducted with medication-free individuals. While, caution is warranted in using BSM as an adjunctive treatment to stimulant medication, early research suggests that in some cases, medication doses may need to be reduced (with physician monitoring) when taken alongside nutrients. Reduction in dose is thought to be possible because of the nutrients’ potentiating effect of the medication, hence the caution for combining and the need for medical oversight.

Although the multi-ingredient trials described here have all shown promise, replication and longer-term studies, including clinical populations who are taking medication, are required to make more definitive recommendations about efficacy. No significant safety concerns were raised in the trials, which suggests that at least in the short-term, the nutrients are not having a negative effect on functioning or blood markers of general health (e.g., hematology, liver or kidney functioning). Adverse effects such as gastrointestinal upset are typically mild, short-lived, and alleviated by taking pills with food and water.

Conclusion
A growing body of research suggests that diet, both the elimination of certain additives and/or allergens, and the consumption of nutrient-rich foods, plays a role in ADHD. The effects of these dietary changes are small, and may be due to inter-individual differences such as genetic polymorphisms and food sensitivities. More persuasive than dietary interventions alone, however, are the supplementation studies of omega-3 fatty acids and/or BSM formulas that provide the nutritional building blocks needed for optimal brain functioning at high, but safe, doses.

The authors report no conflicts of interest concerning the subject matter of this article.

ACKNOWLEDGMENTS—Dr Johnstone is supported by an NIH-NCCIM S09AT0082403 through the National University for Natural Medicine and Helfgott Research Institute in Portland, OR; she also received support from the Department of Child and Adolescent Psychiatry, Oregon Health & Science University.

References

Clinician Tips
• Encourage families to start with a whole foods diet approach including healthy fats, vegetables, fruit, whole grains, and protein. Eating “clean” as opposed to processed foods will naturally eliminate unnecessary food additives such as artificial colors, flavors, sweeteners, and preservatives that do not add nutritional value and may contribute to ADHD symptoms. Limit sugar intake to 10% of total calories daily (roughly 6 teaspoons for children aged 2 to 19 years).
• Two areas of supplementation that have shown benefit for ADHD or associated symptoms are PUFAs (minimum of 1 g/d with at least 500 mg of EPA) and BSM (none of the research on BSM has been conducted on medicated individuals).
• Following a specific elimination or few-foods diet has shown small effects overall, but in a minority of individuals with ADHD (about 8%), these restrictive diets improved symptoms significantly. Encourage families to work with a dietician before starting these types of diets.
Call Me by Your Name: Not Pedophilia, Still Problematic

Dr. Sorrentino is Assistant Professor, Harvard Medical School, Boston and Medical Director, Institute for Sexual Wellness, Weymouth, MA. Dr. Turban is a resident physician in adult-child and adolescent psychiatry, Massachusetts General Hospital and McLean Hospital, Belmont, MA.

The 2017 blockbuster film, Call Me by Your Name (directed by Luca Guadagnino) draws the moviegoer into the romantic and sexual development of Elio, a 17-year-old adolescent boy living in...
Northern Italy. The viewer watches him run through the typical trials of a teen working to understand sex and intimacy. At the start, he has a girlfriend who appears close to his age, with whom he experiments romantically. When a 24-year old American graduate student named Oliver moves into his house to study with Elio’s father, a professor, the movie takes an unexpected turn.

As Elio and Oliver spend time together exploring the town, their relationship becomes flirtatious. Elio finds himself sexually attracted to this older man but does not share his feelings with anyone. In Oliver’s early move, he gives Elio a massage while they’re outside. Elio, embarrassed, recoils. Elio next has sex with his girlfriend and relays this to Oliver, hoping for a jealous reaction. We then watch Elio sneak into Oliver’s room to smell his bathing suit.

The process of Elio coming to understand his sexuality and how to communicate these things is a cumbersome process, and it all plays out onscreen.

Later in the film, Elio openly expresses his affection to Oliver. Oliver immediately tells Elio that they cannot act on this attraction, although he does not give an explicit reason why. Given that the movie takes place in the 1980s in Italy, the main fear is likely the stigma of homosexuality. The age consideration is likely an afterthought, particularly as the age of consent in Italy is 14. Despite Oliver’s initial hesitation, the two eventually initiate a sexual relationship. Elio’s parents seem to endorse this, and they approve for the two to go on a trip to Bergamo together.

Scenes quickly escalate to Elio and Oliver running drunk through
the streets of Italy. Graduate student Oliver manages his alcohol tolerance well. Teenager Elio throws up, and Oliver subsequently kisses him—there is an implication that they then have sex. Questions of consent are raised in the viewer’s mind but not discussed in the film. Is it appropriate for a 24-year-old experienced in drinking to have sex with an inebriated and vomiting 17-year-old? Little is mentioned, and after the three-day fling, Oliver leaves and Elio returns home heartbroken. Elio’s father consoles him and speaks fondly of the experiences Elio has had with Oliver, suggesting he should savor the memories.

The age of consent varies dramatically from place to place. In Italy, the age of consent is 14.

Developing intimacy as a gay or bisexual adolescent
Much of the movie is realistic. The adolescent process of developing romance and sexuality is complicated. For gay and bisexual young boys, it can be even more challenging. These kids are often afraid to talk to their parents or other confidants about their romantic and sexual interests for fear of rejection, and instead they go underground. In Elio’s case, he did not discuss his sexual exploration with anyone other than Oliver, who given his older age and experience, had significant power in the relationship and the potential to be exploitative.
Today in the US, the parallel activity is for teenage boys to experiment sexually online and on social networking apps (eg, Grindr). Taken together, data from the CDC and a recent study by Macapagal and colleagues suggest that one in four gay and bisexual boys between the ages of 14 and 17 are on these “hookup” apps. A total of 69% have had sex with someone from the apps and only 25% use condoms consistently. Because young gay and bisexual boys are exploring their sexuality in secret, they are vulnerable to exploitation and abuse. In a recent piece in Vice, gay and bisexual young men opened up about how they were exploited, in secret, by older men on these apps purportedly geared toward adults.

Some controversial political pundits have argued that relationships between closeted young gay men and older gay men are beneficial. Milo Yiannopoulos infamously asserted:

_Some of those relationships between younger boys and older men, the sort of coming of age relationships, the relationships in which those older men help those young boys to discover who they are and give them security and safety and provide them with love and a reliable and sort of a rock where they can’t speak to their parents._

This is a cognitive distortion. It’s true that these young gay people need support and affirmation. It should not be in the context of a “relationship” with an older man who can be exploitative.

Elio’s father provides him with a strong message of affirmation at the end of the movie, accepting him for
his homosexuality instead of shaming or chastising him. There is strong data that such messages of affirmation are associated with better mental health for LGBT kids. What was missing, however, was any concern about whether the relationship may have been dangerous. His father did not ask a single question about whether Elio felt in control in the relationship, if the power-dynamic was problematic, or if his sex was safe and consensual.

**Age of consent vs developmentally appropriate consent**

Age of consent varies dramatically from place to place. In Italy, the age of consent is 14. In California, it’s 18. Some have pointed out that these cutoffs are fairly arbitrary. What these laws are likely reaching toward is an understanding of when a relationship is developmentally inappropriate. In the case of Elio and Oliver, many viewers are likely uncomfortable because the poised and mature graduate student Oliver seems to have a strong power differential over Elio, who is younger and dependent on his parents. Elio’s immature limerence for the more confident and worldly Oliver may appear to come as a potential setup for manipulation.

Although this film may empower gay adolescents to embrace their sexuality, the film is not without peril. Critiques have chastised this film as “pedophilic.” This film is not about pedophilia (sexual attraction to prepubescent individuals) or hebephilia (sexual attraction to peripubescent individuals). This film is about sexual predation. Oliver looks much older than his reported age of 24 while Elio looks like a very young 17-year-old. The power disparity in the relationship is clear. Elio is fragile and sexually naive. Oliver is experienced and directive in the relationship. One could argue...
that Oliver grooms Elio by moving into the household, spending time with him, endearing trust before advancing to a sexual relationship that is secretive. Elio’s parents are portrayed as supportive of the relationship.

In the end, Elio is heartbroken when he learns that Oliver has moved on to another relationship. In the scene in which Elio’s father speaks favorably about the connection, there is no discussion about whether Elio felt manipulated or exploited. As is common with grooming, onlookers don’t identify or question the coercive nature of the relationship. Heralding such a film as a “masterpiece” is dangerous because it dismisses the exploitation in the relationship and is yet another example of the public’s reluctance to identify problematic sexual behavior. In light of the “Me Too Movement” and the endeavor to eradicate sexual abuse bred by an inappropriate power dynamic, this film promotes a dangerous message.

The authors report no conflicts of interest concerning the subject matter of this article.

References
Psychosocial Treatments for Trauma-Based Nightmares

Dr Favorite is Director, University of Michigan Psychological Clinic, Clinical Assistant Professor of Psychiatry, Michigan Medicine, and Clinical Psychologist at the Ann Arbor VA Healthcare System PTSD Clinical Team. Dr Conroy is Clinical Associate Professor of Psychiatry and Clinical Director of the Behavioral Sleep Medicine Program, Michigan Medicine, University of Michigan Hospital, Ann Arbor.

Either idiopathic or trauma-based, nightmares have an adverse effect on sleep continuity and efficiency. However, trauma-based nightmares are more frequent, are more intense, and they can persist throughout the lifespan. As might be expected, patients with PTSD have the highest incidence of trauma-based nightmares. Although nightmares are included in the DSM-5 diagnostic criteria for PTSD, they often persist even after first-line PTSD treatments have been successfully completed.

Two evidence-based psychosocial treatments are available for trauma-based nightmares: imagery rehearsal therapy (IRT) and exposure, relaxation, and rescripting therapy (ERRT). Both modalities utilize a brief, sequential approach that incorporates psychoeducation about trauma nightmares, sleep hygiene, relaxation, visual imagery, and “nightmare rescripting.” Even though IRT and ERRT share these basic aspects, they diverge when it comes to specific methods and their application.

To outline the application of each of these modalities, we provide a case illustration for each method. The cases were chosen based on the similarity of demographics and nightmare presentation in terms of frequency and intensity as well as previous trauma-focused treatments.

Imagery rehearsal therapy

IRT is grounded in a “systematic desensitization” approach that creates a hierarchy of nightmares in which the patient moves from a moderately intense nightmare toward more distressing nightmares over the course of treatment. IRT focuses attention on changing the imagery system, which is hypothesized as an entrenched, habitual mental process that is dislodged through practicing alternative “rescripted,” neutral imagery.

Subject information and brief history.

Jack is a 66-year-old, married, white, Vietnam War veteran. He retired from an automotive factory job 4 years ago, where he frequently worked overtime or double shifts over the 34 years that he was employed there. He has been married for 35 years and has two adult children and three grandchildren. He describes his family relationships as emotionally distant but supportive.

He and his wife sleep in separate bedrooms because of his protracted nightmares and violent movements during sleep when having a combat-related nightmare. (Rapid eye movement behavior disorder has been ruled out prior to presentation). Jack reports that he has few friends and avoids social activities and public events. He used alcohol for several years to reduce stress and promote sleep. When alcohol abuse threatened his marriage and his job, he stopped drinking and began working overtime as often as he could in an attempt to exhaust himself, so he could sleep. This provided limited results as he got older; he was asked to take early retirement when his company began to lay off workers.

Presenting problems.

Jack initially presented at the VA Healthcare System for medical problems related to high blood pressure and diabetes. He also reported that his sleep was poor and that he experienced multiple nightmares about the war every night. Jack was referred to the PTSD clinic for evaluation and treatment. On the Clinician Administered PTSD Scales (CAPS) he had a total score of 106 out of 120, evidencing severe PTSD. He met criteria for all three symptom clusters, i.e., re-experiencing, avoidance, hyperarousal.

He reported that he was sleeping 2 to 3 hours each night and that he had vivid, recurrent nightmares each night when he did fall asleep. His nightmares and other PTSD symptoms had noticeably increased since his retirement, and as a consequence he was experiencing feelings of hopelessness and depression. His nightmares typically involve responding to several men screaming for a medic and working frantically to stop bleeding or close wounds only to have the soldier die.

Treatment intervention and course.

Jack was engaged in prolonged exposure therapy to address his PTSD symptoms and he was prescribed citalopram and trazodone to address symptoms of PTSD, depression, and insomnia. He was able to complete 16 sessions of trauma-focused psychotherapy and reported a moderate reduction in PTSD symptoms (CAPS = 84), primarily regarding avoidance behaviors. He adhered to his medication regimen, which afforded 2 to 3 more hours of sleep some nights. However, he continued to report frequent nightmares.

He was referred to a group application of IRT in which 5 Vietnam war combat veterans were seen weekly for a period of 6 weeks to address trauma-related nightmares. He attended each of the group sessions. He was engaged and complied with treatment, and he was provided with a description of his nightmare as a habitual and self-perpetuating pattern of behavior that could be effectively addressed by treatment. IRT was introduced as well as breathing techniques, sleep hygiene principles, and mental imagery exercises.

Jack was asked to complete a list of his nightmares from the most distressing to the least, and from this hierarchy he chose a nightmare that was in the middle range of intensity using a subjective unit of distress (SUD) rating, from 0 to 100. He then wrote out the nightmare in detail and provided a SUD rating upon completion. He was asked to rescript this nightmare with another imaginal dream sequence of his choosing, which he wrote out in detail, and gave a SUD rating. His homework for the week was to rehearse the rescripted dream and practice sleep hygiene principles.

Each week progress was checked by reviewing his sleep diary, which provided data on sleep hygiene (ie, stimulus control, sleep environment), sleep latency, frequency of nighttime awakenings, wake time as well as nighttime frequency and intensity. When SUD for the target nightmare was reduced (SUD = 50/100), a more intense nightmare in the hierarchy was rescripted and practiced.

Exposure, relaxation, and rescripting therapy

ERRT is a cognitive behavioral, exposure-based approach to nightmare reduction, targeting the most intense nightmare as the focus of treatment. Treatment assists the patient identify core themes contained in the nightmare, such as safety, trust, power/control, intimacy, self-esteem. The nightmare content is rescripted in order to modifying the content based on the theme of the nightmare. As it is with IRT, the practice of rescripted nightmare content is followed by relaxation exercises, such as progressive muscle relaxation.

Subject information and brief history.

Charles is a 68-year-old, white, Vietnam war veteran, in his second marriage of 23 years, with an adult daughter from his previous marriage. He has been self-employed as a plumbing subcontractor for several years. He had had a number of skilled labor jobs but decided that he was better off working for himself. Charles has received treatment through the VA Healthcare System ever since his return from Vietnam in 1968 where he was severely wounded when his squad of 19 Marines walked into an ambush and only 6 survived.

Presenting problem.

Charles was referred for nightmare treatment by his primary care physician after he completed 12 sessions of cognitive processing therapy for PTSD. He was able to complete first-line group psychotherapy and reported a moderate reduction in his PTSD symptoms, evidenced by a reduction in his CAPS total score of 18 points. However, he continued to struggle with repetitive nightmares of the ambush he had survived in Vietnam. His sleep was interrupted on a nightly basis and when he attempted to return to sleep the nightmare would continue where it left off. He typically experienced 3 to 4 hours of sleep per night and would stay up late to avoid the nightmare. Charles was having difficulty working because of fatigue, he was often irritable, and his family relationships were strained.

Treatment intervention and course.

He started in an ERRT group with 4 other combat veterans who were seen weekly for 6 weeks to address trauma related nightmares. Initial sessions provided psychoeducation on trauma-related nightmares, sleep hygiene, and relaxation methods, which were practiced daily before sleep. He was asked to provide a detailed description of the most frequent and most
intense nightmare and SUD rating before and after writing the description. He was also asked to identify the predominant theme of the nightmare (ie, safety, trust, power/control, intimacy, self-esteem), for which he identified safety and control as central themes in his nightmare. While maintaining the basic content of the nightmare, Charles worked with the therapist to construct new elements to the nightmare that addressed safety and control. Again, a SUD rating was established for the scripted dream. These elements were included in a rescripted dream that Charles practiced every night 1 hour prior to a set bedtime, followed by progressive muscle relaxation.

Clinical outcomes

Imagery rehearsal therapy. Jack was able to complete the 6 sessions of IRT, and was adherent with between-session practice and rescription assignments. He was unable to reduce his SUD from his target nightmare to move to a higher-level nightmare, which impeded his progress in the therapy. He chose to rescript his nightmare with a mental image of fishing on a lake rather than content that reflected the subject matter of the nightmare, which appeared to reflect his avoidance of traumatic content. He stated that he could not change what happened in Vietnam and he believed he had nightmares "so that those soldiers would not be forgotten."

He improved his sleep hygiene by reducing caffeine intake at night and establishing a regular bedtime and optimal bedroom environment. His pretreatment and post-treatment scores are seen in Figure 1.

Jack was referred for depression treatment and medication review as he continued to complain of low mood and insomnia. Jack continued to report frequent nightmares at the end of treatment. He was also referred to the Sleep Medicine Clinic at the VA for a full sleep study to provide a differential diagnosis. He was also asked to identify the presence of violent movements during sleep, which appeared to reflect his avoidance of traumatic content. He stated that he could not change what happened in Vietnam and he believed he had nightmares "so that those soldiers would not be forgotten."

He improved his sleep hygiene by reducing caffeine intake at night and establishing a regular bedtime and optimal bedroom environment. His pretreatment and post-treatment scores are seen in Figure 1.

Exposure, relaxation, and rescripting therapy. Charles completed each of the 6 sessions of ERRT and was adherent to the between-session practice. After his initial rescripting of the entire nightmare, he decided that there was one part of the nightmare that was the most difficult, and he focused on this with a more circumscribed theme identification and rescription. He showed improvement on each of the pretreatment measures (Figure 2).

The most significant outcome for Charles was the change in his attitude toward his sleep and dreaming. This was evidenced in his reduce anxiety, agitation, and fear about having a nightmare about the ambush and his increased sense of efficacy when these nightmares occurred. He reported that he was better able to stay asleep longer while dreaming and that he dreamt about smaller portions of the ambush. He also reported that he could return to sleep without the dream repeating.

Summary

The challenge in applying each of these approaches to nightmare treatment is that the clinician needs to be reasonably knowledgeable about sleep science, sleep disorders, relaxation methods, and trauma treatment. The presence of violent movements during sleep may also reflect other sleep pathology that warrants assessment by a polysomnogram. In such cases, collaboration with sleep disorders specialists may be of benefit. Overall, these nightmare treatments are brief and each session requires sufficient structure and preparation in order to get the maximum therapeutic benefit. This also applies to the between-treatment work as patients are encouraged to contact the therapist during the week if they are having difficulty with practicing the methods.

The IRT method presents particular challenges in that it is more difficult to address avoidance behaviors, which are a hallmark of PTSD. Patients who utilize avoidance and/or safety behaviors in the rescripting process limit the therapeutic effect of the treatment. Moreover, it is difficult to move up a patient nightmare hierarchy in 6 to 8 sessions.4,5

ERRT adopts an exposure-based approach in identifying the most difficult nightmare first. This may present a challenge for therapists who are less familiar or uncomfortable with this method. Although the ERRT has a more structured protocol, therapists will require a significant degree of abstract thinking and cognitive flexibility assisting patients with rescripting their nightmares. It is important to note that trauma associated sleep disorder is a newly proposed parasomnia that develops after a traumatic experience and presents with nightmares, dream enactment behaviors, and other symptoms such as night sweats or tachycardia.

The authors report no conflicts of interest concerning the subject matter of this article.

References
A

DHD is a neurodevelopmental disorder characterized by inappropriate levels of inattention and/or hyperactivity-impulsivity and occurs in approximately 3% to 10% of children and adolescents and 2.5% of adults. Research indicates that increasing numbers of high school students with ADHD are going to college. Treatment options include both non-pharmacological (eg, behavioral support therapies, coaching, cognitive-behavior therapy, neurofeedback) and pharmacological approaches.

A plethora of studies attest to the effectiveness of prescription stimulants for ADHD symptoms in children and adults with the disorder, and more recent studies report that stimulants often lead to improvements in self-regulation, planning, and organizational skills (ie, executive functions). Commonly prescribed stimulants for ADHD include methylphenidate, mixed amphetamine salts, and the prodrug lisdexamfetamine (see Table 1). Double-blind placebo-controlled studies have reported the efficacy and safety of these medications in children, adolescents, and adults when taken as prescribed and appropriately monitored.

The use of prescription stimulants to treat ADHD symptoms first began in 1937 when psychiatrist Charles Bradley administered benzedrine sulfate to children with behavior problems at the Emma Pendleton Bradley Home in Providence, Rhode Island. The practice of prescribing stimulants (methylphenidate) for the treatment of hyperactive and inattentive behavior became more commonplace in the 1950s and widely accepted in the 1980s, corresponding with the specification of attention deficit disorder in DSM-III.

Although prescription stimulants are often highly effective in reducing ADHD symptoms in children, adolescents, and adults, the misuse (ie, non-medical use) of prescription stimulants among adolescents, college students, and adults has become problematic in recent years. Estimates of prescription stimulant misuse vary among studies but meta-analyses report between 5% to 35% of college students in the US report misusing prescription stimulants and varying rates have been reported among military personnel, lawyers, medical, dental, and nursing students.

A recent population study conducted by the US National Association of Drug Abuse reported 16.0 million used prescription stimulants in the past year, 5.0 million misused prescription stimulants, and 0.4 million had prescription stimulant use disorders. International studies have found similar prevalence, underscoring that prescription stimulant misuse is present across cultures (eg, Germany, Iceland, Switzerland, UK).

The primary reason adults report taking prescription stimulants without a valid prescription is to enhance cognition functioning and improve performance. A secondary reason reported by college students and other adults is for recreational purposes (eg, experimentation, intoxication, poly use of substances). Less commonly reported reasons include social conformity and weight loss. The primary motivating factor for misuse among adults and high school students, in contrast to adults, appears to be social and recreational. A number of studies have identified characteristics of individuals who are more likely to misuse prescription stimulants and include nicotine use and use of illicit drugs (eg, marijuana, cocaine, hallucinogens, opiates), heavy alcohol consumption, lower grade point average, sorority and fraternity membership, poor study skills, and poor class attendance.

Psychological factors are also implicated in misuse of prescription stimulants as higher rates have been found among young adults who report greater psychological distress and anxiety, executive function deficits, higher rates of sensation seeking, and symptoms associated with ADHD including difficulty concentrating, impulsivity, and internal restlessness.

Clinical implications

Students with ADHD in middle school, high school, and college have reported being pressured by others to share, trade, or sell their medication. The most common source of prescription stimulants for those who misuse is friends and family members followed by physicians and illegal sources. Students who are more likely to divert their medication are those who use other alcohol and other illicit substances.

These findings have direct implications for psychiatrists and other prescribers of stimulants. Specifically, when prescribing, it is important to emphasize to patients the illegality of sharing, trading, distributing; nor a “smart drug.”

Table 1. Commonly prescribed FDA-approved medications for ADHD

<table>
<thead>
<tr>
<th>Stimulant medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylphenidate (Ritalin, Concerta, Daytrana, Methylin)</td>
</tr>
<tr>
<td>Dexamphetamine (Adderall, Focalin, FocalinXR)</td>
</tr>
<tr>
<td>Amphetamine/dextroamphetamine (Adderal, AderalXRx, Mydayis)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prostimulant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisdexamfetamine (Vyvanse)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-stimulant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atomoxetine (Strattera)</td>
</tr>
<tr>
<td>Guanfacine (Intuniv)</td>
</tr>
<tr>
<td>Clonidine (Catapres, Kapvay, Catapres-TTS-1)</td>
</tr>
</tbody>
</table>

Note: When prescribing emphasize to patients: safe storage; illegality of sharing, selling, trading, distributing; nor a “smart drug.”
Are prescription stimulants “smart drugs”? Individuals with ADHD who take prescription stimulants often report improvements in ability to focus, sustained attention, self-regulation, and executive function performance. Individuals without ADHD who take prescription stimulants do so primarily to enhance their cognitive functioning. However, contrary to expectations and beliefs that prescription stimulants will lead to neurocognitive enhancement and improved academic performance, there is no evidence that stimulants have robust cognitive effects in healthy individuals. Stimulant misuse is negatively, rather than positively correlated with academic functioning in college students. Furthermore, meta-analytic studies do not support significant effects of amphetamine on episodic memory, working memory, inhibitory control, creativity, intelligence, reading comprehension, or scholastic achievement in healthy adults. In fact, while stimulants may improve alertness and attention in adults without ADHD, findings indicate that amphetamine and methylphenidate impair performance on tasks of response inhibition, working memory, and cognitive flexibility.

While taking prescription stimulants, healthy adults report improved mood and perceived neurocognitive enhancement, and these effects are likely fueling the increased misuse of these medications. The clinical implication of this research is that placebo effects probably contribute to the perception of prescription stimulants as “smart drugs” among healthy adults.

What remains unknown, however, is the extent to which prescription stimulants may enhance or impair performance on “real world” measures such as exams, assignments, and presentations. In the meantime, students and other adults are likely to continue to seek prescriptions for stimulants or to obtain them from friends, family members, and illegal means. Given the increased misuse of these medications, psychiatrists need to keep in mind the importance of thorough ADHD evaluations, the possibility of patient malingering, and education of patients and their families regarding the proper storage and legality of selling or sharing stimulant medications. Lastly, it is imperative that psychiatrists and other mental health professionals do their part to dispel the myth that stimulant medications are “smart drugs” for healthy adults.

**CASE VIGNETTE**

Molly is a 19-year-old college student who was struggling in her major; her current GPA was 2.0. Her class attendance was variable. She complained to friends that she had difficulty focusing during lectures, daydreamed frequently, and had poor organizational skills. She withdrew from 3 courses and failed a physics course twice. Molly was concerned of not performing well on upcoming midterms and felt exceedingly “stressed out.”

Molly’s roommate suggested that she try Adderall and shared her prescription medication. Molly reported that Adderall “made an amazing difference” in her ability to stay awake and study. She continued to obtain Adderall from friends and other students on campus for several weeks but became concerned when she learned that pursuing and taking stimulants without a prescription was illegal and students who do so can be prosecuted and face university sanctions.

Molly subsequently sought an evaluation to determine whether she had ADHD. She presented with complaints of internal restlessness, difficulty focusing, poor organizational skills, distractibility, lack of follow through, and “impatience.” She reported that her symptoms began in elementary school and that she was frequently reprimanded for talking excessively and being off task. In elementary school her grades were “OK” (Bs and Cs); her father helped her study every night at the kitchen table and without his help she would have had to repeat 4th grade.

She had been evaluated in 4th grade to determine if she had a learning disability and the results were negative. Her teacher told her parents that she was “hyperactive” and needed medication. Her parents were opposed to medication and “did not believe in ADHD.” Molly reported that in middle school and high school she had been a mess and extremely disorganized. She graduated with a 2.2 GPA.

Now in college, she had difficulty focusing in lectures, often “spacing out,” and secretly recorded lectures so that she could review them prior to exams. In addition to poor academic functioning she reported that her symptoms resulted in impairments in her occupational and social functioning (e.g., speeding tickets, spending money impulsively). Developmental history indicated that her mother smoked cigarettes throughout her pregnancy and her medical history was significant for being accident-prone (broken elbow at age 3, stitches required on the forehead at age 6, broken ankle at age 10). Further evaluation revealed intellectual functioning and memory skills within the average range. Her performance on executive function, impulsivity, and vigilance tasks was in the clinical range as were her ratings on self-report instruments for childhood and current ADHD related symptoms. The informant’s ratings were also within the clinical range for attention problems, hyperactivity, impulsivity, and executive functions. Psychologically the student reported significant somatic symptoms. Molly’s symptoms were not consistent with MDD, anxiety, or other psychiatric disorders.

Developmental, academic, social, and medical histories in conjunction with clinical interview findings, behavior observations, and testing results supported a diagnosis of ADHD.

**Combined presentation**

This case demonstrates that some individuals who misuse prescription...
Culturally Competent Approaches to ADHD: Issues in African-American Populations

Gail A. Mattox, MD, and Sarah Y. Vinson, MD

Dr Mattox is Professor and Chair, Dr Vinson is Associate Professor, Department of Psychiatry and Behavioral Sciences, Morehouse School of Medicine, Atlanta, GA.

There is no single African-American experience. Consider three different 8-year-old African-American boys, one each from the Mississippi delta, Chicago’s inner city and Prince George’s county’s affluent suburbs. Their cultures will have significant differences, and a cookbook cultural competency model would not serve them well. While consideration of these issues regarding ADHD in African-Americans is helpful, cultural humility is a must within each individual patient encounter. Cultural competency implies an endpoint; however, cultural humility embraces a lifelong process that includes self-reflection, introspection, advocacy, and co-learning.

ADHD is a common and treatable disorder that can have significant implications for social, educational, and occupational trajectories. Diagnosis rates have increased over time. Based on parent report data from the National Survey of Children’s Health, 2011 to 2013, the percentage of youth aged 4 to 17 years with a diagnosis of ADHD increased significantly from 7.0% to 10.2% overall and from 5.5% to 9.6% in non-Hispanic black children.1

Diagnosis, assessment, and barriers

On one hand, while early identification is the goal, ADHD’s prevalence can lead to over-diagnosis with less emphasis on co-occurring disorders. All that fidgets is not ADHD. This may be particularly relevant in black populations. Multiple environmental and psychosocial issues that disproportionately affect African-American youth may consequently manifest in symptoms that overlap with those of ADHD. On the other hand, African-Americans in general are disproportionately affected by structural barriers to care as well as by stigma regarding mental illness. These factors can lead to underdiagnosis or delays in diagnosis.

Trauma can affect attention, concentration, and impulsivity. The Adverse Childhood Experiences (ACEs) studies revealed that the incidence of childhood exposures to two or more adverse experiences was higher in blacks than Hispanics or whites. Although the higher the income, the lower the trauma load overall, this relationship was less pronounced for blacks. In other words, income did not appear to be a protective factor. In fact, middle-income blacks had a higher percentage of two or more ACEs than middle class or nearly poor whites.2

Asking directly about traumatic exposures is an absolute necessity in working with black youth and families. While trauma-related diagnoses are by no means mutually exclusive with ADHD, if both are present, it is imperative that the family is educated about the psychological impact of trauma and that treatment interventions target both issues.

Disparities also exist with regard to environmental neurotoxic exposures. Cassidy-Bushrow and colleagues3 point out that African-American children have the highest prevalence of elevated lead blood levels in the US. Furthermore, the disproportionate burden of lead exposure is transmitted from mother to child, thus the burden of higher lead exposure starts in utero and persists into childhood.

Alcohol exposure in-utero is another consideration as fetal alcohol spectrum disorders can have overlapping symptoms with ADHD. Although a study of a representative sample in the Midwestern community did not find differences across races, Dr Carl Bell, has noted that in a retrospective chart review, alarmingly high rates of fetal alcohol exposure were found in poor African-American populations.3,5

Research regarding African Americans and ADHD diagnosis is limited; however, there are some notable findings. Racial and ethnic disparities exist in the diagnosis of ADHD. One 10-year review found that African-American youth had a diagnosis only two-thirds as often as white youth.6 While more

REFERENCES

Informed consent, psychosocial considerations, and treatment engagement

After a diagnosis is made, there are additional cultural considerations in the informed consent and treatment engagement process. Findings indicate that among children with ADHD, African-American youth were less likely to be on a prescribed medication. This disparity occurred as early as kindergarten and continued to at least the end of eighth grade. Educational disciplinary procedures, failure to complete high school, and juvenile justice involvement disproportionately affect black youth. While the reasons for these disparities are multifaceted and complex, the harsh reality is that society gives black youth less room for error. A thorough informed consent process must include a candid discussion about not only the risks of intervention, but also the risks of untreated ADHD.

The same structural barriers that can impede access to assessment and diagnosis can have an impact on treatment engagement. When Cummings and colleagues’ looked at racial and ethnic differences in ADHD treatment among Medicaid-enrolled youth, it was found that the most important disparity was medication discontinuation among minorities and that medication discontinuation was associated with disengagement from any type of treatment for ADHD, including behavioral interventions. It was also noted that African-American youth were less likely to receive adequate follow up both in the initiation phase of ADHD medication and in the continuation and maintenance treatment phase. Moreover, if a comorbid disorder such as PTSD is not addressed, poor treatment response may lead to disengagement with mental health interventions altogether.

Another consideration is the disproportionately harsh legal consequences faced by members of the black community who have substance use disorders. These experiences can lead to increased fear of addiction to psychiatric medications. It is important that families are informed of the elevated risk of substance use disorders in youth with untreated ADHD and that treatment lowers the risk for a substance use disorder.

Psychosocial interventions

The implications of health disparities related to ADHD and the African-American community are far-reaching. Effective treatment plans require a comprehensive approach in the school, community, and mental health treatment settings.

Inadequate interventions in the school setting can result not only in academic difficulties, but can also set off a chain of events leading to legal problems. The school to prison pipeline is a well-documented phenomenon wherein academic disciplinary actions lead to juvenile and/or criminal justice system involvement. If symptoms are significantly more pronounced in the school setting or in classes that rely on a common skill set (eg, reading, language arts, social studies), psychoeducational testing is needed.

Because of a history of discrimination and segregation within school settings, African-American parents may be reluctant to have their child undergo psychoeducational testing or to initiate an evaluation for an Individualized Educational Plan (IEP). It is important that parents understand the need to address ADHD as well as any learning or cognitive issues to enable their child to reach his or her full academic potential. Education regarding the child’s rights throughout the evaluation and plan-development process as well as the range of IEP interventions available is helpful. Even in the absence of comorbid learning or cognitive issues, parents should be made aware that ADHD alone may qualify their child for an IEP and that this confers protections regarding suspensions and expulsions for diagnosis-related behaviors.

Mental health stigma has been found to be a significant factor in African-American treatment engagement. For this reason, taking steps to bolster the families’ exposure to supportive contacts, both in the community and within the mental health system can be critical interventions. Identification of and links to supportive contacts can be particularly helpful. With regards to treatment planning, the most effective one is the one the family can and will implement. In a family with transportation problems and openness to therapeutic relationship is an important first step. When implementing treatment, establishing a therapeutic alliance with the mother, emphasis was placed on the need for error. A thorough informed consent process must include a candid discussion about not only the risks of intervention, but also the risks of untreated ADHD.

Informed consent, psychosocial considerations, and treatment engagement

After a diagnosis is made, there are additional cultural considerations in the informed consent and treatment engagement process. Findings indicate that among children with ADHD, African-American youth were less likely to be on a prescribed medication. This disparity occurred as early as kindergarten and continued to at least the end of eighth grade. Educational disciplinary procedures, failure to complete high school, and juvenile justice involvement disproportionately affect black youth. While the reasons for these disparities are multifaceted and complex, the harsh reality is that society gives black youth less room for error. A thorough informed consent process must include a candid discussion about not only the risks of intervention, but also the risks of untreated ADHD.

The same structural barriers that can impede access to assessment and diagnosis can have an impact on treatment engagement. When Cummings and colleagues’ looked at racial and ethnic differences in ADHD treatment among Medicaid-enrolled youth, it was found that the most important disparity was medication discontinuation among minorities and that medication discontinuation was associated with disengagement from any type of treatment for ADHD, including behavioral interventions. It was also noted that African-American youth were less likely to receive adequate follow up both in the initiation phase of ADHD medication and in the continuation and maintenance treatment phase. Moreover, if a comorbid disorder such as PTSD is not addressed, poor treatment response may lead to disengagement with mental health interventions altogether.

Another consideration is the disproportionately harsh legal consequences faced by members of the black community who have substance use disorders. These experiences can lead to increased fear of addiction to psychiatric medications. It is important that families are informed of the elevated risk of substance use disorders in youth with untreated ADHD and that treatment lowers the risk for a substance use disorder.

Psychosocial interventions

The implications of health disparities related to ADHD and the African-American community are far-reaching. Effective treatment plans require a comprehensive approach in the school, community, and mental health treatment settings.

Inadequate interventions in the school setting can result not only in academic difficulties, but can also set off a chain of events leading to legal problems. The school to prison pipeline is a well-documented phenomenon wherein academic disciplinary actions lead to juvenile and/or criminal justice system involvement. If symptoms are significantly more pronounced in the school setting or in classes that rely on a common skill set (eg, reading, language arts, social studies), psychoeducational testing is needed.

Because of a history of discrimination and segregation within school settings, African-American parents may be reluctant to have their child undergo psychoeducational testing or to initiate an evaluation for an Individualized Educational Plan (IEP). It is important that parents understand the need to address ADHD as well as any learning or cognitive issues to enable their child to reach his or her full academic potential. Education regarding the child’s rights throughout the evaluation and plan-development process as well as the range of IEP interventions available is helpful. Even in the absence of comorbid learning or cognitive issues, parents should be made aware that ADHD alone may qualify their child for an IEP and that this confers protections regarding suspensions and expulsions for diagnosis-related behaviors.

Mental health stigma has been found to be a significant factor in African-American treatment engagement. For this reason, taking steps to bolster the families’ exposure to supportive contacts, both in the community and within the mental health system can be critical interventions. Identification of and links to supportive contacts can be particularly helpful. With regards to treatment planning, the most effective one is the one the family can and will implement. In a family with transportation problems and openness to therapy, in-home services may be available. In a family that lives close to their PCP and is reluctant to go to a mental health clinic, integrated care may be the best fit.

Implementing treatment

When implementing treatment, establishing a therapeutic relationship is an important first step. A multimodal system of care approach allows for individualization, flexibility, and identification of family strengths. This approach also supports the utilization of community resources as illustrated in the Case Vignette.

Case Vignette

A six-year-old African-American boy was brought in by his mother because of major concerns regarding disruptive behavior in the school setting and difficulty in his after-school program. His mother felt that at home his behavior was typically manageable but there were concerns. In fact, the mother reported that he had been “kicked out of head start.”

The boy’s mother presented as a concerned and engaged parent. Focusing on establishing a therapeutic alliance with the mother, emphasis was placed on gaining trust and conducting a strength-based comprehensive evaluation. Findings were consistent with severe ADHD and treatment options were explored and included pharmacotherapy combined with other therapeutic interventions. Education regarding ADHD as a neurodevelopmental disorder was provided.

The mother clearly expressed a preference of focusing on the child’s diet. She was fearful of any medication because of family members’ concerns regarding addiction. Her concerns were acknowledged and addressed, she was encouraged to return on a regular basis to monitor how the child was doing.

At a follow-up visit, the boy’s mother became very upset because of the school’s plan to initiate an evaluation for an IEP to determine appropriate placement based on significant documentation that the boy could not function in a regular classroom setting. His mother was concerned about her legal rights and how this would affect his future.

At this point, the mother was open to attending our multifamily parenting group sessions and she was open to her child attending our ADHD group. This proved to be beneficial to both the mother and her son. The mother was able to connect with other parents, many of whom were comfortable with ADHD medications and openly shared their experiences. Eventually the mother agreed to pharmacotherapy as an additional component to the overall treatment plan.

The boy participated in our ADHD group and while he initially perceived and referred to himself as being unable to progress within the group where positive re-enforcement, social skills, and problem-solving strategies were utilized. His mother was connected with Parents Educating Parents (PEP), a community-based group of parents knowledgeable about parental rights, whose members volunteer to attend school and IEP meetings with concerned parents.

Conclusion

The need for comprehensive diagnostic assessment is vitally important and comorbidities must be addressed. We must also clearly inform families of the risk of not treating ADHD. Cultural humility demands that providers be flexible in their approach, keep the door open, and embrace families where they are.

The authors report no conflicts of interest concerning the subject matter of this article.

References

Neurological Manifestations of HIV

**FIGURE.** Neuropathic versus nociceptive pain

**Neuropathic pain**
- Duration dependent
- Polyneuropathy (diabetic/HIV)
- Trigeminal neuralgia
- Chronic post-herpetic neuralgia
- Chronic radicular pain
- Phantom limb pain

**Nociceptive pain**
- Bone fractures
- Arthritis pain
- Lower back muscle spasm
- Acute disk herniation causing radiculopathy
- Post-surgical pain

Mixed pain resulting from primary injury followed by aberrant, secondary neuronal transmission

**Neuropathic versus nociceptive pain**
- Pain accompanies the condition in more than 80% of cases, described as dysesthesias and/or deep, aching pain in the legs or lower back. Symptoms are notable for areflexia, ascending weakness, and relative sparing of sensation although some sensory impairment can occur. As in HIV negative individuals, these conditions are thought to be immune-mediated. In advanced AIDS, additional studies (ie, viral testing and nerve biopsy) may be necessary to rule out primary cytomegalovirus (CMV) infection of the peripheral nerve.

Electrodiagnostic testing typically reveals a primarily demyelinating, sensorimotor neuropathy, although secondary axonal loss may occur, especially in chronic inflammatory demyelinating polyneuropathy. Unlike seronegative patients where high protein without pleocytosis in the cerebral spinal fluid is a classic finding; cerebrospinal fluid testing is less reliable in the HIV population. HIV patients can have mild lymphocytic pleocytosis. MRI studies are usually normal, however may reveal evidence of nerve root enhancement.

Treatment of these conditions relies on immunomodulatory therapies such as intravenous immunoglobulin, plasmapheresis, and with caution, steroids, as well as neuropathic pain medications as needed.

**Other neuropathies**

Progressive polyradiculopathy is a rare, rapidly progressive condition that may resemble cauda equina syndrome. It can be seen in advanced HIV/AIDS, often associated with CMV infection. MRI is crucial to rule out a lesion compressing the cauda equina as well as to evaluate for the presence of lumbar sacral nerve root enhancement. Cerebrospinal fluid testing most commonly reveals lymphocytic pleocytosis and positive CMV polymerase chain reaction. Early diagnosis and anti-viral treatment is crucial in preventing root necrosis and irreversible damage.

Mononeuritis multiplex presents as asymmetric, multifocal peripheral neuropathies affecting both motor and sensory modalities. Deep, aching pain or allodynia in affected regions is commonly described. Early on in the course of HIV, mononeuritis multiplex is typically an immune-mediated, self-limiting process. Opportunistic infections including CMV can be the cause in advanced HIV/AIDS and have a worse prognosis. Vasculitis is another possibility, which can be associated with HIV or coinfection with hepatitis C.

**Myopathies**

HIV infection is associated with a number of myopathies, although the mechanism by which HIV leads to muscle inflammation is not well understood. HIV-associated myopathy is the most common myopathy in these patients, typically presenting with a slowly progressive, symmetrical muscle pain and weakness affecting primarily proximal muscles. Laboratory results include elevated CK level, electrodiagnostic evidence of irritative myopathy and muscle biopsy revealing myofiber degeneration, often associated with inflammatory infiltrates. Although treatment guidelines have not been well established, immunomodulatory therapies including corticosteroids and IVIG have been successfully used. A similar condition, has been described in the setting of immune reconstitution inflammatory syndrome.

Additional inflammatory myopathies including dermatomyositis and inclusion body myositis has also been described. Furthermore, myopathy can be a rare adverse effect of zidovudine therapy. Infectious myopathies due to opportunistic infections such as Staphylococcus aureus can also occur.

**Treatment of neuropathic pain**

Pain, estimated to affect between 20% to 90% of HIV-infected individuals, is one of the most significant causes of disability in the HIV/AIDS population. Categorizing pain into two categories, nociceptive and neuropathic, is helpful in determining the appropriate treatment plan (Figure). Neuropathic pain results from abnormal neural transmission following an initial injury to the peripheral or CNS, which persists even in the absence of additional damaging stimuli. Aberrant reorganization of neural tissues after the initial injury can result in ongoing, abnormal signaling and chronic, neuropathic pain.

Pharmacologic therapy is the mainstay of treating neuropathic pain. Because of the lack of HIV-specific guidelines, current recommendations are based on those for other forms of peripheral neuropathy including diabetic neuropathy and post-herpetic neuralgia.
Multiple categories of drugs have long been used in the treatment of neuropathic pain. Among antidepressants, tricyclic antidepressants including amitriptyline and nortriptyline have demonstrated efficacy in diabetic neuropathy, post-herpetic neuralgia as well as primary headaches, low back pain, and fibromyalgia. However, these agents failed to show benefit in HIV-related neuropathy.4,9 Of note, protease inhibitors may increase TCA serum levels, increasing the risk of toxic adverse effects.10 Several SNRIs including duloxetine and venlafaxine have shown benefit in the treatment of diabetic polyneuropathy and migraines, with fewer adverse effects than amitriptyline.11-13 These agents have unfortunately not been studied in HIV-related polyneuropathy. SSRIs have not shown any analgesic benefit.

Anticonvulsant therapy such as gabapentinoids (gabapentin and pregabalin) are widely used neuropathic agents. One small study on HIV-DSP demonstrated significant pain reduction and improved sleep with the use of gabapentin.14 Pregabalin, however failed to show a benefit when compared to placebo in two large multicenter trials, predominantly due to the high placebo response.15,16 Lamotrigine, another anticonvulsant, has shown benefit in conditions including trigeminal neuralgia, diabetic polyneuropathy, and complex-regional pain syndrome.17 However because of its complex titration schedule and concern of potentially serious adverse effects including Steven Johnson syndrome, it is not commonly used in neuropathic pain.

Opiate use in non-cancer related pain has been a controversial issue because of the risk of serious adverse effects and dependency. However in severe, refractory pain, opiates may be an effective treatment both in neuropathic and nociceptive pain. Precautionary measures should include starting with immediate release formulations at the lowest effective dose, regularly assessing the risks and benefit, and discontinuing therapy once the risks outweigh the benefits. Many opiates have interactions with anti-retroviral agents, which should be considered when planning a treatment regimen (Table). Another agent, high dose topical capsaicin, derived from chili peppers, has demonstrated significant pain reduction in HIV neuropathy up to 12 weeks post application.14,15 However, treatment availability and pain with application has limited its use. Cannabinoids have also emerged as a potential therapy for chronic neuropathic pain, with several studies that demonstrated pain reduction in HIV-DSP.20,21

Given the complexity of treating HIV-related neuropathic pain and limited evidence for most of the agents, combination therapy using agents with different mechanisms of action is often used. Furthermore, non-pharmacologic therapies, such as physical activity, cognitive behavioral therapy, and acupuncture should also be considered.

HIV-associated neurocognitive disorder

HIV-associated neurocognitive disorder (HAND) has historically been a significant cause of disability in HIV, estimated to affect up to 50% of patients.22 Presentation is often insidious. Common symptoms include cognitive slowing, impaired concentration and memory, and behavioral changes. Motor disturbances such as psychomotor slowing, gait impairment, clumsiness, and even movement disorders (eg, parkinsonian features, chorea) have also been described.

In mild cases, bedside neurological exam may be normal. Cortical findings such as aphasia is less commonly seen, suggesting predominantly subcortical involvement. MRI studies typically reveal cerebral atrophy, especially in the hippocampus and basal ganglia, often with associated bilateral and symmetric white matter abnormalities.

Although good viral control is protective against the development of HAND early on, this condition appears to re-emerge late in the disease course in older populations. Risk factors include advanced age, low CD4 count, longer duration of HIV illness, AIDS-defining illnesses and high viral load. Medical and lifestyle (such as substance abuse) comorbidities also likely play a role.

The pathophysiology of HAND is not well understood although it is possibly multifactorial. A few contributors likely include direct cerebral toxicity from the HIV virus, chronic inflammation in the setting of HIV, elaboration of HIV-associated neurotoxins, and associated metabolic changes that increase the risk of cerebrovascular disease and amyloidosis.

Headache syndrome

Primary headache. Headaches may occur in up to 60% of HIV-infected individuals and have a wide range of potential etiologies.23 Migraine and tension-type headaches are most common.24 Lower CD4 count is associated with higher frequency and severity of these conditions.25

Migraines are treated similarly in HIV as in the general population, with a few exceptions. For example, ergots (such as dihydroergotamine) are contraindicated in patients taking protease inhibitors and non-nucleoside reverse transcriptase inhibitors because of the risk of psychosis, seizures, and gangrene, and therefore are not typically used in the HIV population. Steroids, which are occasionally used for abortive therapy, should be used with caution because of the risk of additional immunosuppression.

Secondary headaches. CNS manifestations of HIV can occur at any point in the disease progression because of the high viral permeability through the blood–brain barrier. A dull, bilateral headache can occur in patients during the prodromal stage, 2 to 4 weeks after exposure. Aseptic meningitis, manifesting with fever, meningismus, and cranial neuropathies, can also occur at any point in the disease course and are typically self-limited.

Opportunistic infections must always be considered when assessing new-onset headaches in an HIV patient and therefore warrants careful evaluation, especially in those with low CD4 count. Toxoplasmosis and progressive multifocal leukoencephalopathy are the most common focal, CNS infections associated with HIV.26 Toxoplasmosis, a parasitic infection caused by Toxoplasma gondii, can present as focal granulomas, abscesses or leptomeningitis especially in patients with a CD4 count of less than 100. Progressive multifocal leukoencephalopathy, caused by the John Cunningham (JC) virus, consists of patchy or confluent lesions within the white matter. Focal neurologic deficits are commonly seen in these conditions although indolent headaches can also be the primary presenting feature. Cryptococcus is another frequently seen agent, often presenting with indolent headache and confusion with or without overt signs of meningitis. CMV, seen in advanced AIDS (CD4 <50), typically causes diffuse meningoencephalitis.

Opportunistic intracranial malignancies are also potential causes of headaches and focal neurological symptoms. Primary CNS lymphoma is the most common, although systemic lymphoma with CNS metastases and intracranial Kaposi sarcoma can also occur.

Treatment of secondary headaches is centered on treating the underlying condition. However many of the abortive therapies used in treatment of primary headaches may also be used for severe or refractory pain. Opiates, which are not recommended in primary headaches, can be used with caution for severe pain in those with secondary headaches.

References
Psychocardiology: Understanding the Heart-Brain Connection: Part 1

Heart-brain interactions have been known to mankind since Hippocratic times and written about extensively in the medical and nonmedical literature over the centuries. The epigraph by the 17th century physician holds great validity and urgency in the present day. Heart-brain interactions are now recognized to be complex and multifaceted, and to engulf several functions and systems of the body. At least in certain conditions, as will be described below, they appear to be bidirectional. The consequences of heart-brain dysfunction can lead to pathological manifestations involving many organ systems, with dire consequences.

There is evidence that cardiovascular disease (CVD) and psychiatric disorders are far more closely interrelated than had been assumed. Moreover, findings indicate that CVD and psychiatric disorders, notably depressive and anxiety disorders, have a bidirectional relationship. A common pathophysiological link underlying this comorbidity is mental stress and stress susceptibility that is confounded by genetic and epigenetic factors, psychosocial and environmental influences, and lifestyle choices. In recognition of the multifactorial complexity underlying these high rates of comorbidity and associated patient needs for management and recovery, the term “psychocardiology” was coined.

In Part 1 of this 2-part CME article, the following topics are discussed: key epidemiological data to illustrate the high comorbidity between CVD and depression, mental stress as a common instigator behind the comorbidity, and the autonomic nervous system. In Part 2, the following will be discussed: the concept of endothelial dysfunction as a preamble to atheromatosis and atherosclerosis; depression in association with myocardial infarction; the role of inflammation in heart disease and heart failure as well as non-cardiac chest pain.

Epidemiology
CVD and depression are two of the world’s leading health problems. CVD is the leading cause of mortality worldwide and accounts for approximately 16.7 million deaths every year. The most common types of CVD are coronary artery disease and cerebrovascular disease.

It has been estimated that CVD is responsible for close to 1 million deaths and more than six million hospital admissions with an annual cost to the US healthcare system of $174.2 billion.

Activity Goal
To goal of this activity is to understand the bidirectional relationship between depression and cardiovascular disease.

Learning Objectives
At the end of this CE activity, participants should be able to:

- Explain the reasons for the high comorbidity between depression and cardiovascular disease
- Understand the role of the autonomic nervous system in regulating heart function
- Assess autonomic nervous system activity through measurement of heart rate variability

Target Audience
This continuing medical education activity is intended for psychiatrists, psychologists, primary care physicians, physician assistants, nurse practitioners, and other health care professionals who seek to improve their care for patients with mental health disorders.

Credit Information
CME Credit (Physicians): This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of CME Outfitters, LLC, and Psychiatric Times: CME Outfitters, LLC, is accredited by the ACCME to provide continuing medical education for physicians. CME Outfitters designates this enduring material for a maximum of 1.5 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Note to Nurse Practitioners and Physician Assistants: ANA/ACP and AANPCP accept certificates of participation for educational activities certified for AMA PRA Category 1 Credit™.

Disclosure Declaration
It is the policy of CME Outfitters, LLC, to ensure independence, balance, objectivity, and scientific rigor and integrity in all of their CME/CE activities. Faculty must disclose to the participants any relationships with commercial companies whose products or devices may be mentioned in faculty presentations, or with the commercial supporter of this CME/CE activity. CME Outfitters, LLC, has evaluated, identified, and attempted to resolve any potential conflicts of interest through a rigorous conflict of interest evaluation procedure, use of evidence-based data/research, and a multidisciplinary peer-review process.

The following information is for participant information only. It is not assumed that these relationships will have a negative impact on the presentations.

Angelos Halaris, MD, has no conflicts to report.

Ebrahim Haroon, MD (peer/content reviewer), reports that he receives research, and a multidisciplinary peer-review process. It is the policy of CME Outfitters, LLC, to ensure independence, balance, objectivity, and scientific rigor and integrity in all of their CME/CE activities. Faculty must disclose to the participants any relationships with commercial companies whose products or devices may be mentioned in faculty presentations, or with the commercial supporter of this CME/CE activity. CME Outfitters, LLC, has evaluated, identified, and attempted to resolve any potential conflicts of interest through a rigorous conflict of interest evaluation procedure, use of evidence-based data/research, and a multidisciplinary peer-review process.

The following information is for participant information only. It is not assumed that these relationships will have a negative impact on the presentations.

For content-related questions email us at editor@psychiatrictimes.com; for questions concerning CME credit call us at 877.CME.PROS (877.263.7767)
economy in excess of $350 billion.1 In the US, major depressive disorder (MDD) afflicts approximately 17 million people annually with a direct and indirect cost to the nation exceeding $50 billion in today’s dollar estimates.4

The incidence of MDD has been steadily increasing over the past decades. Using the Disability Adjusted Life-Years measure, MDD was classed as the fourth leading burden of disease worldwide for both sexes in 1990. By 2004, it advanced to third place, and according to the World Health Organization’s estimate, will rank second to CVD by the year 2020 and will be the leading cause of disease burden by 2030.

Numerous studies published over the past two decades have confirmed the bidirectional association between CVD and depression. In a meta-analysis, clinical depression was identified as a significant risk factor for mortality in patients with coronary heart disease.5 The Multiple Risk Factor Intervention Trial (MRFIT) of middle-aged men established an association between depressive symptoms and all-cause mortality with a higher risk of CVD-related death and more specifically stroke mortality.6

**Mental stress and its consequences**

Mental stress can produce profound alterations in the physiology and chemistry of the CNS and the autonomic nervous system, peripheral organs, and the endocrine, vascular, and immune systems. The perception of mental stress is subject to high individual variability and vulnerability, which is based, in part, on genetically determined and epigenetically modified stress susceptibility and stress resilience. Chronic and inescapable stress ultimately lead to pervasive mental status changes and pathological alterations to the cardiovascular system that may lead to irreversible tissue and organ damage.

**The autonomic nervous system and heart rate variability**

In addition to activating the hypothalamic-pituitary-adrenal axis (HPA), stress activates the sympathetic branch of the autonomic nervous system. This activation leads to a reduction in vagal tone that can have consequences in the body’s immune responses. The imbalance in autonomic nervous system function, especially if prolonged, has profound effects on cardiovascular physiology and the immune system. These pathophysiological changes contribute significantly to the comorbidity between CVD and psychiatric disorders. Thus, the autonomic imbalance and decreased parasympathetic activity may be the final common pathway to numerous diseases and conditions associated with increased morbidity and mortality.7

Psychophysiological consequences of stress include sympathoadrenal hyperactivity, with a concomitant decrease in vagal tone, increases in plasma catecholamines, vasoconstriction, elevated heart rate, and platelet activation. The Heart and Soul Study clearly established that in patients with coronary artery disease, depressive symptoms are associated with elevated levels of noradrenaline.8 These changes, singly and additively, exert adverse effects on the cardiovascular system. Elevated and sustained catecholaminergic action on the heart, blood vessels, and platelets leads to changes in hemodynamic factors with increased shear stress. The decrease in parasympathetic tone may predispose to ventricular arrhythmias and possibly explain the excessive cardiovascular mortality found in patients with CVD and comorbid depression.

Heart rate variability (HRV) is an index of a healthy heart and good cardiovascular function with the ability to adapt to external and internal stressful demands. Diminished high-frequency HRV reflects decreased parasympathetic tone and has been observed at least in some depressed patients. The results of a large cohort study demonstrated that depressed patients, when compared with healthy controls, have significantly lower total HRV and lower HRV in the respiratory frequency range.9 These findings are compatible with theoretical models, notably the polyvagal theory coined by Porges.10 These models have linked the parasympathetic system to the etiopathology of depression based on the premise that low vagal tone is associated with reduced social engagement and an impaired response to environmental stimuli and challenges.

Heart rate variability can also be significantly decreased in severe coronary artery disease or heart failure. The risk of sudden death after acute myocardial infarction is significantly higher with decreased HRV. Indeed, HRV is a post-myocardial infarction prognostic factor (along with age, left-ventricular ejection fraction, frequency of arrhythmia). In patients with coronary artery disease, diminished HRV is far more common in depressed patients.11

Our group has recently published studies in which we included HRV measurements along with inflammation biomarkers and relevant rating instruments before and after pharmacological treatment of unipolar or bipolar depressed patients.12,13 We also addressed methodological issues such as duration of ECG monitoring and recording and corrections for respiratory and muscular artifacts. We are encouraged by our findings, which confirm in large part and expand on previously published studies of HRV in psychiatric cohorts. Taken together, with further research and methodological refinements, HRV measurements could be introduced into the diagnostic and prognostic armamentarium for the evaluation and management of stress-related disorders, notably depression and comorbid heart disease.

It is now possible to obtain accurate readings after short ECG tracings obviating the need for time intensive Holter monitors. The raw data must be subjected to correction of tracing artifacts by means of commercially available software programs. For the rationale of conducting such measurements and detailed description of data processing, the reader is referred to our recently published work. It is also noteworthy and of potential clinical significance that administration of therapeutic compounds with anti-inflammatory activity as part of their pharmacologic profile may exert unwanted and possibly deleterious effects over prolonged exposure to such agents.

**The role of inflammation**

The autonomic nervous system is involved in exerting regulatory input to the immune system. Simultaneous and sustained reduction in parasympathetic tone due to illness chronicity, recurrence, and severity may lead to disinhibition of the body’s inflammatory response as the immune system becomes overactive. Vagal nerve efferent inputs that regulate inflammation via the cholinergic anti-inflammatory pathway are well documented and measurements of inflammatory biomarkers in mood disorders can differentiate at least some of these patients from healthy subjects.14,15

Amongst the various pathophysiological processes that have been identified as playing major contributory roles to the comorbidity between CVD and depression is inflammation. The inflammatory response aims to restore homeostasis and health; however, inflammation can persist and expand, both centrally and peripherally, especially in instances of chronic physical or mental illnesses that perpetuate the stressful condition. The relationship between stressful events and the onset of inflammation-related diseases, notably cardiac, cerebral, neurological, and immunological, has been documented in the literature. A growing body of evidence has also identified inflammatory events associated with affective, anxiety, and psychotic disorders.

Evidence for a connection between mood disturbances and the immune system dates back more than two decades, and the connection continues to be studied.16 Activation of inflammatory processes as a common link between depression and CVD has received increased attention. Proinflammatory cytokines have been implicated in the pathogenesis of atherosclerosis and CVD.17,18 Endothelial damage leads to the release of pro-inflammatory cytokines that induce a sequence of events leading ultimately to thrombus formation and vascular occlusion.

Inflammation is a major contributing causal factor to depression and has been thought to play a major role in endothelial damage of the cerebral vasculature. This has led to the designation of “vascular depression” that presents with many of the typical symptoms of depression. Interleukin-6 (IL-6), secreted in response to stress, is one of the most potent stimulators of the HPA axis and induces the release of other pro-inflammatory cytokines. It is postulated that depression is a disease of inflammation in response to chronic psychological stress.19

**Cardiovascular pathology and inflammation**

Inflammation plays a major role in the development of atherosclerosis and atherothrombosis with the associated clinical sequelae that lead to high morbidity and mortality. Immune–competent cells are involved both in the early stages of atherosclerosis and the subsequent events leading to plaque formation and rupture and the ensuing acute coronary syndromes.20

During the past two decades, circulating compounds have been identified as markers of inflammation and atherosclerosis. These compounds include acute phase proteins, C-reactive protein (CRP), fibrinogen, immunoglobulins, adhesion molecules, and cytokines. Most of these biomarkers have also been shown to be abnormally regulated in many, but not all, patients with depressive syndromes without any evidence of other inflammatory processes, cardiovascular, or immune system pathology. Fibrinogen, CRP, tumor necrosis factor alpha (TNF-α), interleukin-1 (IL-1), and IL-6 have been discussed extensively in the cardiovascular literature. Indeed, a case has been made that CRP and depression have prognostic value in predicting adverse cardiac
events.21 The literature is replete with findings that indicate persisting CVD vulnerability after full recovery from a depressive episode, although there appears to be a time lag between mood improvement and immune marker normalization. However, the role of CRP in mediating inflammatory response and whether elevated blood levels in depression or CVD should always be considered a risk factor must be reexamined in view of findings that there is a pentameric and a monomeric CRP with the latter posing a toxic threat.

**Focusing on CRP**

A growing field of research involves CRP levels posttreatment with antidepressants. Several studies have sought to answer whether CRP levels change with various MDD treatments. Pizzi and colleagues22 randomized patients with coronary heart disease and MDD to receive sertraline or placebo for 20 weeks. At 20 weeks, levels of CRP decreased significantly from baseline with sertraline treatment, whereas they did not significantly change in the placebo group. Moreover, patients treated with sertraline demonstrated a decrease in depressive symptoms with a lower Beck Depression Inventory score.

Similar results were obtained from a meta-analysis conducted by Hiles and colleagues.23 The researchers considered various antidepressant treatment studies in patients with MDD that measured CRP, IL-10, and IL-6 at baseline and posttreatment. The results showed that treatment with antidepressants resulted in a significant reduction in CRP levels with the most notable reductions obtained after treatment with TCAs. As CRP levels decreased there was an accompanying reduction in depressive symptoms. While these co-occurring reductions may be correlated, it is not clear whether a reduction in CRP is indicative of a response to treatment.

Chavda and colleagues24 treated patients with 20-mg fluoxetine or 20-mg escitalopram daily for two months. The results showed a significant decrease in CRP levels from baseline with both fluoxetine and escitalopram. However, unlike the results of other studies, the decrease in CRP was independent of the medication effects on depression symptoms. As indicated by the Hamilton Depression Rating Scale for depression, there was no notable response. Findings from the three studies suggest that antidepressants can exert an anti-inflammatory effect as evidenced by a reduction in CRP levels. Whether this reduction in CRP is related to a reduction in depressive symptoms remains unclear. (For further discussion of this issue, the reader is referred to Halaris.25)

**CRP isomers**

CRP polymorphisms help explain variations in CRP levels at the gene level, but differences in CRP also exist in the structure of the protein itself. CRP is present in two different forms: the pentameric (pCRP) and the monomeric (mCRP) isomer. These isomers are structurally unique from one another. CRP is believed to circulate as a pentamer in plasma, while mCRP is known to have limited solubility. Recently, it has been recognized that mCRP and pCRP have different biological activities, which raises questions about the role of each isomer in the inflammatory process. The differing biological activities of mCRP and pCRP may help explain the discrepancies in reported findings. Clearly more research focused on elucidating these issues must be completed before routine measurements of CRP in psychiatric patients can be justified.

**References**

UMass Memorial Health Care and the University of Massachusetts Medical School currently has openings within the Department of Psychiatry. To view these openings directly, please click on either of the two links below.

- UMass Memorial Health Care: https://www.umassmemorialhealthcare.org/careers/physician-opportunities
- UMass Memorial Medical School: http://academicjobsonline.org/aaj/UMASSMED

UMass Memorial Health Care is the largest health care system in Central Massachusetts. We are the clinical partner of UMass Medical School, with access to the latest technology, research and clinical trials. In addition to our fully equipped medical centers, our system also includes home health and hospice programs, diverse behavioral health programs and community-based psychiatric practices.

The Department of Psychiatry is a national leader in public sector psychiatry, child and adolescent psychiatry, neurodevelopmental disorders, biological psychiatry, neuropsychiatry, forensic psychiatry, psychosocial rehabilitation, women’s mental health, and addiction psychiatry. We integrate our clinical, research, teaching and community partnership activities to help individuals and families transform their lives through recovery from mental illness and addiction. We are the largest provider of psychiatric services in central Massachusetts with over 350 faculty and 10 hospitals and community mental health centers.

Our residency program trains 7 residents per year including general psychiatry and specialty tracks for combined adult and child psychiatry and combined neurology and psychiatry. We offer fellowships in Child and Adolescent Psychiatry, Addiction Psychiatry, Forensic Psychiatry, Neuropsychiatry, and Adult Developmental Disabilities.

Centrally located, Worcester is a short hop from Boston, Providence, and Cape Cod and within easy reach of the scenic Berkshire Mountains. The diverse city of Worcester has nine colleges and universities including the University of Massachusetts Medical School, that overlooks the panoramic shores of Lake Quinsigamond. As the second largest city in New England, it has powered a rise of booming technology, research, manufacturing and healthcare industries.

Applicants should submit a letter of interest and curriculum vitae addressed to:

Sheldon Benjamin, MD
Interim Chair of Psychiatry
University of Massachusetts Medical School
UMass Memorial Medical Center
c/o: Jessica Saintelus, Physician Recruiter
Jessica.Saintelus@umassmemorial.org

As the leading employer in the Worcester area, we seek talent and ideas from individuals of varied backgrounds and viewpoints.
Psychiatry opportunities

Geisinger is seeking multiple candidates for positions within its Division of Psychiatry:
• Medical director, Geisinger Lewistown Hospital, Lewistown, PA
• Psychiatrist, Geisinger Lewistown Hospital, Lewistown, PA
• Adult outpatient medical director, Geisinger Medical Center, Danville, PA
• Psychiatrist, Geisinger Medical Center, Danville, PA

The Division of Psychiatry at Geisinger encompasses a full array of services and modalities, including adult and child psychiatry, addiction medicine, adult and child psychology, adult and child neuropsychology, primary care and specialty integrated care clinics, inpatient short-term care, intensive outpatient programming, community psychiatry, university mental health services, telepsychiatry, comprehensive consult and liaison services, and ECT. The division’s strong focus on academics offers the opportunity to teach and support medical students, interns and fellows, as well as involvement with our newly established, ACGME-accredited psychiatry residency program.

Visit us at GeisingerJobs.org.
Contact: Karen Rubbe, Talent Management, klrubbe@geisinger.edu

RUTGERS UNIVERSITY

PSYCHIATRISTS

University Correctional Health Care (UCHC), a division of Rutgers Health, currently has an opening for a full-time staff psychiatrist in South Jersey, within a short drive of Philadelphia. UCHC provides integrated health care services to our patients within the New Jersey Department of Corrections.

This position offers a competitive salary and excellent University benefits, including an additional 8% retirement contribution by Rutgers, and Rutgers tuition remission for your dependent children. You can look forward to minimal call, flexible hours, a reasonable workload, no insurance or pharmacy authorizations, a formula with few restrictions, an emphasis on safety and security, interesting patients, and a focus upon treatment rather than paperwork. Make a difference with University Correctional Health Care.

Please apply via our website at https://jobs.rutgers.edu/postings/71489 or e-mail our Associate Director of Psychiatry, Tony Tamburello, M.D., at tony.tamburello@rutgers.edu.

Rutgers University is an AA/EEO employer - M/F/Veteran/Disability.

Division of Mental Health & Addiction Services

wellness recovery prevention
laying the foundation for healthy communities, together

PSYCHIATRISTS
For clinical staff and leadership positions

The State of New Jersey is seeking motivated BE/BC Psychiatrists for full-time inpatient work in our Joint Commission-Accredited state psychiatric hospitals and forensic center. Psychiatrists with management experience are also needed to serve as Medical Director or Associate Medical Directors in some facilities.

• Facilities are in close proximity to metropolitan centers of New York City and Philadelphia/N.J. shore
• Psychiatrists work with a multidisciplinary team
• Primary care physicians provide for patients’ physical health care
• University affiliations/Opportunities to work with forensic fellows and psychiatry residents
• On-site CME activities and paid CME leave time
• 35 hour work week
• Competitive salaries
• Opportunities for voluntary on call available
• Tuition reimbursement for full-time employment is available
• 12 paid holidays
• Generous medical and dental benefits and retirement packages for full-time positions

Candidates must possess N.J. medical license.

Interested candidates should send cover letter and detailed resume to:
Robert Eilers, MD
Medical Director
Robert.Eilers@doh.nj.gov
609-438-4147

A New Nerve Center for Neurology

MS.
Parkinson’s.
Stroke.
Alzheimer’s.
Headache.
Epilepsy.

Neurology Times

Visit NeurologyTimes.com
With the continued growth of our Department of Psychiatry and our New General Psychiatry Residency Programs at Ocean Medical Center and Jersey Shore University Medical Center our vision for Behavioral Health is Bright.

Hackensack Meridian Health is a leading not-for-profit health care network in New Jersey offering a complete range of medical services, innovative research, and life? enhancing care aiming to serve as a national model for changing and simplifying health care delivery through partnerships with innovative companies and focusing on quality and safety.

Through a partnership between Hackensack Meridian Health and Seton Hall University, the School of Medicine will re-define graduate medical education, research, and clinical practice; reverse the critical physician shortage in both the New York/New Jersey metropolitan area and the nation; and stimulate economic development in northern New Jersey.

The School of Medicine will be the anchor in the development of a comprehensive health sciences campus that will also include research facilities and biotechnology endeavors – all in service of educating tomorrow’s doctors, discovering novel therapies, and facilitating compassionate and effective healthcare that will meet the ever-changing needs of tomorrow’s patients.

The School of Medicine will be the cornerstone of a dynamic venue for the exchange of ideas, the development of healthcare and research thought leaders and practitioners, and the discovery of novel therapies to meet the medical challenges of the future.

“Ocean Medical Center’s psychiatry program will be a community-based program,” said Ramon Solhkhah, M.D., program director for psychiatry as well as founding Chair of Psychiatry & Behavioral Health at the Hackensack Meridian School of Medicine at Seton Hall University. “Our new psychiatry residency program will improve clinical care and ultimately encourage future health care leaders to build practices in the Jersey Shore area.”

As the area’s premier provider of psychiatric services, Hackensack Meridian Behavioral Health Services has provided comprehensive mental health and substance abuse services to the residents of Monmouth, Ocean, Middlesex, and Bergen Counties for over forty years. Due to continued growth and expansion, we are currently accepting applications for Psychiatrists to join our Mental Health and Addiction Interdisciplinary Teams in the following positions:

- **Consultation Liaison Psychiatrists**: Jersey Shore University Medical Center (Neptune, NJ) and Riverview Medical Center (Red Bank, NJ) and Hackensack University Medical Center (Hackensack, NJ)
- **Staff Psychiatrist for Adult Inpatient Unit**: Jersey Shore University Medical Center (Neptune, NJ) and Riverview Medical Center (Red Bank, NJ) and Hackensack University Medical Center (Hackensack, NJ)
- **Outpatient Child & Adolescent Psychiatrist**: Jersey Shore University Medical Center (Neptune, NJ) and Hackensack University Medical Center (Hackensack, NJ)
- **Medical Director/Section Chief, Child & Adolescent Psychiatry**: Jersey Shore University Medical Center (Neptune, NJ)
- **Outpatient General 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 Medical Center (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)**

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
NATIONWIDE

THE 1ST CHOICE IN PSYCHIATRIC RECRUITMENT
Visit our website www.fcpsy.com
Over 400 permanent searches nationwide.
800-783-9152

Aligned Telehealth, Inc. – California
Our mission is to be the leader in innovative, high quality, accessible behavioral health solutions. Explore opportunities in multiple states—both tele and onsite positions available.

Hiring for Tele and onsite positions for BC Psychiatrists in the following states CA, VA, TX, FL, MN, WI and many other states.

Need BC PSYCH NP’s for onsite positions in CA, and FL.

Urgent need for BC Psychiatrist for Onsite position/Correctional in Jarrett, VA, Milwaukee, WI and Santa Anna, CA

Various venues for Psychiatrist, and Psych NP’s:
Correctional, Outpatient, Inpatient, Hospitalist

Please contact:
Sandra Williams
Director of Recruitment
P: (818) 584-1785 or 818-814-7790
Email: swilliams@alignedth.com

CALIFORNIA

Exceptional opportunity to earn from 450k to 575k for psychiatrists to work in State Hospitals, outpatient clinics and Telepsychiatry in CA.

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

Psychiatrists: Enjoy both a rewarding & lucrative work experience working as a FT Independent Contractor at Atascadero State Hospital or Coalinga State Hospital. Comp over $400k with malpractice & CA license assistance.

Contact:
Wonona Davis
MHSM Services, Inc.
Tel: 707-266-7788
Email: wonona@mhmcareers.com

www.mhmcareers.com

www.psychiatrist.com

PSYCHIATRIST

$253,600 - $329,700 annually
7 weeks of annual leave
Full benefits & retirement

(San Diego)

(Santa Clara Valley Health and Hospital System, a public healthcare system in the heart of Silicon Valley, is seeking BE/BC psychiatrists & PGY III/IV for a variety of clinical settings, including emergency psychiatric services, inpatient psychiatric services, outpatient behavioral health clinics, and custody health programs. Opportunities for additional moonlighting also exist within our healthcare system.

As the largest public health care system in northern California, we offer comprehensive healthcare resources to a large and diverse patient population. Psychiatrists are part of a robust team of staff that work in collaboration with other medical specialties to provide integrated health care to patients. Psychiatrists are eligible for numerous benefits including 7 weeks of annual leave, 1 week of educational leave, 12 holidays, $45000 educational funds, health benefits, life insurance and CalPERS retirement plan.

If you are interested in working in a dynamic and collegial work environment, please submit a CV and letter of interest directly to:

Dr. Tiffany Ho,
Behavioral Health Medical Director:
tiffany.ho@hs.hscgov.org

(408) 885-5767

The County of Santa Clara is an Equal Opportunity Employer.

Outpatient Adult and Child Psychiatrists are needed for Stanislaus County Behavioral Health & Recovery Services, in the Central Valley less than two hours from San Francisco and Yosemite.

Recovery-oriented treatment provided in a multidisciplinary setting with friendly and dedicated staff members. Recently revised rates with full malpractice coverage and pension plan (PARS) as a Personal Service contractor with an income potential of over $325 K per year for adult psychiatrist and over $355 K per year for child psychiatrist for F/T work.

P/T options and the opportunity to combine Tele-Psych with limited onsite work are also available. Excellent work environment with NO Call Requirement, lower than average case load and comprehensive nursing & ancillary support makes this a very pleasant and rewarding opportunity.

J 1 applicants are welcome.

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

www.psychiatrist.com

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 all mental health programs 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) 981-2986 or 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/humanresources/employment.aspx

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 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 no 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, 502 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

Find What You’re Looking For Now
www.PsychiatricTimes.com/classifieds

Classification
Work and Play in Sunny California:
Outpatient Psychiatrist Opportunities!

Dignity Health is one of the largest health systems in the nation and the largest hospital provider in California. We are seeking energetic, passionate, hardworking and outgoing Outpatient Psychiatrists to join our vibrant teams in Northern California!

ADULT OUTPATIENT PSYCHIATRIST
Dignity Health Medical Group – Central Valley – Stockton
- Established 20+ provider multi-specialty group
- 100% outpatient practice
- Existing psychiatrist in group
- Ability to see some C/A if desired
- Competitive salary guarantee period with bonuses, paid medical benefits, paid malpractice, generous time off and more
For more information, please visit: https://www.dignityhealth.org/central-california/medical-group/stockton

ADULT CONSULTING PSYCHIATRIST: NO CALL, NO PANEL
Dignity Health Medical Group – Dominican – Coastal Santa Cruz
- Opportunity to develop an integrated care program and supervise a team of social workers
- Experienced physicians required
- Competitive salary guarantee period, including bonuses, CME, benefits and malpractice
- Established 80+ provider multi-specialty group
- Shareholder opportunity
For more information, please visit: dhnf.org/dominican

ADULT PSYCHIATRIST: OUTPATIENT, NO CALL
Woodland Healthcare - Woodland, CA (Near Sacramento and Davis)
- 100% outpatient
- No call (call is taken by primary care physicians)
- Colleagues include Adult Psychiatrist, Child/Adolescent Psychiatrists, Developmental Behavioral Pediatrician, MFTs, Psychologist
- Medication management with therapy
- Collegiality and interdepartmental cohesion is second-to-none
- Shareholder opportunity, competitive compensation, bonus potential, excellent benefits
For more information, please visit: https://www.dignityhealth.org/sacramento/medical-group/woodland-davis

Please contact/send your CV to:
Dignity Health
Physician Recruiter
providers@dignityhealth.org
888-599-7787
www.dignityphysiciancareers.org

Dignity Health.
Hello humankindness

California Department of State Hospitals

Quality of practice. Quality of life.

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@dsh.ca.gov.

Practice and Benefits:
- Annual salaries to the high $200,000s
- Flexible workweek options may be available
- Voluntary paid on-call duty
- Substantial continuing medical education
- Generous defined-benefit pension
- Psychopharmacology support by leading experts and established protocols
- Medical, dental and vision benefits
- Private practice permitted
- Retiree healthcare
- Psychiatrist-led treatment teams
- Patient-centric, treatment first environment
- Relocation assistance may be available

We are currently recruiting psychiatrists at our five locations:

To find out more, please contact Laura Dardashiti, MD.
at (916) 654-2609.
You can also email us at DSH.Recruitment@dsh.ca.gov or visit our website at www.dsh.ca.gov

Psychiatric Times
Your leading source for unbiased information on clinical psychiatric practice.
Private Practice
Looking for the Freedom and Flexibility
Earn over $350K/Year

Choose your own hours
Clinical Freedom
Malpractice paid
H1 Visa Welcome

We are looking for Adult and Child Psychiatrists in
San Francisco Bay Area
Los Angeles/Orange County Area
Sacramento Area

Comprehensive Psychiatric Services
Mansoor Zuberi, M.D.
(P) 925-944-9711 (F) 925-944-9709
dzuberi@gmail.com
www.psych-doctor.com

Your Career in Paradise!
Psychiatrist Job Opening In
Santa Barbara, CA

Visit: www.getpsychhelpsb.com
Contact Tom Wdroe at 805.680.7772 or
tomwdroe@mac.com

FLORIDA

PSYCHIATRY AND
BEHAVIORAL SCIENCES

The University of Miami Miller School of
Medicine Department of Psychiatry and
Behavioral Sciences is recruiting several
full-time psychiatrists at the assistant or
associate professor rank to join our faculty.
We are in an exciting phase of growth and
we are recruiting psychiatrists for several
services including inpatient, outpatient,
consultation-liaison and emergency room.

Faculty rank and compensation are
commensurate with experience.
The University of Miami also provides a
moving bonus and faculty stipend. The UM
Department of Psychiatry is ranked 25th
in the nation in NIH Funding and there are
extraordinary opportunities to participate
in research, resident education and medical
school teaching. Position Requirements:
• M.D./D.O. with Board Eligibility or
Board Certification in Adult Psychiatry
• Active State of Florida Medical License

To be considered for a position please
send a copy of your CV to Radio Saveanu
M.D., Professor and Vice Chair,
Department of Psychiatry and Behavioral
Sciences at psychiatry@med.miami.edu

Meridian Behavioral Healthcare, Inc., is a
CARF accredited community mental
healthcare facility located in the heart of
Florida. Currently, we have full time posi-
tion Staff Psychiatrist position available
with an excellent salary and benefits pack-

age. Looking for someone who can work
with a flexible schedule – preferably Adult
and Child, with the mixture of inpatient
and outpatient to be discussed.

Meridian has been a part of the lives of
thousands since 1972; providing a safety
net for those in crisis. Since then, Meridian
has expanded to 16 sites across Central
Florida, touching over 22,000 lives through
over 325,000 direct care visits a year.
Gainesville is home to the University of
Florida and serves as the cultural, educa-
tional and commercial center for the north
central Florida region.

For more information, contact:
Logan Anglin,
Vice President – Staffing/Recruiting
@352-374-5600 x8294
or email confidential C.V. to
logan_anglin@mbhi.org

MBH is an Equal Opportunity Employer
and a Drug-Free Workplace.
Please visit our website:
www.mbhi.com

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 pri-
ivate 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 environ-
ment. OP work, call 12 wks. Regional is
a leader in psychiatrist-directed integrated
care services. Incentive bonus available,
full benefits.

Please contact Kokie Douglas, MD:
kokie.douglas@regionalmentalhealth.org
219 736-7232

MISSOURI

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 pro-
gram. Open to employment, or independent
contractor arrangement. Located in south-
est 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 outpatient
and outpatient.

Please contact Terry Good,
Horizon Health, at 804-684-5661;
terry.good@horizonhealth.com;
Fax: 1-804-684-5663.

NEW JERSEY

NORTHERN NJ - TWO OPENINGS: BAYONNE- Primarily a CONSULTA-
TION LIAISON POSITION and JERSEY CITY-OUTPATIENT POSITION - Full-
time employment with benefits.

Please call for details. Terry Good, 804-684-5661;
terry.good@horizonhealth.com;
Fax: 1-804-684-5663.

NEW YORK

The Icahn School of Medicine at Mount
Sinai affiliated with Elmhurst Hospital
Center, serving the culturally diverse com-
munity of Western Queens, is seeking a
BC/BE Adult Psychiatrist to join its Adult
Inpatient Division and a BC/BE Child
Psychiatrist to join its Adult/Child
Outpatient Division.

Elmhurst Hospital Center’s Psychiatry
Department serves a multi-cultural popula-
tion of adults, children and families. We
offer a full spectrum of services including:
Adult/Child Inpatient services with a
Psychiatric ICU, Co-Occurring Disorders
Unit and Women’s Forensic Unit; a high
volume CPEP; culturally competent Asian
and Spanish Units; Mobile Crisis Team;
Adult and Adolescent Partial Hospitaliza-
tion Programs; Ambulatory Adult and Child
programs; Chemical Dependency; and
Home Based Services. In addition, we also
offer faculty appointment with the Icahn
School of Medicine at Mount Sinai Health
System. The Department collaborates
with numerous schools in providing training
programs in the areas of psychology, nursing
and medicine. This is an excellent oppor-
tunity to join a multidisciplinary team work-
ning with a diverse patient population.

Elmhurst Hospital Center offers a collegial
environment and competitive salary and
benefits. Salaries range from $180,000-
$190,000 depending on board certification
with a sign in bonus and annual retention
bonus. This position requires current New
York State License, Medicaid number and
DEA number in order to practice medicine.

Please send CV along with a brief descrip-
tion of career interests and goals to:
Howard Gould, M.D.
Deputy Director
Department of Psychiatry
Elmhurst Hospital Center
79-01 Broadway
Elmhurst, NY 11373
Email: gouldh@nychlc.org

The Mount Sinai Health System is an
equal opportunity employer. We promote
recognition and respect for individual and
cultural differences, and we work to make
our employees feel valued and appreciated,
whatever their race, gender, background,
or sexual orientation.

EOE

Minorities/Women/Disabled/Veterans
The Mount Sinai School of Medicine at Mount Sinai affiliated with Elmhurst Hospital Center, serving the culturally diverse community of Queens, is seeking a BC/BE Adult Psychiatrist to join its Integrated Clinic department located in Meyer Shelter-Wards Island, NY.

Elmhurst Hospital Center (EHC) is the major tertiary care provider in the borough of Queens. The hospital is comprised of 545 beds and is a Level I Trauma Center, an Emergency Heart Care Station and a 911 receiving Hospital.

The candidate will provide leadership for all aspects of the program, including clinical instruction and supervision of staff. The candidate will be responsible for conducting comprehensive clinical psychiatric evaluations of patients appropriate for integrated care services; provide on-site psychopharmacologic treatment when appropriate; order appropriate laboratory studies; collaborate with clinic staff and service agencies related to patients’ clinical needs; assist in facilitating referral for more intensive psychiatric care when appropriate; conduct supportive or other evidence-based individual psychotherapies for clients, when appropriate; collaborate with team in the completion of required documentation at all stages of care; record and document data necessary to maintain and coordinate psychiatric care; communicate patient’s plan of care with appropriate disciplines and provide educational activities for center and affiliated agency staff when appropriate.

Candidates must have a MD or DO from an accredited medical or osteopathic school degree and be board certified/eligible with a valid New York State License, DEA and Medicaid number. They should also demonstrate interest and/or clinical experience in an integrated care model for Psychiatric conditions with comorbid Substance Use Disorders and Medical problems; have strong interpersonal and communication skills and ability to work well in a multidisciplinary team setting; familiarize with high-risk patients and cultural sensitivity in community settings.

We also offer a faculty appointment with the Icahn School of Medicine at Mount Sinai commensurate with credentials, experience and qualifications.

Send CV along with a brief description of career interests and goals to:

Howard Gould, M.D.
Deputy Director
Department of Psychiatry
Elmhurst Hospital Center
79-01 Broadway
Elmhurst, NY 11373
Email: gouldh@nymh.org

The Mount Sinai Health System is an equal opportunity employer. We promote recognition and respect for individual and cultural差异, and we work to make our employees feel valued and appreciated, whatever their race, gender, background, or sexual orientation.

EOE

Minorities/Women/Disabled/Veterans

CAPE FEAR VALLEY HEALTH

We Want You to Join Our Behavioral Health Team!

Cape Fear Valley Behavioral Health is one of the largest comprehensive, multi-tiered behavioral health services in North Carolina. Behavioral Health Care’s mission is to meet and respond to the mental health needs of the community. We offer evidence-based, best practice treatments. Staffed by psychiatrists, psychologists, clinical social workers, psychiatric nurses, licensed professional counselors, and other mental health professionals, Cape Fear Valley Behavioral Health Care provides a team approach to mental wellness. Behavioral Health Care is accredited by The Joint Commission and licensed by the State of North Carolina.

The Health System is seeking providers for the following due to regional volumes and commitment to expand services:

Emergency Opportunity
• Two BE/BC providers with experience in ED or trained in ED/Psychiatry.
• The Emergency Department maintains a Psychiatric Unit of 9 beds for patients in crisis. Support team is specially trained. Schedule consists of 16 hour shifts, approximately 10 shifts per month.

Adult Outpatient Opportunity
• BE/BC provider with training/experience in a variety of mental health treatment conditions as well as Chemical Dependency and Substance Abuse.
• Candidate with experience in treatment of Bipolar Disorder, Borderline Personality Disorder, and Mood Disorders is preferred. Additionally, ECT training and experience is highly desirable. Well established adult team is flexible and transparent for either or both inpatient and outpatient services.

Clinic hours are Monday - Friday with limited call.

Child Outpatient Opportunity
• BE/BC Child & Adolescent providers.

We are seeking a BC/BE provider with a fellowship in child psychiatry.

The current structure is for 90% outpatient Monday through Friday work schedule.

We offer best in class compensation plus generous benefits including Paid Malpractice, CME Time and Allowance, Accrued Paid Time Off, 403(b) match and 401k, Health, Dental, and other desirable benefits.

Please contact Suzy Cobb, Physician Recruiter for more details at (910) 615-1889 or scobb2@capefearvalley.com.

OHIO

Clinical Neuroscience of Mood Disorders Fellowship is looking to fill an available position, Requirements for this position is to be a MD who has completed residency in psychiatry or related field or a PhD in Clinical Psychology. Candidate should be eligible for an Ohio Trainee License to conduct clinical work. This is a 1 -2 year program and is accredited by the Cleveland Clinic. Position can be filled any time during the year on a rolling basis. The fellowship is designed to train fellows in clinical care and neurobiological basis of depression and bipolar disorder. Current research is focused on noninvasive and genetic biomarkers for diagnosis and treatment as well as on clinical trials of novel pharmacological agents and strategies.

Please contact Amit Anand, MD at ananda@ccf.org

VIRGINIA

Psychiatrist Opportunity

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 psychiatry 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.sayers@dbhds.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.
Keep your practice healthy.
The business side of the medical profession

Explore more at medicaleconomics.com