Despite the outpouring of support, are survivors of mass shootings getting the care they really need?

In the days following the three suicides of school shooting survivors and in anticipation of the 20th anniversary of the Columbine shooting, Parkland and Columbine students took time to contemplate the attacks and how their lives have been affected. Both groups have been outspoken about the need for better approaches to assisting survivors in the days, weeks, months, and years following such tragedies.
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Survival 
Continued from cover

DSM-5 and its predecessors clarify diagnostic criteria for PTSD, but do not specifically name survivor guilt as an outcome of PTSD or traumatic exposure. PTSD’s criterion D (negative alterations in cognitions and mood associated with trauma) includes persistent distorted cognitions such as blaming oneself or others and persistent negative emotional state such as guilt or shame.

Risk for suicidal ideation and attempts in PTSD is clearly discussed in the text, as well as the risk for comorbid depression. DSM-5 differs from previous DSMs, which excluded depression diagnosis for symptoms lasting less than two months after a loved one’s death. Thus, at the clinician’s judgment, major depression can now be diagnosed in the presence of bereavement.

Survivor guilt occurs when individuals believe they have done something wrong in surviving a traumatic event in which others have perished. It has been described among Holocaust survivors and combat veterans as well as by survivors of natural disasters, airplane crashes, acts of terrorism, and mass shootings. While some survivor guilt may be natural, when excessive or prolonged, it can lead to other problems.

Here’s an example of a man who survived the Oklahoma City bombing while working inside the Federal Building. When the blast occurred, he had been turning on a light switch. He developed the irrational belief that his switching on the light had somehow triggered the bomb, although he knew intellectually that this was not the case. He escaped the devastated building with no physical injuries, but many coworkers perished. He did not escape psychic injuries. Along with considerable survivor guilt, he developed PTSD and a substance use disorder, complicating his treatment and recovery, and died a few years later of cardiovascular disease.

Survivor guilt has been described in the psychoanalytic literature. Freud described a broader conceptualization of a more universal guilt that individuals feel when they survive another’s death. Hartman recently re-examined Anna Freud’s dreams, exploring the interplay of mourning and survivor guilt. Her immediate family escaped the Holocaust but her aunts were lost in Nazi concentration camps. While she never wrote directly about her family’s Holocaust experiences, her grieving was seen to be complicated by survivor guilt, with the possibility that her mourning may have affected her views on trauma and attachment. Anna later worked with child concentration camp survivors although she had a conservative view of altruism.

Survivor guilt has been recognized in combat veterans with PTSD and has been one of 5 factors significantly related to suicide attempts, along with depression, anxiety, severe PTSD, and intense combat guilt as the number one factor. Survivor guilt may vary among veterans of different wars. Vietnam veterans had more severe symptoms of PTSD, depression, hostility, survivor guilt, and work impairment as well as earlier onset of alcoholism compared with World War II veterans, although more time had passed since combat experiences for the latter group. Hospi-

talized Nigerian army veterans who had served as peacekeepers in Liberia and Sierra Leon had higher rates of survivor guilt (38%) than PTSD (22%), with survivor guilt associated with avoidance of trauma stimuli and PTSD linked with alcohol and cannabis use.

Traumatic bereavement or grief may occur after a sudden or unexpected death of a loved one if the response is severe or prolonged and interferes with functioning. It differs from survivor guilt in having predominant grief rather than guilt. According to the National Center for PTSD, with traumatic bereavement there is preoccupation with or a longing for the deceased; avoidance or being drawn to reminders of the lost one; feeling bitter, dazed, or angry; seeing the deceased or hearing the loved one’s voice; difficulty with relationships, upsetting memories, or feelings of emptiness.

A SNAPSHOT OF SCHOOL SHOOTINGS 2018-2019

RESOURCE BOX

General Recommendations for Assisting in the Immediate and Longer Term Aftermath of a Community Disaster

1. Recognize and educate survivors and their families about common responses in children, which may be more severe with close physical proximity, personal injury, or losses of close people; reactions may be:
   • EMOTIONAL: shock, fear, sadness, anger
   • BEHAVIORAL: acting out shootings or dying in play, tantrums, bedwetting, clinging
   • OTHER: nightmares, aches, and pains
2. Help the child and family to regulate strong emotions and restore a sense of safety.
3. Recognize that each child is unique; assess severity and how much time has passed since the episode of trauma.
   • Anniversaries of school shootings or similar events or disasters in other communities may reactivate memories and strong emotions
   • Formal mental health assistance is more available in the first months after disasters and may decrease over time
4. More severe or prolonged responses warrant referral to a mental health professional.
5. Utilize the specific tools that are available:
   • National Child Traumatic Stress Network (NCTSN): https://www.nctsn.org/what-is-child-trauma/trauma-types/trauma-andschool-resources
   • Parent Guidelines for Helping Youth After the Recent Shooting (includes common reactions, things to do to help self and child, including talking with the child and promoting self-care and sense of safety): https://www.nctsn.org/sites/default/files/resources/parents_guidelines_for_helping_youth_after_the_recent_shooting.pdf
   • Age-Related Reactions to a Traumatic Event: https://www.nctsn.org/sites/default/files/resources/age_related_reactions_to_trumatic_events.pdf
   • Creating School Active Shooter/Intruder Drills: https://www.nctsn.org/sites/default/files/resources/fact-sheet/creating_school_active_shooter_intruder_drills.pdf
   • Psychological First Aid (for teachers, administrators, health care professionals, and others): https://www.nctsn.org/sites/default/files/resources/pfa_field_operations_guide.pdf
   • Trauma and Grief Component Therapy for Adolescents: https://www.nctsn.org/interventions/trauma-and-grief-component-therapy-adolescents
   • Trauma-Focused Cognitive Behavioral Therapy (individual, family, or group): https://www.nctsn.org/what-is-child-trauma/trauma-types/traumatic-grief/interventions

28
79
35
24
2018
2019
19
2
12
School shootings
People killed
People injured
Students/children killed

A SNAPSHOT OF SCHOOL SHOOTINGS 2018-2019

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School shootings
People killed
People injured
Students/children killed

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School shootings
People killed
People injured
Students/children killed
Other psychiatric, behavioral, or medical problems may also occur with prolonged traumatic grief. Risk factors complicating recovery after witnessing sudden death include survivor guilt, having one’s own life threatened, and being confronted with massive, shocking deaths. For children, having many losses or viewing death is especially difficult. To help the traumatically bereaved individual recover hope and comfort, recommendations include providing information about grief, assessing the bereaved person’s distress while helping solve practical problems, and managing intense feelings.6

In light of recent events, mass shootings of youth have become increasingly a concern. What have we learned over the years? Much of the focus has understandably been on PTSD, with some assessments of grief. One year following a 1984 sniper attack at an elementary school, surviving children had more grief symptoms if they were better acquainted with the deceased child and had had more exposure to the violence; grief and PTSD symptoms sometimes presented independently, and at other times they were interconnected.7

More PTSD symptoms were seen in traumatized youths who had families who exaggerated their child’s emotional response.

Four months after a 2007 high school shooting in Finland, half of the girls and a third of boys had postrumur distress; intense exposure and female gender increased the risk for PTSD.8 After a 2007 classroom shooting in an Illinois university, an assessment of female undergraduates in a sexual revictimization study found many (42.1%) to be resilient, with 11.9% having probable PTSD acutely and 8 months later.9 More PTSD symptoms at 8 months was associated with higher prior trauma exposure, post-trauma emotional dysregulation, and peritraumatic dissociation.

The impact of school shootings extends far beyond the directly affected school and community. The widespread emotional effects of 69 deaths (average age 19 years) in a 2011 summer camp mass shooting in Norway were revealed in an assessment of over 10,000 Norwegian high school students. One in five respondents knew individuals directly exposed, over 50% felt the event threatened their own or a close one’s lives, and almost 80% had changed views of the world. Higher levels of PTSD symptoms were associated with personal proximity to the events, perceived threat, and being a female or immigrant.10

Looking at the widespread effects of mass school shootings, a national US survey of high school students not directly involved in the event was conducted a month before and two months after the 1999 Columbine High School shootings. Results showed that more students felt too unsafe to go to school after the catastrophe, but they were less likely to consider suicide.11

So, what can we do to help survivors and family members of school shootings? No studies have systematically studied interventions to help these individuals with specific problems of survival guilt alone. See Resource Box for recommendations that may be helpful in the immediate aftermath of a community disaster and over time.

Treatments for diagnosed PTSD cited by the National Center for PTSD as having the strongest evidence for efficacy are prolonged exposure, cognitive processing therapy, and eye movement desensitization and reprocessing (EMDR). Four antidepressants with demonstrated effectiveness in adults only are sertraline, paroxetine, fluoxetine, and venlafaxine. Similarly, psychotherapy and some antide- pressants may be helpful for children or adolescents who have major depression in the aftermath of mass violence.

Providing a sense of safety and normalcy is important. A recent study of children and teens who presented to an ER in the UK after traumatic incidents were followed for two months. The findings suggest that youths with more PTSD symptoms made more efforts to deliberately process their trauma, as if they perceived that there was something wrong with them. PTSD symptoms were not associated with severity of physical injuries, other life stressors, or social support.12

The reactions of caregivers also plays a role in number of PTSD symp- toms. More PTSD symptoms were seen in traumatized youths who had families who exaggerated their child’s emotional response or whose parents reported more family over-involve-ment and accommodation behaviors.

School shootings have taken different forms. The Columbine High School shootings sent the world.

CONTINUED ON PAGE 24

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FROM THE EDITOR

Psychiatric Pharmacogenomic Testing
The Evidence Base

John J. Miller, MD | Editor in Chief

This month’s issue features The Complicated Patient Special Report with an article by Drs Fabbri and Serretti, “Overcoming Treatment Resistance: Can Pharmacogenetics Help?” It comes on the heels of “Using Pharmacogenetics in Making Treatment Decisions for Schizophrenia” a Special Report by Drs Yoshida and Muller in the March issue. Both articles reinforce the current expert consensus that clinically actionable genetic testing in psychiatry is quite limited. Specifically, all current evidence-based guidelines support only four genes that have risen to the level of “clinically actionable” in our entire field of psychopharmacology: cytochrome P450 2D6 (CYP2D6), cytochrome P450 2C19 (CYP2C19), human leukocyte antigen, B type, allele 15:02 (HLA-B*15:02), and human leukocyte antigen, A type, allele 31:01 (HLA-A*31:01).

Current expert consensus on psychiatric pharmacogenomic panels

Expert consensus publications and editorials from thought leaders in psychiatry in the past 3 years have consistently concluded that psychiatric pharmacogenomic panels (AKA combinatorial pharmacogenetic tests) are not currently evidence based, and clinical decisions should not be based on their reports.1-3 In fact, on October 31, 2018, the FDA published a safety communication warning against the use of the AmpliChip CYP450 Test. It was FDA approved. It used micro array technology from Affymetrix (GeneChip) AmpliChip CYP450 Test was FDA approved. It used micro array technology from Affymetrix (GeneChip) to determine the phenotype of a patient at the two most genetically diverse cytochrome P450 enzymes: 2D6 and 2C19. For unclear reasons it was not often utilized, and it eventually became outdated as the large number of genetic polymorphisms of CYP2D6 (100 unique alleles in the human genome currently indexed) and CYP2C19 (35 unique alleles in the human genome currently indexed) grew. Moreover, the AmpliChip was not able to determine multiple copies of one gene.

Post sequencing of the human genome

After the completion of the sequencing of the approximately 3 billion base pairs of the human genome in 2003, pharmacogenomics research advanced at an astronomical rate. As a large database accumulated of the many diverse polymorphisms of a variety of genes, entrepreneurs looked for a market for this data. Companies emerged that marketed gene panels, which would obtain saliva (containing buccal cells) from a patient, amplify the patient’s DNA in a test tube, and sequence the selected genes of interest to determine the patient’s genotype and phenotype.

Theoretically, this information would provide the prescriber actionable clinical information about each tested patient to help determine what medications to use based on that patient’s unique pharmacogenomic profile, including:

- Genes for metabolic enzymes (cytochrome P450 and glucuronidation/sulfonation)
- Promoter sequences that can help predict the likelihood of a gene transcribing a low output or high output of that gene’s mRNA
- Single nucleotide polymorphisms (SNPs) of receptors and enzymes that could predict degree of function
- The presence or absence of the HLA-B*15:02 allele, which, if present, predicts a significant increase in the risk for developing Stevens-Johnson syndrome when carbamazepine/oxcarbazepine is prescribed
- Polymorphisms in genes that code for the drug transporting P-glycoproteins

Creating “gene panels” that combine 5 to 10 genes that may be relevant to a specific disease state, along with implementation of each company’s proprietary algorithm to do all the relative risk calculations for the practitioner, in theory, makes for a great clinical tool to assist the clinician in determining what treatment should help the patient the most. To a clinician looking for any diagnostic aid to help treat a patient more...
effectively it seemed too good to be true, which, unfortunately, it is. Although a remarkable database of pharmacogenomic data has accumulated over the past 20 years, at this time in psychiatry we only have four genes whose pharmacogenomic information is clinically actionable. Once again, these are CYP2D6, CYP2C19, HLA-B*15:02, and HLA-A*31:01.

Despite this, companies that market the psychiatric pharmacogenetic panels/combinational pharmacogenetic tests promise a report that will inform the clinician as to what medication they should use for their patient, based on a proprietary algorithm developed by each independent company. As already reviewed, all the expert consensus reviews and opinions clearly state that this information is not evidence based, and the FDA advises us not to act on these reports. Common genes that are not evidence form clinicians about gene/drug practice guidelines:

**CPCIC assigns an evidence level of A, B, C, or D to gene/drug pairs, with CPCIC levels A and B deemed to have actionable prescribing based on genetics; importantly, genedrug pairs with a CPCIC level of C or D are not considered to have adequate evidence to support using a genetic test for prescribing, and this can serve as a useful starting point in deciding whether clinical genetic testing of that gene for that drug is likely to be justified.**

In 2015 CPCIC published a comprehensive guideline summarizing the evidence base for clinical decision making when prescribing SSRIs affected by the genotypes of CYP2D6 and CYP2C19.**14**

### At this time in psychiatry we only have four genes whose pharmacogenomic information is clinically actionable... these are CYP2D6, CYP2C19, HLA-B*15:02, and HLA-A*31:01.

A second organization, the International Society of Psychiatric Genetics, also maintains an active and evidence-based website which it continually updates as new information is established. Their most recent genetic testing statement for psychiatric disorders was updated and approved March 11, 2019.**15** Their summary recommendations include the following:

**We recommend HLA-A and HLA-B testing prior to use of carbamazepine and oxcarbazepine, in alignment with regulatory agencies and expert groups.**

**Genetic information for CYP2C19 and CYP2D6 would likely be most beneficial for individuals who have experienced an inadequate response or adverse reaction to a previous antidepressant or antipsychotic trial.**

**Conclusion**

An impressive and ever-expanding research literature exists on the... (CONTINUED ON PAGE 27)
Strategies to Facilitate a Positive Clinical Encounter

Therapeutic Office Designs Support Positive Doctor-Patient Alliances

Stephanie Liddicoat, PhD

There is a considerable body of literature confirming the relationship between mental well-being and good design practice. Evaluations of specific design interventions have shown that good design of a hospital’s environment leads to better clinical outcomes and less stress for patients and staff.1 Research also links environmental aspects, such as landscaping or natural elements, to the reduction of stress and the promotion of recovery from illness.2 The therapeutic office space can influence the relationship between psychiatrist and patient, as well as therapeutic outcomes.3

The counseling environment is regarded within clinical literature as having an effect on a patient’s sense of well-being.4 Patients’ experiences of such spaces can have a highly emotional dimension, which suggests that environment design should be investigated as a potential means to influence therapeutic efficacy.5

Individuals have different abilities to censor or suppress their environments, and a patient has reduced capacity to exclude environmental distractions when stressed or anxious. This suggests that the environment of a therapeutic office may have more of an impact on these individuals who often arrive for an appointment in a distressed state. Findings also indicate that layout has strong psychological dimensions for patients in therapy and may form a pathway to addressing issues of the self.6 This suggests that the therapeutic office may be influential in patient anxiety levels and therapeutic efficacy.

Self-disclosure can be difficult for a patient and is less likely to happen when the patient is in an anxious or worried state.7 Linking the design of therapeutic offices to communication and patient self-disclosure is a major area of research. Not only does the physical environment affect patients, non-verbal communication variables have also been analyzed in therapeutic settings, including distance, body position, and body motion. Atmosphere, too, is implicated in therapeutic offic-
TABLE 2. Therapeutic office interior layout design strategies summary

1. Promote flexibility with moveable furniture, objects, and enough space to allow rearrangement of this environment.

2. A room of approximately 12 by 12 by 12 feet minimum; if the floor area is smaller, compensate with higher ceilings.

3. Seating between patient and psychiatrist should be at 45 degrees; seating directly opposite is too confrontational. A side table adorned with a lamp, plant, or items such as tissue boxes should be available for each person. This can be moved if the patient desires a barrier. There should be no intervening desk, coffee table, or barrier between the psychiatrist and patient, and enough room that if both were to stretch out their legs they would just touch feet. There is also room for each chair to be moved forward or backward from this position. A couch can allow the patient to sit closer or further from the psychiatrist. There should be a piece of artwork or a window directly in front of the patient’s seat, to allow visual disengagement. An unoccupied chair is a space for the patient’s mind (equivalent to the personal space of one person). This also makes the space feel more natural and informal. Lay out the chairs so that they have even spacing between them; do not have one chair off to one side, for example. Chairs should face the center of the room/each other.

4. If administrative functions are also included in the therapeutic office, have them in a separate area. All computer screens should be off during a session and not visible to the patient.

5. Rectangular or square rooms are preferred. Spaces that are longer and thinner are ideal because they allow for multiple foci within the space.

6. Have one door that is used to enter the therapeutic office; the door should be visible and accessible to everyone in the room. Ideally the patient should have better access to the door than the clinician, and a clear line of sight to this door. If necessary, an additional egress path can be provided through a doorway to a courtyard or framed outdoor space, which appears enclosed from the room but may have a discrete side door.

**Therapeutic office interior layout design strategies.** Therapeutic office interior layout design strategies (Table 2) relate to how the physical design of the space promotes patient self-disclosure, communication, empowerment, and psychological safety. Spatial arrangement affects self-disclosure, which directly underpins the therapeutic experience and outcomes. Empowerment relates to how the space might be flexible and how space can be adjusted to meet the needs of individual patients and allow them to enact and develop a sense of agency within physical space (Figure 1). Environments that are flexible and can be rearranged may be useful to promote self-disclosure and communication.

Suitable room dimensions allow a provision of physical space for psychological space, i.e., mental breathing room. Having physical space for mental processing is important to patients and allows them to better explore their thoughts. A smaller floor area (less than 12 feet by 12 feet) can be mitigated when paired with an increase in ceiling height, achieving this mental space physically.

The layout may also include a provision of “space of the mind,” which can be afforded by an additional chair in the room, equal to the physical space of one person. This is a chair to be occupied by the mind of the patient and never to be occupied by a physical person. By symbolically allowing physical space for their mind to be present in the room, patients are provided with more “breathing space” and “thinking space” and can more readily communicate and unpack their issues, and engage in therapy (Figure 2).

The interplay of power relations in the therapeutic office is also significant. Chairs should be evenly spaced and face the center of the room or each other to mitigate power imbalances, hierarchies, or “otherness.” There should also be no intervening desk between psychiatrist and patient. These recommendations establish a greater sense of equality and may, as suggested by patients, promote a higher therapeutic engagement by the patient and a better patient-psychiatrist alliance.

The layout of the therapeutic office can emphasize the significance, or lack thereof, of the therapeutic activity. To foster a positive emphasis on its significance, the administration area of the therapeutic office should be physically separate from the counseling area. This does not need to be through a physical barrier, such as a wall, but a clear delineation of the functions is important. During a counseling session, this separation signals to patients that the focus is on them and their therapy and that their mental well-being is a priority. It also communicates that the counseling area is a different kind of work space, and that work (of a therapeutic kind) is to be done. This activity is significant and not just an accessory activity that occurs amid administrative duties. Computer screens should not be visible to the patient—this is distracting and hinders the focus on the patient and the activity of the therapy session.

Egress and thresholds are significant in relation to spatial layouts, which patients linked with dimensions of metaphorical inferences and psychological privacy. There should be one door for both the patient and psychiatrist. When there is a separate door or easier access for the psychiatrist, it grants more power to the clinician. In essence, it tells the patient, “You are dangerous, you are bad, I will need to use this exit door when you act out.” Patients have...
also interpreted an articulation of space and egress as an encouragement to act out, as though it is an expected behavior.

To foster psychological privacy, additional doors into the therapeutic office should be avoided. The presence of such doors leads the patient to question who might enter through the door, whether an unknown person might come in at any moment and intrude upon (physically and psychologically) the private space. This results in an unwillingness to open up and engage in the therapy session, as the patient’s privacy does not feel protected, physically or psychologically (Figure 3).

Therapeutic office interior finishing, furniture, and materials and accessories design strategies. Therapeutic office interior finishing, furniture, and fitout design dimensions (Table 3) relate to the relationships of furniture, and materials and other fixed and non-fixed physical features, with psychological space, comprehensibility, various notions related to metaphoric inferences, and psychosensory dimensions.

Manipulation of window design is related to various dimensions of psychological space. A view through a window to a natural landscape adjacent to the therapeutic office was found to be very significant for patients.

Having that view out to a landscape, it’s been important through my whole stages of treatment . . . I didn’t realize until I didn’t have that safe view from a window, and I think that is probably part of the reason I didn’t continue in some ways, because as I said it was so confrontational, I had nowhere to look, I felt totally judged, and I just didn’t feel safe (Patient, personal communication, 2015).

It seems that this landscape is not important to occupy physically, and that visual access provides the sense of escapism or mental respite which is desired:

In the counseling I would need a window to feel safe, to “Oh, there’s a world out there!” You know? There’s a world out there and I might not feel safe in the physical area I am in, but it’s OK. It gives me a psychological connection to a bigger space, to a world outside what I am dealing with (Patient, personal communication, 2015).

However, it seems that a large expansive view to a landscape lacking borders or delineation is perceived as threatening, rather than supportive. The notion of a framed landscape as providing greater sense of freedom and comfort simultaneously is

CONTINUED ON PAGE 25
Serial Pleasures

Harvey Roy Greenberg, MD

Dr. Greenberg practices psychiatry in Manhattan, New York. He continues to publish frequently on film, media, and popular culture. For many years, his cinema column appeared in Psychiatric Times. He has appeared frequently on national and international network and cable television programs including Good Morning America, Today, CBS Evening and Sunday News, PBS, CNN, Showtime, and BBC TV. Please address communications to Dr. Greenberg at HRG@STOCK.ADOBE.COM.

The pleasures of a story unfolded serially are ancient and ubiquitous. Cliffhangers enhance their power. Imagine a Cro-Magnon tribe’s ace yarn spinner suddenly breaking off his tale before a circle of enraptured listeners. He announces the hour is late, the fire burnt down, all the Neolithic hooch drained.

So—they’ll have to wait a moon or two for the conclusion. That primal “to be continued” must have been sorely frustrating. But one conceives that it also conjured up a bevy of exciting fantasies about mighty Og’s slaying the monstrous mammoth, rescuing future Mrs Og to share his man cave.

The serial format has ranged across every genre in every time and place—embracing epic, saga, Dickens’s masterpieces (published in monthly installments), banana-peel comedy, and banal soap operas. For decades, prime time network TV thrived on the serial format—pitching series at every brow (mostly low- and mid-).

In the wake of popular BBC/Masterpiece Theater series—from I, Claudius (1976) to Downton Abbey (2016)—major cable networks like HBO and Showtime, followed by new kids on the block like Netflix and Amazon, have increasingly turned to serial programming. As always, industry financial considerations figured prominently in the move.

Compared with big network series, cable fare generally has lower production costs and is more easily cancelled. Producers’ fervent hope is for that Big Box Office Kahuna, when avid fans cry out for more, and multiple seasons generate staggering profit: Game of Thrones (2011, et seq), an obvious case in point.

We are lucky to be living through a time of unprecedented cable excellence. A cornucopia of American and international series are hallmarked by riveting plots, magnificent casts, and exquisite-realized milieus—whether Victorian stately homes or prohibition-era Atlantic City. Sadly, the field is already becoming crowded with flimsier stuff. So, enjoy the good times while they last!

The following short takes on three favorite series cover widely different subjects, are notable for accomplished technical craft, depth of characterisation, and psychological resonances.

**NETFLIX**

**Shtisel**

From Israel comes Shtisel, a nuanced depiction of a fiercely patriarchal Jerusalem Hasidic community. Its traditions mandated to be unchanged until the Messiah’s advent. Marriages, commonly arranged after two dates, yield a throng of children to continue their parents’ pious practice. Meanwhile the community has to deal with the lure of the secular world as well as the recurrent doctrinal disputes with other ultra-orthodox groups.

The protagonist is Rabbi Shiloh Shtisel, teacher and later principal of a children’s Talmud Torah school. His avuncular presence reminds one of Sholom Aleichem’s tender hearted Tevayah—until he opens mouth, and out pops anti-Tevayah.

In Dov Glickman’s magisterially turbulent performance, Shtisel’s dismissive jeremiads are provoked by the least opposition to his iron will. The characters rarely speak about their inner lives. Potentially troublesome motives are repressed or consciously disavowed. Shtisel is even more alixithymic on this score than others.

He is infuriated when a matchmaker’s report deems him merely an “eater and smoker”—he’s both, big time—because he conceives himself a major educator. He never cops to shamelessly manipulating his children if they threaten to stray from obedience to the Divine Will—as he conveys it.

He wheedled one son, a promising singer, to sacrifice his gift for the Talmudic study house. Another daughter fled his domination to marry a Lubavitcher Hasid. Shtisel views the Lubavitch as Satan’s spawn.

In the second season one discovers this petty tyrant possesses a Tevayah soft side after all. It’s evident in his abiding affection for his students, the ancient mother who knows him like a book, and his deceased wife Dvora. She strove to nurture the better angels of his nature behind the scenes—a familiar strategy in similar rigorous patriarchies. He finally confronts his desolating grief in the series’ unsettling conclusion.

Shtisel’s deepest wrath—and warmth—is compelled by his youngest son, the dreamy Akivah who lives with him in harmonious disharmony. Akivah is tagged with the dreaded sobriquet of “screw-up” for repeatedly rejecting desirable matches and a settled life. Instead he pursues a remarkable artistic talent that is anathema to his father.

I admire Shtisel for its scrupulously unjudgmental portrayal of a culture too facilely condemned by
the political correctniks. The series refuses convenient resolutions. The construction of Hasidic custom is amply recognized; but one also appreciates the nurturing and support offered by this holy community to its people.

The price may seem heavy, but the cost of alienation spurred by assimilation is also intimated. According to Hasidic perception, the latter proceeds inevitably from the broken covenant of secular Judaism with an omnipotently loving God.

NETFLIX

Call My Agent

French cinema has always featured a unique brand of hectic comedy, with madcap characters, convoluted plots, ratatat dialogue, and racy sex. Its conventions are squarely grounded in the popular bedroom farces of the 19th century Parisian stage. French movie farce was congenially influenced by Hollywood screwball comedies of the thirties and forties.

That unique Gallic humor continued to flourish abroad. But with the exception of a few pictures like the original La Cage Aux Folles (1978), it hasn’t appeared in American theaters except in borrowed Anglophone roles—eg, the Pink Panther Clouseau series.

Call My Agent (2015) recaptures the genre’s pixilated essence. The aging chief of ASK, a high-octane Parisian talent agency, drops dead on his first and only vacation. His partners are left to fend and claw amongst themselves, while nurturing a narcissistic clientele clamping to have every loopy whim instantly gratified.

Actual stars of French screen and stage sweeten the kitty—inter alia Isabelle Huppert, Natalie Baye, and Francois Bertrand. Piquantly, one doesn’t know if they are playing or playing at playing themselves.

At the series’ whimsical heart are the frenetic, funny, and in the end poignant relationships between the survivors as they jockey for pelf and themselves.

In the end he accepts his children and West’s protective affection. You don’t often find better than this on or off screen.

POETRY OF THE TIMES

Dr Berlin is Instructor in Psychiatry, University of Massachusetts Medical School, Worcester, MA. ☞

Patient Interviewing 101

Richard M. Berlin, MD

Always ask the name of their dog.

Though silence is a tool that works, the best interviews are dialogues.

You want them engaged when you do your job.

Each session spans an empathic arc

Buster’s presence creates a spark—their joy animates the dialogue.

You want them engaged when you do your job.

Each session spans an empathic arc

Let the interview unfold as dialogue and patients will reveal the way they bark.

Always ask the name of their dog.
THE COMPLICATED PATIENT
A Lexicon of Complex Patients in Psychiatric Practice

We hope these perspectives on different types of complicated patients will improve your ability to understand and treat these complex patients in your own practice.


It is certainly true that none of our articles in this Special Report deal with simple kinds of patients; and all of our authors had to assemble many moving parts for their coherent, comprehensible pieces.

We often make the mental health treatment world convoluted for those patients who are deaf or hard of hearing in ways those without hearing loss often do not appreciate. Fortunately, the article by Kimberly Mathos, DO, MPH, raises our cultural competence in being able to communicate professionally with persons who are deaf or have hearing loss so that we can make a better diagnosis and treatment plan.
Diabetes mellitus is a systemic chronic disease, and though as physicians we are well aware of the detrimental effect of diabetes on the heart, kidney, nerves, and eyes, we often forget that it is inextricably bound up with psychiatric symptoms. Awais Aftab, MD, Sidra Qadir, MD, and Muhammad Hasnain Abbas, MD, provide a primer on the management of anxiety disorders in individuals with diabetes.

Finally, these days many of the most exciting new research articles are on pharmacogenomic studies. It may be that my brain is just getting old, but I find these to be very torturous articles. Alessandro Serretti, MD, PhD, and Chiara Fabbrini, MD, PhD, untangle two of the most cutting-edge areas in psychiatry: treatment resistance and pharmacogenetics. Their overview of how pharmacogenomics can be a powerful tool to overcome the obstacles of treatment resistance is user-friendly for old and young psychiatrists alike.

These thumbnail sketches of the articles in this Special Report produce an impressionistic sketch of the meaning of the word complicated in psychiatric practice.

A patient can be complicated because of an unusual presentation we were not trained to assess, such as a deaf person. A patient can be complicated for one practitioner and yet not for another: a psychiatrist who has a strong basic science background such as our new Editor-in-Chief probably finds subjects like pharmacogenetics to be easy reads whereas a medical psychiatrist like myself would feel far more able to understand an article about diabetes patients who have anxiety.

Treating a patient may be complicated because of a lack of resources in the community or knowledge of how to access those resources. And last but not least, a patient may be complicated as a result of having too many cooks in the prescribing kitchen who are faced with a multi-syndromal patient in an era in which medication management is both our blessing and our curse as clinicians.

We hope these perspectives on different types of complicated patients will improve your ability as practitioners to understand and treat these complex patients in your own practice.

Dr Geppert is Professor, Department of Psychiatry and Internal Medicine, and Director of Ethics Education, University of New Mexico School of Medicine in Albuquerque, NM; she is also Health Care Ethicist, Ethics Consultation Service, VA National Center for Ethics in Health Care. She is also an Editorial Board Member of Psychiatric Times.

Reference

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ased on estimates by the International Diabetes Federation, there are 451 million people with diabetes mellitus worldwide and the prevalence is projected to increase to 693 million by 2045. Worldwide, five million deaths were attributed to diabetes in 2017 and global health care expenditure incurred for diabetes in that year was 850 billion US dollars. The prevalence of diabetes mellitus in the US is variously estimated to be around 7% to 9%. Type 2 diabetes mellitus (T2DM) is the more common subtype of the disorder, accounting for 90% to 95% of the cases; the remaining are predominantly type 1 diabetes mellitus (T1DM).

Anxiety disorders are also highly prevalent in the general population, particularly in those with medical illnesses such as diabetes. The umbrella term anxiety disorders includes a variety of psychiatric conditions characterized by excessive, impairing, and dysfunctional patterns of anxiety symptoms. Generalized anxiety disorder (GAD), social anxiety disorder, specific phobia, and panic disorder are all common anxiety disorders with varying rates of prevalence. PTSD and OCD used to be classified as anxiety disorders but are currently classified in DSM-5 in the Trauma and Stressor Related Disorders and Obsessive Compulsive and Related Disorders respectively.

Aside from specific anxiety disorders, anxiety symptoms not meeting criteria for a specific disorder, or sub-threshold anxiety symptoms, are also common in the population and can nonetheless be distressing and impairing. In a study conducted across 15 primary care clinics in the US, 19.5% of 965 patients had at least one anxiety disorder; 7.6% had GAD, 6.8% had panic disorder, 6.2% had social anxiety disorder, and 8.6% had PTSD. Close to half (41%) of the patients with anxiety disorders were receiving no active treatment.

Association between anxiety and diabetes
Comorbid anxiety disorders and diabetes mellitus is known to occur more than would be predicted by chance alone. In a meta-analysis of 12 studies including data from nearly 13,000 individuals with diabetes, diabetes was associated with an increased probability of anxiety disorders (odds ratio [OR] = 1.20) as well as anxiety symptoms (OR = 1.48).

Analysis of data from the 2006 Behavioral Risk Factor Surveillance System (N = 201,575; 20,142 with diabetes) revealed that after adjusting for educational level, marital status, employment status, current smoking, leisure-time physical activity and body mass index, individuals with diabetes had a 20% higher prevalence of lifetime diagnosis of anxiety than those without (prevalence risk 1.20; 95% CI 1.12, 1.30). Young adults (aged 18-29 years) and Hispanics were noted to be at higher risk compared with other age and ethnic groups respectively.

In a systematic review of 18 studies, prevalence of GAD was 14% in individuals with diabetes. The prevalence of anxiety disorder not otherwise specified (subsyndromal presentations) and of elevated anxiety symptoms were reported to be 27% and 40%, respectively. Anxiety symptoms were higher in diabetic women compared with men and similar in patients with T1DM versus T2DM.

Effects of anxiety on outcomes in diabetes
Anxiety symptoms, including those of subclinical severity, are associated with a variety of poor outcomes such as increased risk of diabetic complications, increased pain, unhealthy self-care behaviors, greater disability, greater depression, increased BMI, decreased quality of life, poor functioning, and increased utilization of health care resources.

Several studies have reported an association between anxiety and glycemic control in diabetes. For instance, a 2011 study found significant correlations between anxiety symptom severity (measured by Hospital Anxiety and Depression Scale) and BMI (correlation coefficient r = 0.34), HbA1c levels (r = 0.41), post-prandial blood glucose levels (r = 0.51) and daily physical exercise (r = -0.25). A 2002 meta-analysis reported that anxiety was significantly as-

Treating Patients With Comorbid Anxiety and Diabetes Mellitus

**SIGNIFICANCE FOR PRACTICING PSYCHIATRISTS**
The comorbidity between anxiety and diabetes mellitus has important implications in screening, diagnosis, and treatment. This article equips practicing psychiatrists with clinically relevant knowledge and tips to manage these complex patients.

- Diabetes mellitus is associated with an increased likelihood of anxiety disorders as well as anxiety symptoms.
- Anxiety in diabetes mellitus is associated with a variety of poor outcomes such as increased risk of diabetic complications and greater disability.
- The American Diabetes Association recommends that patients with diabetes mellitus be screened and assessed for symptoms of diabetes distress and anxiety.

**Reference**
Comorbid anxiety may also have a relationship with inflammatory markers in diabetic subjects. Higher levels of phobic anxiety in women with diabetes have been associated with higher leptin and soluble TNF-alpha receptor II, and emotion dysregulation has been significantly associated with higher levels of C-reactive protein in African-American women with T2DM. 10,11

Meta-cognitive beliefs (such as “worrying about the future keeps me prepared” or “worry is uncontrollable”) are associated with anxiety as well as depression with both T1DM and T2DM. In a study of nearly 2000 people with T2DM, those with elevated anxiety and/or depression symptoms were less likely to report adhering to self-care recommendations, and were more likely to have poor eating habits, reduced physical activity, and increased risk of smoking.12

Anxiety has also been associated with increased mortality risk in diabetics. In an 18-year Norwegian longitudinal study of T2DM, mortality risk in individuals with diabetes increased in the presence of depression or anxiety, or both. This increased mortality risk was lowest for symptoms of anxiety, higher for comorbid depression-anxiety, and highest for depression.13

At the same time, anxiety symptoms may predispose some people with diabetes to be more receptive to self-management training approaches. In one randomized controlled trial (RCT) of group-based self-management training directed at patients with serious mental illness and T2DM, those with anxiety comorbidity demonstrated greater improvement in HbA1c with the intervention.14 One possible explanation may be that anxiety symptoms, particularly in the mild to moderate range, may make some people with diabetes more receptive to self-management training by enhancing the awareness and worry surrounding the potential risks of poorly controlled blood glucose.

Mechanisms underlying anxiety-diabetes comorbidity

Three categories of explanations have been proposed to explain this link between diabetes and anxiety. The first two postulate a direct causal link between the two, while the third sees this association as resulting from mutual relationship with other factors.

These three hypotheses are not mutually exclusive, and all three may very well be true (Box). 1

1 Anxiety as a risk factor for the development of diabetes. This hypothesis pertains to the physiological effects of chronic anxiety on the hypothalamic pituitary axis (HPA) that leads to an increase in diabetogenic hormones such as glucagon, epinephrine, norepinephrine, cortisol, and growth hormone in the body. It has been noted that stressful events can trigger the development and progression of diabetes in at-risk individuals. In a Swedish longitudinal study, individuals who reported elevated symptoms of depression and anxiety at baseline had increased risk of T2DM at 10-year follow-up.15

2 Diabetes as a risk factor for the development of anxiety. This hypothesis views anxiety as a response to the stress of diagnosis and management of diabetes. The news of the diagnosis itself as well as the stress of day-to-day management can be a significant source of distress. Many persons with diabetes experience fear of losing control over their health and have difficulty following recommended life style modifications, adhering to regular blood glucose monitoring, and incorporating dietary changes. Furthermore, development of complications associated with diabetes such as neuropathy and cardiovascular disease can be anxiety inducing.

3 Anxiety and diabetes are indirectly related via mutual factors. Factors such as pain, disability, depression, obesity, and inflammatory markers are independently associated with diabetes as well as anxiety, and the presence of one or more of these factors may underlie some of the comorbidity seen between the two conditions.

Physical symptoms of anxiety, particularly during panic attacks, such as increased heart rate, sweating, trembling, nausea or abdominal distress, feeling dizzy, numbness or tingling sensations can mimic symptoms during hypoglycemic states. Patients with diabetes may develop a phobia for needles or they may show an excessive fear for hypoglycemic episodes, and these anxiety reactions can result in poor glucose monitoring, non-adherence with insulin administration as well as deliberately maintaining hyperglycemic states to mitigate the fear of hypoglycemia. These anxiety and phobic symptoms may be particularly prominent in children with T1DM.

Evaluation and diagnosis of anxiety in diabetes

Patients with unusual features of anxiety such as late onset, weight loss, in this assessment (with the explicit consent of the patient) and referring to a mental health specialist if indicated.16 Patients with diabetes who have a history of psychiatric disorders are at increased risk for depression and anxiety symptoms, and these high-risk patients should be monitored more vigilantly for symptoms of anxiety.

The 7-item self-report anxiety scale GAD-7 is a valid and efficient tool to assess for anxiety and was noted to have a sensitivity of 89% and specificity of 82% for diagnosis of GAD.17 It can be used to assess response to treatment, and it is a good indicator of symptom severity. GAD-2, which consists of the first 2 items of GAD-7, is also utilized as a screening instrument. It uses a cut-off of 3 and has a sensitivity of 80% and specificity of 81%.18

GAD-7 also performs reasonably well as a screening tool for anxiety disorders other than GAD. It is common for outpatient primary care practices to screen all patients with GAD-2 and administer GAD-7 to those who screened positive. GAD-2 and GAD-7 are appropriate screening instruments for patients with diabetes. It is important to note that GAD-7 is a screening instrument, and any diagnosis of an anxiety disorder requires a clinical interview.

Hypothized Mechanisms Underlying Anxiety–Diabetes Comorbidity

- Diabetes mellitus
- Anxiety disorders
- Putative common risk factors
  - Shared genetic predisposition
  - Obesity
  - Unhealthy diet
  - Sedentary lifestyle
  - Inflammation
  - Depression
  - Pain
  - Disability
- Diabetes may predispose individuals to anxiety from stress related to diagnosis, management, or complications
- Chronic anxiety may predispose individuals to diabetes due to an increase in diabetogenic hormones

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THE COMPLICATED PATIENT
Although there is concern regarding weight gain as a potential adverse effect of antidepressants, research overwhelmingly shows that antidepressants have a favorable effect on glycemic control. 

| Dr Qadir is Second-Year Psychiatry Resident, Georgetown University Hospital, Washington, DC, Dr Abbas is Third-Year Psychiatry Resident, Howard University Hospital, Washington, DC, Dr Affal is Geriatric Psychiatry Fellow, University of California San Diego, La Jolla, CA; he is also a member of the Psychiatric Times Advisory Board. The authors report no conflicts of interest concerning the subject matter of this article. |


table 2. Clinical tips for the treatment of anxiety comorbid with diabetes

- Where possible, start with lower doses of antidepressants to minimize anxiogenization and risk of hypoglycemia
- Avoid psychotropic medications with high metabolic risks, or if necessary, use with caution and monitoring (eg, paroxetine among SSRIs, mirtazapine, atypical antipsychotics such as quetiapine and olanzapine)
- Duloxetine may be useful in the presence of diabetic neuropathy, as it may help with neuropathic pain as well as anxiety; gabapentin and pregabalin can similarly be helpful with both anxiety and neuropathic pain
- Avoid beta-blockers or use with caution; they can mask the warning signs of hypoglycemia and can potentially enhance the hypoglycemic effect of sulfonylureas
- Since diabetes impairs renal function, attention should be paid to psychotropics that have significant renal clearance (for example); adjust dose if renal impairment is present

Dr Qadir is Second-Year Psychiatry Resident, Georgetown University Hospital, Washington, DC, Dr Abbas is Third-Year Psychiatry Resident, Howard University Hospital, Washington, DC, Dr Affal is Geriatric Psychiatry Fellow, University of California San Diego, La Jolla, CA; he is also a member of the Psychiatric Times Advisory Board. The authors report no conflicts of interest concerning the subject matter of this article.

References
Overcoming Treatment Resistance
Can Pharmacogenetics Help?

Chiara Fabbri, MD, PhD
Alessandro Serretti, MD, PhD

Psychiatric disorders affect more than 1 billion people globally and are among the leading causes of disability worldwide in all age ranges from 5 to 75 years. A careful clinical evaluation is the first step in making an accurate diagnosis and treatment decision. However, the complexity of many cases or the effect of unmeasured biological markers (biomarkers) may make this approach difficult. Various psychotropic medications belonging to different classes are available, which contributes to the difficulty in making treatment decisions. Consequently, multiple drug switches or combinations/augmentations are a frequent practice and months may be required before finding an effective and well-tolerated treatment. Approximately 50% of patients with depression do not respond to at least one antidepressant. Moreover, poor treatment adherence often due to adverse effects is frequent and may be one of the causes of treatment resistance.

In this scenario, the use of biomarkers, and specifically genetic variants, to tailor treatment to the individual is an option to improve mental health care by increasing remission rates and reducing the incidence of adverse effects. Genetic variants are involved in the inter-individual differences in psychotropic drug pharmacokinetics and pharmacodynamics. Compared with other types of biomarkers such as neuroimaging brain measures or plasma proteins, genotyping has several advantages: it is easy and quick to perform (the patient can collect the sample using a saliva kit at home), it is economically affordable, and the information generated does not change over time and can be used life-long. These facts explain why psychiatric pharmacogenetics has become a central interest for academic and non-academic institutions and of course for patients and caregivers.

The circumstances requiring the prescription and/or interpretation of a pharmacogenetic test are becoming more and more frequent in everyday psychiatric clinical practice. In some cases, a patient may come for the initial visit to a psychiatrist’s office with the results of a pharmacogenetic test. He or she asks for “the right” prescription based on the results. Some key questions arise at this point: is this the best option to guide treatment choice in this patient? How to translate the information into a prescription?

In other cases, it might be the clinician who wonders if pharmacogenetic testing should be recommended: for example, in a patient with a history of treatment resistance or poor tolerability to several drugs. The answers are not always straightforward.

Pharmacogenetic testing: genotyping
There is sufficient evidence for the clinical application of pharmacogenetic testing guiding drug choice and dose (Table). Except for the HLA-A and HLA-B genes, which code for the human leukocyte antigens involved in the pathogenesis of the Steven-Johnsons Syndrome, all the other reported genetic variants affect both the risk of nonresponse and adverse effects, because they mediate drug hepatic metabolisms and drug plasma levels. Two cytochrome P450 (CYP450) enzymes, CYP2C19 and CYP2D6, metabolize the most antidepressants and antipsychotics, and the corresponding genes are highly polymorphic. Polymorphisms carried by an individual in each of these CYP450 genes define the patient’s metabolizing status, which can be normal (extensive metabolizer), increased (ultrarapid metabolizer), decreased (intermediate metabolizer), or severely decreased/completely defective (poor metabolizer).

Variants in the CYP2D6 gene are examples of pharmacogenetic biomarkers supported both by the Clinical Pharmacogenetics Implementation Consortium (CPIC) and the Dutch Pharmacogenetic Working Group (DPWG) for several antidepressants and antipsychotics. Recommendations include to avoid drugs mostly metabolized by CYP2D6 (eg, several tricyclic antidepressants, paroxetine, risperidone) in patients with altered function of this enzyme or alternatively they suggest dose adjustments and increased monitoring to avoid adverse effects in poor metabolizers and treatment failure in ultrarapid metabolizers (Table and Figure 1).

Recommend pharmacogenetic testing
Current guidelines provide no advice on when, or to whom, genetic testing should be offered. This is due to the lack of data regarding which patients will garner the most benefit from testing and for whom it will be most cost effective. Large non-sponsored trials are expected to clarify this point in the next few years, but in the mean...

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**Significance for Practicing Psychiatrists**
Knowing the clinical applications of pharmacogenetics is becoming essential as the number of psychotropic medications with a pharmacogenetic biomarker is increasing rapidly according to clinical guidelines and drug labels. Genetic variants may be useful to guide medication choice and dosing in patients with inadequate response to at least one previous treatment.

- Pharmacogenetic testing is a decision-support tool to assist in thoughtful implementation of good clinical care.
- Genetic variants in genes responsible for drug metabolism can be used to guide antidepressant/antipsychotic choice and dosing.
- Pharmacogenetic biomarkers have evidence of usefulness in guiding drug prescription in patients who had inadequate response to at least one previous treatment.

**Table**

<table>
<thead>
<tr>
<th>Protein</th>
<th>Metabolism Class</th>
<th>Metabolic Status</th>
<th>Clinical Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYP2D6</td>
<td>Extensive</td>
<td>Normal</td>
<td>Use a lab with a clinical certification</td>
</tr>
<tr>
<td>CYP2D6</td>
<td>Intermediate</td>
<td>Increased</td>
<td>Poor or intermediate metabolizer for CYP2D6 or CYP2C19</td>
</tr>
<tr>
<td>CYP2D6</td>
<td>Ultrarapid</td>
<td>Decreased</td>
<td>Uratarapid metabolizer for CYP2D6 or CYP2C19</td>
</tr>
<tr>
<td>CYP2D6</td>
<td>Poor</td>
<td>Decreased</td>
<td>Extensive metabolizer for CYP2D6 and CYP2C19</td>
</tr>
<tr>
<td>CYP2C19</td>
<td>Poor</td>
<td>Decreased</td>
<td>Avoid drugs metabolized by the defective CYP450 or reduce starting dose + increased monitoring</td>
</tr>
</tbody>
</table>

**Figure 1. Illustration of when and how to perform pharmacogenetic testing in psychiatric care**

- Use a lab with a clinical certification
- Poor or intermediate metabolizer for CYP2D6 or CYP2C19
- Uratarapid metabolizer for CYP2D6 or CYP2C19
- Extensive metabolizer for CYP2D6 and CYP2C19
- Avoid drugs metabolized by the defective CYP450 or reduce starting dose + increased monitoring
- Avoid drugs metabolized by the hyperactive CYP450 or titrate dose to upper standard limit + increase monitoring
- Use clinical criteria to guide drug choice

CPIC, Clinical Pharmacogenetics Implementation Consortium; DPWG, Dutch Pharmacogenetic Working Group.
TABLE. Overview of the recommendations provided by the Clinical Pharmacogenetics Implementation Consortium and the Dutch Pharmacogenetic Working Group

<table>
<thead>
<tr>
<th>Drug</th>
<th>Gene(s)</th>
<th>Synthesis of recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitriptyline</td>
<td>CYP2D6, CYP2C19</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>CYP2D6</td>
<td>Reduce maximum dose to 10 mg/d in PMs</td>
</tr>
<tr>
<td>Atomoxetine</td>
<td>CYP2D6</td>
<td>Insufficient data to calculate dose adjustments; PMs probably do not need dose increase; be alert to reduced efficacy or select alternative drug in UMs</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>HLA-A, HLA-B</td>
<td>If patient is carbamazepine-naive and carries one of the risk alleles (HLA-A<em>31:01 or HLA-B</em>15:02) do not prescribe carbamazepine</td>
</tr>
<tr>
<td>Citalopram</td>
<td>CYP2C19</td>
<td>Consider an alternative drug in UMs or titrate dose to a maximum of 150% and a 50% reduction of the standard starting dose in PMs</td>
</tr>
<tr>
<td>Clomipramine</td>
<td>CYP2D6, CYP2C19</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Desipramine</td>
<td>CYP2D6</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Doxepin</td>
<td>CYP2D6, CYP2C19</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>CYP2C19</td>
<td>Consider an alternative drug in UMs or titrate dose to a maximum of 150% and a 50% reduction of the standard starting dose in PMs</td>
</tr>
<tr>
<td>Fluvoxamine</td>
<td>CYP2D6</td>
<td>Consider a 25%-50% reduction of recommended starting dose in PMs</td>
</tr>
<tr>
<td>Imipramine</td>
<td>CYP2D6, CYP2C19</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>CYP2D6</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Oxcarbazepine</td>
<td>HLA-B</td>
<td>If patient is oxcarbazepine-naive and carries HLA-B*15:02 do not prescribe oxcarbazepine</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>CYP2D6</td>
<td>Select an alternative drug in UMs; consider alternative drug or 50% reduction of the standard starting dose in PMs</td>
</tr>
<tr>
<td>Risperidone</td>
<td>CYP2D6</td>
<td>Select alternative drug in PMs, IMs, and UMs or be extra alert to adverse drug reactions and adjust dose to clinical response</td>
</tr>
<tr>
<td>Sertraline</td>
<td>CYP2C19</td>
<td>50% reduction of the standard starting dose or alternative drug in PMs</td>
</tr>
<tr>
<td>Trimipramine</td>
<td>CYP2D6, CYP2C19</td>
<td>Avoid drug in PMs and UMs or consider dose adjustments</td>
</tr>
<tr>
<td>Venlafaxine</td>
<td>CYP2D6</td>
<td>Select alternative drug in PMs and IMs or adjust dose; titrate dose to a maximum of 150% of the normal dose or select alternative drug in UMs</td>
</tr>
<tr>
<td>Zuclopenthixol</td>
<td>CYP2D6</td>
<td>Reduce dose by 25%-50% or select alternative drug in IMs and PMs, respectively; be alert to low drug plasma concentrations or select alternative drug in UMs</td>
</tr>
</tbody>
</table>

*Recommendation from DPWG only; †Recommendation from CPIC only.

The need for a cautious interpretation is confirmed by a case report showing that pharmacogenetic testing may be misleading when the scientific evidence is not definitive, and a complete clinical evaluation is not performed. In this case, the patient had treatment-resistant schizophrenia and had been struggling with the disease for years. He had had multiple hospitalizations and lack of response to multiple medications, including haloperidol, olanzapine, ziprasidone, and paliperidone. The clinical team considered the patient’s documented history of antipsychotic resistance and concluded that a trial of clozapine would be the next appropriate step. However, the results of a pharmacogenetic test advised against the prescription of clozapine because of a variant in the dopamine receptor 2 (DRD2) gene, which was associated with poor clozapine response. Nonetheless, the clinical team reached a consensus to try clozapine; the patient subsequently had a rapid improvement on 400-mg clozapine daily and gradually returned to the previous level of autonomous functioning.

**Conclusions**

Pharmacogenetic testing can provide helpful guidance in the choice of treatment when applied in accordance to the available guidelines (Table). The current evidence suggests that testing can be helpful in patients who have experienced an adverse drug reaction or inadequate response to at least one previous treatment, including patients with treatment-resistant disorders.
The Psychiatric Assessment of People Who Are Deaf or Hard of Hearing

Kimberly Mathos, DO, MPH

Hearing loss is the sixth most common disability in the US with a prevalence of 9.4%. According to the National Institute of Health, 2 or 3 out of every 1000 children are born with a detectable hearing loss in one or both ears. More than 90% of children who are deaf are born to hearing parents. Approximately 15% of American adults aged 18 years and older have trouble hearing. Hence, the prevalence of hearing loss varies significantly with age.

Hearing loss before the development of language has a major impact on communication, identity, and social development, as well as how mental health symptoms present. Learning to effectively perform a psychiatric evaluation and treat people who are deaf or hard of hearing is an important clinical skill. Few providers feel competent in this area.

In psychiatric training, we learn to ask questions about a person’s upbringing, his or her culture as well as educational background, current stressors, and physical health history. We assess a person’s language, communication skills, emotional health history, peer group, and available support system. When we assess people with hearing differences, we can expand on these basic probes. The first step in the assessment of people with hearing loss or deafness is to inquire about their language and the accommodations that are preferred by the patient for effective communication in the healthcare setting. Some people will prefer to rely on their residual hearing and will use hearing aids or FM system amplification.

A personal FM system is a wireless assistive hearing device that will enhance the use of hearing aids or cochlear implants. It can also help people who are hard of hearing who do not wear hearing aids over distance and noisy environments. FM systems enable sound to be picked up close to the speaker and transmitted directly to the patient’s ear to provide greater clarity. Others can be fluent in American Sign Language and will request an interpreter.

It is important in a psychiatric assessment to review some basic issues such as:

- Degree of hearing loss
- Age of onset of hearing loss or deafness
- Language development and identity
- Perceptions and knowledge about mental health
- Manner that hearing loss or deafness has influenced their life
- Whether communication issues remain as a chronic stressor
- Accessibility of mental health resources

Quantifying hearing loss

When a person is struggling to hear spoken language, psychiatrists should discuss with the patient services that an audiologist can offer. The audiologist will quantify and will map what sound a person can hear in each ear at different levels of loudness. For example, Figure 1 illustrates that a person with normal hearing hears sounds as soft as 20 decibels (dB) at low frequencies from 250 to 8000 hertz. Someone who has moderate hearing loss would only be able to recognize sounds that were present at an average sound level of 50 decibels.

Most speech sounds occur at a loudness of between about 30 and 40 decibels. The range of sounds that must be heard in order to understand spoken English is typically referred to as the “speech banana.” This area is represented by the shaded area on the audiogram in Figure 2. If a person has even a mild hearing loss in the 10-20
decibel range, clear understanding of speech is negatively impacted.

Hearing loss in late life
The incidence of hearing loss in senior citizens is quite high. Approximately one in three people between the ages of 65 and 74 have hearing loss. Among senior citizens, high-frequency hearing loss is very common (Figure 3). Hair cells in the cochlea can become damaged as we age. As a result, high pitched sounds from between 4000 to 8000 hertz are no longer easily audible.

There is a complex correlation between hearing loss and depression. It is important for people who have hearing loss and their families to be informed of the effects of hearing loss on self-esteem. People with hearing loss often find communication to be difficult. This can lead people with hearing loss or deafness to feel socially isolated, stressed, and fatigued.1,4

After a thorough evaluation, an audiologist can fit a person with a hearing aid. A hearing aid can amplify sound to help some people understand spoken language better. Audiologists may also inform patients about new assistive technologies that can enhance life. Devices such as amplified or captioned phones, FM systems, or sound field loops can be recommended for use at public theatres. Audiologists can assist in finding payment plans if insurance companies do not cover the cost of hearing aids.

Studies show that once sound amplification is achieved self-esteem is improved and anxiety are reduced.5 Moreover, sound amplification increases environmental awareness and can slow the progression of dementia and speed the resolution of delirium as well.6

Prelingual hearing loss/deafness
Hearing loss can happen at any age. Congenital hearing loss is estimated to occur in about 2 in every 1000 births. Numerous factors have been identified that may cause hearing loss congenitally. Exposure to cytomegalovirus, toxoplasmosis, rubella, measles, and mumps in utero may lead to hearing loss. Hypoxia and intraventricular hemorrhage are other possible causes. Genetic factors and syndromes are other commonly reported causes of hearing loss; however, most hearing loss is not heritable.

In 1993, the NIH held a consensus development conference that endorsed the screening of all newborns for hearing loss before they leave the hospital. Now hearing loss is identified earlier compared with 30 years ago, and intervention efforts begin much more quickly. Before newborn hearing screening became standard practice, hearing loss was often not recognized until a child entered school.

Because most children with hearing loss have hearing parents, many new questions will arise. Early intervention professionals will educate families about options for amplification if hearing loss is mild to moderate. They may raise the options of learning American Sign Language or obtaining a cochlear implant if hearing loss is severe to profound. These decisions may be overwhelming for parents. Some parents who are deaf themselves may have very strong opinions about acceptable interventions for their deaf child and may be quite opposed to surgical interventions such as cochlear implants.7

Child psychiatrists can encourage family members to learn all there is to know about amplification and language development; families can learn American Sign Language. The American Society for Deaf Children (deafchildren.org) can help providers to familiarize themselves with the many challenges of raising a deaf child.

As a child transitions to the educational system, parents must decide about which type of school placement will best match their child’s language and learning needs. Before 1975, 80% of deaf students were educated in special schools for the deaf. After the Education of All Handicapped Children Act passed, which called for children to be educated in the least restrictive environment with non-handicapped peers, enrollment in specialized schools sharply declined.

Students with hearing loss are now commonly educated with children who have no hearing loss. Inclusion may include an assortment of additional supportive services for the child such as note takers, interpreters, teacher’s aids, teachers of the deaf, and audiological services. Deaf and hard of hearing children often struggle with reading and language related courses. Parents should be encouraged to seek re-evaluation and ask for tutoring support if their child is struggling.

In an inclusion model, some deaf children may find it quite difficult to communicate with classmates and teachers.5,6 Deaf educators who are proponents of self-contained classes or specialized schools for the deaf note higher self-esteem among students when they are with a peer group with whom they can freely communicate. Because the educational placement options that parents must choose are so vastly different, it is important that child psychiatrists encourage parents to tour all school options that are available to them. Encourage parents to consult with other parents and professionals.

Identity
The school and language choice that is made by parents for their deaf or hard of hearing child has a major influence on the child’s developing identity. As children mature, they should be encouraged to further explore their social identity. Young people may preferentially socialize with other deaf or hard of hearing people. Youths will assess their communication comfort in relationships with hearing peers as well. Young adults may identify a greater sense of belonging with one peer group over another.

Young adults may elect to go to colleges with proportionately more deaf or hard of hearing students. The National Technical Institute of the Deaf in Rochester, New York and Gallaudet University in Washington, DC, are two such post-secondary schools.
Social supports/peer group
Deaf clubs exist in most large cities. These clubs serve as social hubs for people who are fluent in American Sign Language (ASL). Club members self-identify as being part of a deaf culture that has distinct values, traditions, and pride in fluency in ASL.
Members of this community share a strong sense of belonging and identity in which they are quite invested. Members of this community might reject the idea of “impairment” and prefer to be viewed as being from a linguistic minority.

People who identify as being “hard of hearing” generally more readily accept the notion of having a hearing disability. Typically, they are more inclined to rely on residual hearing and speech reading and have a hearing aid or cochlear implant. They can benefit by joining with others who have hearing loss in a group setting. They share common experiences and discuss stressors in an environment where others can identify with the same communication struggles.

Hearing loss support groups (www.hearingloss.org) exist in most larger cities for people who self-identify as having a hearing loss. They can benefit by joining with others who have hearing loss in a group setting. They share common experiences and discuss stressors in an environment where others can identify with the same communication struggles.

Perceptions about mental health
Disparities in access to information about mental health and access to quality mental health care for people who are deaf or hard of hearing are a significant public health problem (Figure 4). All people with hearing differences may attribute the onset of mental health problems as related to communication breakdowns or to oppression related to a lack of access to information. Hence deaf and hard of hearing people may delay referral for mental health treatment. Study findings indicate that people with hearing loss of all degrees are vastly underrepresented by the mental health system for a variety of reasons.1

Barriers to mental health care exist at the patient, provider, and payor level. Patients often lack basic knowledge about what constitutes a mental health problem. They may not know where accessible treatment can be found. Providers are often ill-prepared about how to access interpreters and how to bill for them. They may be poorly informed about relevant factors that may influence history taking and assessment. And payors may not provide adequate coverage to pay for needed specialized mental health services.

Access to services
In certain states, specialized services have evolved to better serve persons who are deaf or hard of hearing. In Alabama, Minnesota, and South Carolina, a “single point of service” system has been established for deaf persons where providers in the network know ASL and issues that are relevant to the hard of hearing population.

In Pennsylvania, a resource directory of providers who themselves are deaf or hard of hearing, know ASL, and are familiar with that culture as well as audiology-related matters is available. The local list of providers is posted on the website www.healthbridgesinfo.

Building accessible mental health care services
There are no specialized services designed specifically to meet the mental health needs of signing deaf patients or hard of hearing people in most states. Disproportionately few deaf or hard of hearing people seek mental health care.1 Deaf and hard of hearing people are more inclined to present for emergency-related care than outpatients.7 Hence psychiatrists in training do not have many opportunities to learn to work with the hard of hearing. Some training sites have created online learning tools, community training collaborative, or virtual patient trainings.14 The Minnesota Department of Human Services has developed an online training as a first step in helping to familiarize mental health professionals with the topic (http://registrations.dhs.state.mn.us/RegistrationCourses/HearingLoss /welcome.intro.html).

As attention to rehabilitation medicine grows, there are efforts for the integration of rehabilitation and mental health treatment.7 In some audiology clinics, psychiatrists and other mental health clinicians are available for consultation. Some cities have created task forces where mental health providers can collaborate with advocates and deaf and hard of hearing professionals to plan joint training and service initiatives.10 Further research on best practice strategies for psychiatric training is needed. Information about assistive technology, hearing loss intervention, amplification, deaf culture, and the challenges involved in assessing the patient who is deaf or hard of hearing should become a standard part of training in psychiatric diversity training curriculum.

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References
Functional Assessment for Disability Applications

Tools for the Psychiatrist

Barbara Long, MD, PhD, Andrew O. Brown, MD, Sean Sassano-Higgins, MD, and David “Daven” E. Morrison, MD, for the Committee on Work and Organizations, Group for the Advancement of Psychiatry

A 47-year-old project manager presents with a 5-week history of sleep disturbance and other symptoms of generalized anxiety. Three months earlier her manager had retired and a new supervisor was introduced. Whereas her former manager had consistently praised the patient’s job performance and valued her contribution to the firm, her new manager seemed to do nothing but find fault with her work.

Two weeks before presenting to your office, the patient was placed on a Performance Plan by the new manager. She reports that since then her fears about the prospect of job termination have intensified to the point that she cannot concentrate and is making mistakes at work. One week before this visit she reports having a “panic attack” as she was preparing to go to work and did not go. She has not been to work for one week and is scared to return for fear that she will continue to make mistakes, which will culminate in—and be used by the new manager to justify—her termination. As your office visit with her draws to a close, she asks you to complete documentation that she will use to claim disability.

This case illustrates a problem commonly faced by psychiatrists—assessing a patient’s claim of disability. As this series discusses, there are two major issues to keep in mind: avoiding role duality, which will be discussed in a subsequent article in this series; and using an objective tool to evaluate a claim of disability and determine whether functional impairment, if present, can be reversed, and the patient can return to work.

In this article we discuss such a tool—the Functional Assessment. A Functional Assessment seeks to determine whether an individual’s capacity to execute occupationally relevant mental functions is compromised. This is accomplished by identifying the specific work-relevant mental function that is compromised, describing how the work-relevant mental function is compromised, and assessing the extent to which the work-relevant mental function is compromised.

In addressing functional capacity to work, DSM, in its categorization of mental disorders, is of limited use. A DSM diagnosis may be relevant to understanding why a work-relevant mental function has been compromised, but the diagnosis does not identify the specific mental function that has been compromised or explain why or how the mental function precludes the individual’s capacity to work. One individual with a specific psychiatric diagnosis may perform well at work while another with the same level of symptomatology and diagnosis, working at the same occupation, may claim work incapacity attributable to the diagnosis.

Domains of functional assessment

The specific mental functions that most commonly disrupt an individual’s capacity to sustain work capacity include:

1. Social Competence and/or Teamwork: This functional domain refers to the individual’s capacity to communicate, cooperate, and collaborate with peers, subordinates, or authority figures at the workplace.

2. Adaptability/Flexibility: The mental functions that subserve adaptability and flexibility relate to an individual’s capacity to change perspective in response to changing demands in the external world.

3. Conscientiousness/Dependability: These relate to an individual’s capacity to be consistently relied upon to perform the duties that he or she is charged to perform.

4. Impulse and Behavioral Control: Usually the impulses that are most likely to impair an individual’s capacity to work relate to anger and aggression, but any impaired capacity to control behavior can preclude work capacity.

5. Integrity: Integrity relates to, but encompasses more than, truthfulness and involves the consistency between an individual’s words and his or her actions, ie, whether he or she “walks the walk” in addition to “talking the talk.” This functional domain is generally more relevant to assessing an individual’s suitability to perform a specific occupation rather than his or her general capacity to work.

6. Emotional Regulation: Emotional regulation refers to an individual’s capacity to contain emotional responses adequately so that such responses do not interfere with job-relevant mental functions.

7. Decision-Making and Judgment: The level of judgment required of work is to a large extent contingent upon the individual’s occupation. As when evaluating a patient’s competency to consent to treatment, the psychiatrist must determine: does the individual have the relevant knowledge to perform this job? Does the individual understand how the knowledge base relates to his or her specific duties? Does the individual have the sound judgment to examine the relevant facts in a specific situation to be able to make a good decision?

8. Substance Use Proclivity: This domain involves making DSM diagnoses and is an important component of a functional assessment, because individuals with active substance use disorders are automatically precluded from performing many types of work, ie, safety sensitive jobs, and because global impairment of work-relevant mental functions is typically seen in intoxication.

9. Risk-Taking Behavior: This domain, which relates to impulsivity, decision-making, and judgment, is important to assess in general. However, it is particularly important in safety sensitive jobs such as law enforcement, firefighting, medicine, and other jobs where poor judgment can lead to catastrophic consequences.

10. Cognition: If cognitive impairment is present, the specific job-relevant cognitive function that is disrupted should be identified.

Work-relevant functional impairment

Functional Assessment should address treatment, ie, whether and how a functional impairment can be reversed. The most effective functional evaluations do not refer to generic treatment modalities such as “psychopharmacology” or “cognitive-behavioral therapy.” Instead, they focus on identifying the precise work-relevant functional impairment; explaining how and why the recommended treatment can be reasonably expected to reverse the specific functional impairment, and, in so doing, return the afflicted individual to work; and es-
ELECTROCONVULSIVE THERAPY

Modern ECT allows virtually all patients who need this modality to be treated safely, effectively, and with a level of tolerability previously unheard of.

The FDA on ECT: Supporting a Vital Treatment

Charles H. Kellner, MD

After many years of inaction, the FDA issued a final order on the reclassification of ECT devices in December, 2018.1,2 The very good news is that the order allows for ongoing availability of ECT devices in the US; the slightly less good news is that the new list of “on label” indications for ECT is shorter than in the past. To understand the implications of the new order, let’s review some of the background leading up to it, as well as the state of ECT in the US today.

The FDA regulates medical devices as well as drugs. As you might imagine, some aspects of this regulation are straightforward and easy to understand, but some are complicated, arcane, and highly bureaucratic. (For a review of earlier FDA actions leading up to the recent order, please see https://www.psychiatrictimes.com/electroconvulsive-therapy/fda-advisory-panel-reclassification-ect-devices.) Medical devices are classified into three risk categories, with Class I considered the safest, Class III the riskiest.

Until now, ECT devices had been “grandfathered” into Class III for all indications, and the list of “cleared indications” was depression (unipolar and bipolar), schizophrenia, bipolar manic (and mixed) states, schizoaffective disorder, schizophasic disorder, and catatonia. That list conforms well to the generally accepted uses of ECT in the US. The FDA needed to update the classification of all “grandfathered” devices, and the process (this is the complicated part) would require “premarket approval” for indications that would not be moved from Class III to Class II. Premarket approval typically requires new controlled clinical trials to demonstrate safety and efficacy, a requirement that would not be feasible, for both financial and ethical (the inappropriateness of subjecting very seriously ill psychiatric patients to placebos) reasons. Thus, it was crucial that some (at least one) of the previously “cleared indications” be moved to Class II, in order not to interrupt the availability of ECT devices for the US market.

The new ruling does just that: it moves two indications (depression and catatonia) into Class II, with “special controls.” The “special controls” are a series of requirements regarding technical parameters of the devices, labeling about adverse effects, practitioner training, and a few aspects of clinical practice.

So, what are the implications of the FDA order reclassifying ECT devices for ECT practice in the US? Most importantly, the move of the depression indication into Class II insures that the majority of ECT patients will continue to be treated without any change in their care. The way the order is written for this indication (that the depression should be “a severe major depressive episode associated with major depressive disorder or bipolar disorder in patients aged 13 years and older who have treatment resistance or who require a rapid response due to the severity of their psychiatric or medical condition”) mirrors closely clinical practice for the majority of patients referred for ECT in contemporary US practice.

The move of the indication “catatonia” to Class II is also very important, but applies to a much smaller subset of ECT patients, perhaps no more than 5%–14%. In my estimate, the two indications moved to Class II constitute 60% to 70% of current American ECT practice.

What about the other 30% to 40%? The FDA order makes it very clear that the FDA does not regulate clinical practice; they actually say this several times in the text accompanying the order: “FDA does not regulate the practice of medicine (see section 1006 of the FD&C Act [21 U.S.C. 396]). Diagnosis and treatment of patients are clinical decisions that fall within the practice of medicine.” In other words, practitioners are free to continue to prescribe ECT for any patient, regardless of diagnosis, whom they feel would benefit from the treatment.

This is similar to the freedom to use a medication for an off-label indication. The fact that the FDA chose to leave schizophrenia, schizoaffective disorder, and mania in Class III is perplexing and disappointing. Globally, schizophrenia may be the leading indication for ECT, and the clinical and research evidence base supports ECT as safe and effective for this illness.5,6

One of the issues related to the FDA’s consideration of reclassification of indications is that they have a bundled, unitary concept of “safety and effectiveness.” Thus, their review panel may not have been convinced by the data for effectiveness of ECT in schizophrenia, but this has no bearing on safety. In fact, there is no reason to believe that the safety profile of ECT differs by psychiatric diagnosis.

Overall, the FDA order allows patients who need and want ECT, as well as practitioners who perform it, to breathe a sigh of relief. ECT will continue to be an important, albeit small, part of the psychiatric armamentarium landscape. From speaking with fellow ECT practitioners around the country, it is apparent that ECT use is increasing. The ongoing enthusiasm for transcranial magnetic stimulation and ketamine (intravenous or intranasal) has done little to decrease the demand and need for ECT; indeed, many of the patients whom we see in ECT consultation have tried those newer treatments but the treatments have failed.7

The psychiatric community has a responsibility to support and promote treatments that are in the best interests of our patients, those treatments with a track record of safety and effectiveness. ECT certainly fits that bill. But organized psychiatry has always been a tad, or more, ambivalent about supporting ECT. Amazingly, there is no official path to training in ECT, there is no board certification, and it is unclear if the next generation of ECT practitioners (CONTINUED ON PAGE 27)
Chatbots: What Are They and Why Care?

Aditya Vaidyam, MS and John Torous, MD, MBI

It is definitely hard for anyone to take a robot seriously when it tries to tell you, “I too have also struggled with depression.”

The way humans communicate is and matching and cooperating with for patients interacting with chatbots. This finding makes sense as the most studied benefits of talking to a chatbot. This finding makes sense as chatbots can easily pull mental health-related information and offer alarms and reminders. But can they do even more like delivering psychotherapy or making a diagnosis?

In July 2018, we performed a systematic search of the literature in the PubMed, Embase, PsychINFO, Cochrane, Web of Science, and IEEE Xplore databases and isolated 12 studies that used a chatbot in a mental health setting with individuals at risk for or with depression, anxiety, schizophrenia, bipolar disorder, or substance abuse disorder. The review was published in the Canadian Journal of Psychiatry in March 2019. Although interest in deploying chatbots in clinical contexts is expanding, most studies are not reporting metrics for outcomes or efficacy in a standardized way but rather employing custom scales or unique outcomes, which makes it challenging to compare chatbot functionality. Some studies conducted just a few years ago are unrepeatable today because the rate of technological advancement has outpaced that of research.

Basic conversational inability Empathy and relatability are crucial yet seldom considered cornerstones for patients interacting with chatbots and matching and cooperating with the way humans communicate is paramount in the quest for humanoid chatbots. Most people use conversational fillers like “umm” and “ah” when talking naturally, and the simple omission of these filler words and pauses negatively impacts the perception of an already robotic-sounding chatbot. Aside from using variations on common phrases, this might be what chatbots need to build more rapport with patients and, in general, any user. Chatbots also don’t really understand tone of voice or the emotional subtext of language. Because they’re programmed to handle conversational cases specifically, they are typically not very good at answering open-ended “why” or “how” questions, which might lead down a tangent of irrelevance instead of an actual therapeutic conversation. Unpredictable duality of patient interaction We found evidence that some patients prefer the anonymity of talking to a chatbot instead of to a therapist. When interacting with a chatbot, these patients shared sensitive and traumatic experiences, private information that they may not have revealed during an in-person clinical encounter. In a different study, however, patients using a chatbot became more open about their emotional states when they learned that a human being was reading the script; for these patients the human element was essential in fostering trust and enabling patients to open up about their internal life and emotional challenges. Today, it remains difficult to predict which patients will engage more effectively with a chatbot and which patients will prefer the traditional model of face-to-face clinical care. Uncanny valley effect of empathy Conveying the right amount of empathy is surprisingly difficult; too much and it may come across as fake and disingenuous, but too little and the chatbot may fail to build rapport with the patient. It is definitely hard for anyone to take a robot seriously when it tries to tell you, “I too have also struggled with depression.” Of the patients who do open up to a chatbot, some might develop a view of chatbots as emotional creatures. This view of chatbots could lead to an unhealthy attachment that impedes the patient’s ability to have a real-life connection with humans. Because there are so few data regarding the therapeutic alliance between patients and clinical tools in the digital age, we have yet to determine best practices for use of these digital tools, especially in vulnerable populations. Possibility of diagnosis and intervention? Our review also suggests that chatbots are not yet able to understand complex medical inquiries or make diagnoses. When asked about—or directly informed of—suicidal ideation, built-in smartphone chatbots we reviewed either did not provide an actionable intervention or offered inappropriate responses such as “Maybe the weather is affecting you.” Some chatbots have developed the capability to detect words like “suicide” and may suggest that the user contact crisis hotlines such as the National Suicide Prevention line. While there is potential for chatbots to help patients in distress, currently there isn’t a strong evidence-base showing that chatbots can effectively intervene when patients are in crisis. Summary and outlook Flaws aside, there is a growing abundance of ongoing research on chatbots in various roles within the mental health space. The field of psychiatry must quickly determine standards of reporting, evaluation, transparency, and replication before we can make any firm clinical decisions around the use of chatbots. The field should champion new legislation to ensure the confidentiality, privacy, security, liability, competency, and even the licensure of overseeing clinicians. Even if these chatbots aren’t the virtual therapists of tomorrow, you may soon see them in clinical decision support, data processing or entry, and even in managing the clinic’s schedule.
Book Review

Islamophobia and Psychiatry: Recognition, Prevention, and Treatment

Reviewed by Renato D. Alarcón, MD, MPH

The content of this book surpasses the limits of its title. Its main merit is, perhaps, being the first publication on Islamophobia’s multifaceted nature, an exploration of the historical basis of Islam, the etiopathogenesis of a social disorder, its broad and specific clinical challenges, and its connections with the current political realities of a convulsed world. Four editors and 51 contributors from seven countries (four of them with close Islamic connections) give shape to both an attractive and an intriguing publication.

The book has four sections and 32 chapters. The first section deals with General Issues, covering from historical and conceptual topics to psychological, religious, spiritual, neurobiological, cultural, artistic, and clinical discussions about Islam. Chapter 1 is an extremely informative report on Mental Health in the Islamic Golden Era: The Historical Roots of Modern Psychiatry (622 to 1492 AD), which emphasized a harmonious connection between faith and reason, the preservation of intellectual and mental capacities, independent reasoning, anger as a barrier to sound cognitive judgment, and acceptance of scientific inquiry and Greek, Galenic teachings as the bases of Islamic medicine. The first classification of psychological illnesses was elaborated by the beginning of the 9th Century, and Islamic hospitals are described as “hubs for research, offering apprenticeships for students and disseminating the true science of cerebral illnesses.”

The balanced clinical and therapeutic management of patients with mental/ emotional conditions, the combination of somatic therapies, psychotherapy (with strong behavioral postulates) and social approaches “transcending geographical, cultural, language and religious boundaries” and reflecting a “holistic, culturally adaptive, scientific approach” are, indeed, remarkable features.

Compared with the initial chapter, the second, titled “Islamophobia: An Introduction to the Academic Field, Methods, and Approaches,” shows at times a somewhat militant tone. The Introduction mentions the marginalization of Islam and Muslims in the affairs of Western society and in the curricula of secular universities in the US and Europe. It mentions “unresolved and unaddressed” questions dealing with postcolonial theory and decolonization but already surpassed by the “war on terror” and the resulting worldwide Islamophobic discourses and subsequent discriminatory policies. The chapter elaborates a scholarly history of the term Islamophobia qualifying it, from the beginning, as “imperfect,” and declaring that its validity or accuracy “is a healthy and worthwhile academic exercise”: nevertheless, the chapter does not go further. From its start in the early 20th century, Islamophobia focuses on the notions of rejection, hostility, racism, or otherization born out of the military and political implications of colonialist enterprises. Its entry in the field of public policy accentuated a heated debate without necessarily clarifying its many meanings; thus, we witness today the clashes between an ambitious “Islamophobia industry” and the clarifying and protective attempts of Islamophobia academics.

The Islamophobia Studies field faces as well, a pedagogical challenge: It should not be limited to examining the responses to Islamophobia but should also cover substantial theoretical topics such as the deconstruction of its “five pillars”: state machineries, far right and necon servative political movements, transnational Zionism, pro-war liberal left, and the new atheist movement. Each one requires analyses and responses that the chapter does not provide. Its central thesis insists on the political considerations supported by “racial stratification, economic power hierarchies and open-ended militarism.” A sort of conspiracy to silence Muslims around the world is described, and “bigotry at every turn” is denounced. Some readers may consider these as rather impassioned pronouncements, and wonder about their effectiveness vis-à-vis a rational, realistic, truly pedagogical cultivation of public response. Clearly, multidisciplinary research programs are much needed, not to change fixed mental schemas in some socio-political groups but to prevent a dissemination of their extremist gospels. It is crucial to educate the public and correct wrong perspectives, not to fall into conflict and debate traps nourished by equally extremist—and useless—chichês.

This reviewer also liked Chapters 9 on Cultural Literacy, and Chapter 10 on the Psychiatric Cultural Formula.

Perhaps the most interesting section of the book is Part IV, devoted to specific clinical challenges in the assessment of patients’ narratives and their ideas about mental health professionals, and misrepresent habitual Muslim-type responses, reactions, or attitudes as psychopathological manifestations. Specific Clinical Challenges in Part III are useful reminders of these potential situations. Perhaps the most interesting section of the book is Part IV, devoted to specific psychiatric implications of Islamophobia. It presents cogent images of Muslim women and youth status, individual and community resilience, and psychological determinants and social impact of violent extremism. The Chapter on Islamophobia and Public Health examines the impact of the disorder on individuals, social relations, and communities at large. It is a comprehensive review that utilizes the

Continued on page 27
NEWLY IDENTIFIED NEURAL CIRCUIT MAY BE TARGET FOR FUTURE PTSD TREATMENTS

Julie Bowen

A specific circuit of young adult-born neurons in the brain plays a key role in the recognition of safe versus hazardous situations, according to researchers. Their findings, recently published in Science, could pave the way for more targeted treatments for conditions such as PTSD that are associated with hypervigilance and recurrent distressing memories.1

“Without these cells, we would be incapable of distinguishing similar situations from each other, a process sometimes termed pattern separation, which is critical not only for forming novel memories but also for discriminating between safe and dangerous contexts,” said the study’s senior investigator, René Hen, PhD, of Columbia University, New York, in a press statement.

In a study conducted in adult mice, Hen and colleagues1 looked at how young adult-born neurons in the hippocampus either excite or inhibit the dentate gyrus via metabotropic glutamate receptors or N-methyl-D-aspartate receptors, respectively. These opposing mechanisms have profound effects on memory, learning, and mood.

The neural circuit controlled by the young neurons is involved in the development of PTSD, anxiety disorders, and phobias. According to Hen, identification of the neurotransmitters and receptors in this circuit “gives us the information we need to develop drugs that could mimic the young neurons.” He noted that neurogenesis is crucial to the mechanism of action of SSRIs but that these medications require 4 to 6 weeks to take effect.

The results of this study may lead to the development of rapid-acting treatments that directly target the neural circuits involved in mood and memory.

Funding for this study was provided by the Hope for Depression Research Foundation.

Reference

Survival

Continued from page 2

future incidents, as mental health professionals we must deal with the emotional toll on innocent survivors and among youths in general, to restore mental health and a sense of safety.

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References


Survivors’ Insights

Continued from cover

“I remember struggling with not sleeping or eating,” shared Kyra Parrow, a survivor of the Parkland shooting. “I remember quitting varsity track and field after six years, giving up my position of captain. I remember struggling with an assigned essay for one class, as the constant thought of my lost friends weighed on my ability to focus. When I confided in my teacher that I was unable to write, she told me to put my grief in a box and complete the paper.”

“When I confided in my teacher that I was unable to write, she told me to put my grief in a box and complete the paper.”

“Two weeks after the shooting occurred, students and teachers were expected to return to the campus and the crime scene,” she added. “The mental health professionals made available were largely inaccessible and insufficient for the more than 3000 students and staff navigating their trauma and grief.”

After the shooting, Broward County Schools opened several grief counseling centers and brought in 25 mental health clinicians, two guidance counselors, and therapy dogs. However, Parrow noted that there was no consistency in the therapy offered. Students and teachers seeking counseling often saw a different clinician at each visit, which meant they did not have the opportunity to build a therapeutic alliance or receive any sense of stability. Parrow added, “The therapy dogs, painting rocks, and hugs provided were a bandage to deep mental wounds that needed stitches.”

This wave of short-term help seems to be standard operating procedure for these tragedies. Unfortunately, Parrow said she and her classmates were never given instruction or support on what to do next—how to continue to heal and cope.

“What blows my mind is that everybody just expects these kids to go on,” said Gerry Griffith, a crisis counselor who works with communities following such trauma. During her 30-year career, she has been part of the response teams at the Oklahoma City bombings and September 11th. She explained that response teams assist for a few days after an incident and leave behind information.

"To add insult to injury, the multitude of resources may have been overwhelming to the victims. Cindy Arenberg Seltzer, the president and CEO of the Children’s Services Council of Broward County, explained that the variety of resources may have made it difficult for victims to know where exactly they could get the best help.

The Columbine and Parkland survivors also complained of a “grieving Olympics”—an artificial pecking order of how much grief you should feel based on how close you were to the incident. “We have to recognize that whoever was at the end of March, was designed as a “community wellness center” offering a “responsive and nurturing place to call for help.” According to their website, they offer support groups, kickboxing, healthy eating, pet experiences, yoga, open mic music, and more. The website further notes that they are not a therapy center, and their “staff are trained trauma clinicians who can listen to your needs and connect those interested in seeking therapy with a qualified therapist in the community.”

Many took to Twitter to express their frustration over the recent suicides and the lack of appropriate help. One tweet read:

“These kids need more. Not trauma specialists” trained in 3 days.

Not a hug from the...principal. Not painted rocks or cards. We need real help. Real specialists.

Real empathy. No more half-assed effort for full blown trauma and depression. This is what it does.

Perhaps the take-home lesson is that the psychic injury from these tragedies are not acute, but chronic. One of the Parkland survivors said nearly a year after the incident and, according to her mother, had just been diagnosed with posttraumatic stress disorder; the Sandy Hook father took his life almost seven years after that tragedy.

In their discussion, both Parkland and Columbine survivors noted the idea that the trauma does not stop when the bullets stop. After the shooting, Columbine’s principal told the students—and continues to remind all survivors— recovery is a marathon, not a sprint. “Surviving a mass shooting stays with you,” said Brandon Abzug, a Parkland survivor. “It’s inseparable.”

References

discussed by patients, who explain how connection to nature in a contained way allows them to maintain a sense of protection and control through the borders or framing of the natural space. Patients explain how visual access to nature creates a sense of safety, specifically in relation to a particular dual manifestation of containment and mental escape. A bounded landscape, accessed visually and occupied only by the mind, is calming, whereas an unbounded landscape is threatening. We might consider this a “natural mind-space”; a space with natural content that is only occupied psychologically, not physically. Visual experiences are more than simple views but have effects upon psychological states, willingness to engage in therapeutic activities, and implications for psychological comfort, privacy, and safety (Figure 4).

Supportive comprehensibility can be achieved by selecting furniture that is clear in its use and function. This reduces patients’ self-reported anxiety, self-consciousness, and potential confusion in the therapeutic space. Patients also report feeling stigmatized due to the inclusion of security and anti-ligature features. The presence of such features reduces their self-reported willingness to communicate and self-disclose due to feeling judged, stigmatized, and psychologically unsafe; thus, these should be minimized where possible.

Mental escape and respite can be facilitated with careful selection of artwork. Include artwork that is:

1. Detailed in nature
2. Muted or complementary color tones
3. Preferably with a degree of abstraction
4. Able to be viewed easily by the patient

Artwork can provide visual escape for moments when this is needed, thus fostering a reprieve from the intensity of the therapy session. This allows patients to feel psychologically safe and comfortable in the space, as there are visual opportunities for them to disengage if the intensity and focus of the therapy become overwhelming.

Conclusions
Research-derived design strategies can be utilized by practicing psychiatrists to facilitate a positive clinical encounter through the supportive design of waiting areas and treatment rooms. Future research on design strategies will expand the possibilities for psychiatrists, architects, and designers to draw from.

Dr Liddicoat is Research Fellow, Faculty of Architecture Building and Planning, University of Melbourne. Her research interests are at the nexus of architecture and health and include how the built environment can support well-being within hospital settings, and the role of design practice in mental health service environments. Dr Liddicoat reports no conflicts of interest concerning the subject matter of this article.

Additional Reading

Table 3. Therapeutic office interior furniture and fitout design dimensions summary

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<th>Dimension</th>
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<tr>
<td>1.</td>
<td>Do not have windows that are overly large (such as the full area of a wall) as this makes the patient feel watched; perceived size can be reduced by appropriate window dressings/curtains. However, the inclusion of windows is very important and should include views to nature that is framed, such as bounded landscape or enclosed courtyard. A view to the horizon is also an option if the view is clearly bounded and framed.</td>
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<tr>
<td>2.</td>
<td>The furniture should be clear and comprehensible in its function and make sense in the room.</td>
</tr>
<tr>
<td>3.</td>
<td>Minimize the presence of security, alarms, and anti-ligature features.</td>
</tr>
<tr>
<td>4.</td>
<td>Include artwork, which is detailed in nature, and able to be viewed easily by the patient.</td>
</tr>
<tr>
<td>5.</td>
<td>Provide storage space for art materials and sensory modulation equipment; having this out of the patient’s field of vision removes visual and psychological clutter while still accommodating ease of access.</td>
</tr>
<tr>
<td>6.</td>
<td>Furniture that permits movement should also be considered, such as swinging egg chairs or rockers of some sort. Provide a choice of seating options for the patient, including at least two chairs and space on the floor that is useful for patients with psychological aid dogs or those who use movement to self-soothe. Provide well-maintained cushions and a rug with which the patient may engage.</td>
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References
The Medical Irony of the Deadly Opioid Epidemic

Lloyd I. Sederer, MD

My goal in this article is to persuade you, doctors and nurses who have prescribing authority, to save lives by prescribing an opioid drug for the opioid epidemic—namely buprenorphine. Including those practicing psychiatry, primary care, neurology, pain medicine, and so on. While you are at it, don’t miss the chance to help your patients (and their families) obtain the opioid reversal drug, naloxone.

The irony here is that prescribing (or assisting in dispensing) these (often highly stigmatized) drugs will forestall more drug deaths in the next few years than anything else doctors can do. Not a week passes where I do not meet grieving family members who have lost a loved one to a drug overdose, some still recently in its wake, the others who can never forget. Their loved one, or friend, had been smoking, vaping, or injecting heroin (they are beyond pills) or its synthetic close relative OxyContin. Dealers now increasingly lace whatever they are selling with fentanyl. Laboratory synthesized (often in China), this opioid is 50 times more powerful than heroin, 100 times more powerful than morphine. The potency of the opioid was beyond the drug dependent person’s tolerance: first they experienced respiratory distress and then followed an abrupt cessation of breathing. These are preventable deaths. Despite reductions in medical prescribing of opioids (eg, OxyContin, Vicodin, Percocan), overdose deaths in the US continue to rise. Opioid overdoses annually eclipse motor vehicle deaths and now dwarf the loss of lives from the entire HIV/AIDS epidemic as well as the Vietnam War.

Today’s opioid epidemic traces its roots in good part to doctors’ efforts to change what had been regarded as their under-prescribing of pain medications. Pain became the fifth vital sign. Regulatory agencies expected doctors to administer patient self-reports of pain, which of course demanded a response when scores were high, as they often were. With too little time to spend with patients and a wish to help, the most immediate solution for a physician lay there on the desk—the prescription pad. Patients, too, were seeking a simple and fast solution to their pain. The icing on this not-at-all sweet clinical cake was the prominent Pharma marketing that opioids were not addictive. Doctors, in effect, with no ill intent, believed these drugs were a safe solution to the problem of pain. But their common prescription soon fostered addiction and fueled the growth of the opioid epidemic.

Pain is ubiquitous. Everyone’s body feels it. For some it becomes chronic, potentially disabling. But there is more to this epidemic than arthritic joints, broken bones, tumors, and other dolorous conditions. We now recognize what we call the social determinants of physical, mental, and addictive illnesses. These include unemployment, poverty, housing instability, trauma, and domestic and neighborhood violence. You probably have heard the term, “deaths by despair”? These are deaths from suicide, drug overdoses, and the long-term complications of alcoholism and other addictions. We doctors are in a position to keep people alive until there are prospects for their future (and that of their children), safety, or opportunity to find purpose—until they can enter recovery and rebuild what addiction eroded.

Buprenorphine was FDA approved in the US in 2002. In the 1990s, it had reduced drug overdose death by 80% in France (through ready access in primary care). Its use in the US has been terribly impaired by the social stigma of addiction as well as its being the only drug that requires an 8-hour training course and obtaining a DEA number suffix to prescribe it. OxyContin and fentanyl have no such burdensome requirements.

Buprenorphine (Suboxone and others) is an opioid agonist, which means it fills the mu (opioid) brain receptor, impeding another opioid from attaching. Moreover, buprenorphine has a “ceiling effect”—its capacity to produce intoxication and narcosis is limited, unlike other opioids where the more someone takes, the higher they get, until they stop breathing. In effect, this medication provides a safe substitute for a deadly street opioid, while quelling drug cravings. There is no need, as well, to steal, deal, or prostitute oneself to obtain a drug supply, as is the case for all illegally trafficked substances.

Opioid overdoses, too many fatal, are dramatically reduced once someone begins buprenorphine. Doctors and nurses, please take heed. This is a life-saving medication that needs you to prescribe it.

Naloxone, in most states, does not need a prescription. It is an opioid antagonist, the “reversal” drug that immediately blocks the action of any opioid in the body. Breathing resumes, and a life is saved if handy, and administered in time in adequate dosage. Which is why its presence should be everywhere, in any home, office, public building, your briefcase, and in my backpack. Since its nasal spray preparation was introduced, there is no need for an injection, even an auto-pen stabbed into the thigh. Our job as clinicians is to help patients and their families get a supply of naloxone, learn how to use it (which is very simple), and have it nearby should the need arise. Some public health clinics dispense it, like condoms.

Our job as clinicians, our privilege, is to help our patients stay alive until they can engage in and benefit from good treatment.

I do not mean to suggest that medications alone are the answer to the opioid epidemic raging in this country. Complex problems call for comprehensive solutions, including motivational enhancement (readiness for change), 12-step recovery, cognitive therapy, family education and support, and taking care with what we eat and how we sleep, mindfulness and meditation, and finding people who can help rather than harm you.

Our job as clinicians, our privilege, is to help our patients stay alive until they can engage in and benefit from good treatment.

Dr Sederer is Adjunct Professor, Department of Epidemiology, Columbia University Mailman School of Public Health; Distinguished Psychiatrist Advisor to the New York State Office of Mental Health (OMH), and Director, Columbia Psychiatry Media. His most recent book, The Addiction Solution: Treating Our Dependence on Opioids and Other Drugs (Scribner, 2018), is now available in paperback. He reports no conflicts of interest concerning the subject matter of this article.
Pharmacogenomics

Continued from page 4

portant psychiatric topic of pharmacogenomics. Despite this, only four genes (CYP2D6, CYP2C19, HLA-B*15:02, and HLA-A*31:01) have been vetted as clinically actionable by the two organizations that were established to monitor and curate the pharmacogenomic literature. Curiously, there are numerous laboratories that market pharmacogenetic tests, as well as “gene panels,” that have not yet reached a level of evidence base to inform meaningful clinical decisions on medication choices. The savvy clinician should continue to monitor the pharmacogenomics literature and utilize the constantly updated CPIC and International Society of Psychiatric Genetics websites to remain apprised of the additions of new genes as they cross the evidence-based threshold.

References

FDA on ECT

Continued from page 20

will be large enough for the need. In a country with 49,000 psychiatrists, it is estimated that fewer than 1000 actually practice ECT.

Modern ECT allows virtually all patients who need this modality to be treated safely, effectively, and with a level of tolerability previously unheard of. The proper understanding and contextualization of the (largely transient) cognitive effects of ECT suggests that exaggerated concerns about this adverse effect should not interfere with the appropriate prescription of a potentially life-saving treatment.

We believe that the adverse cognitive effects of ECT should be considered a tolerability and not a safety issue. In medicine, safety refers to the risk of physical injury or death. To elevate cognitive adverse effects to this level perpetuates the stigma surrounding ECT.

The most apt analogy to properly contextualize the seriousness of depressive illness weighed against the risks of ECT is cancer and chemotherapy. Many cancers are lethal, life-threatening illnesses for which treatments (surgery, chemotherapy, and radiation) carry considerable risks. Patients rarely categorically refuse cancer treatments because of concerns about adverse effects, yet this happens frequently with ECT. Our contention is that refusing ECT because of concerns about memory loss is equivalent to refusing cancer chemotherapy because of concerns about hair loss.

These effects are unpleasant and unsettling, but not worth risking one’s life over. Just as the side-effects of chemotherapy abate, so too do those of ECT; most of the hair grows back, most of the memories return, and the patient’s life is saved.

The FDA order removes what was a potentially dark cloud on the horizon of ECT. It continues to be the responsibility of our field to train an adequate number of ECT practitioners and to counter unsubstantiated attacks by the anti-psychiatry movement through education and ongoing contributions to the research evidence base for ECT.

Dr Kellner is Chief of Electroconvulsive Therapy (ECT), New York Community Hospital, Brooklyn, NY, and Adjunct Professor of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, NY. He reports that he has received research support from the NIMH, honoraria from UpToDate, Psychiatric Times, and Northwell Health, and royalties from Cambridge University Press.

References

Islamophobia

Continued from page 22

socio-ecological model to describe vulnerability and resilience to Islamophobia and its resulting psychosocial problems. In such context, community engagement strategies, “a bottom-up approach,” seeks and finds self-sustainability, growing social support, and overall positive results. Rich and transparent principles will have to face, however, strong logistic demands: providing community members with the opportunity to advocate for their needs and participate in the design of sensitive interventions is easier said than done. Experience shows that critics of this approach will quickly label these efforts as “socialist” infiltrations, and conservative sectors may very well impede the provision of financial and human resources. Yet, it describes encouraging results from several projects in California. Whether this can reach other parts of the country and the world where Islamophobia and related conditions (led by authoritarianism, oppression, rejection, demagoguery, and/or hatred) dominate, remains a challenging reality.

In short, this book represents a laudable initial effort to study a social phenomenon of somberly complex characteristics. It is multidisciplinary and, as such, recognizes the strong bio-psycho-socio-cultural-spiritual basis of Islamophobia. It presents a solid historical background about Islam, analyzes the different doctrine-based perspectives on the psychological/mental nature of Islamophobia, exhibits artistic illustrations, and succeeds in describing clinical outcomes. Among its few setbacks one can mention is a mild trend toward conceptual repetitiveness, some lack of precision in diagnostic and therapeutic proposals, some theoretical excesses and polemic political pronouncements, and a small number of editing typos. The 20 items listed in the Editors’ Conclusions, however, show concrete evidence of a job well done.

Dr Alarcón is Emeritus Professor and Consultant, Department of Psychiatry and Psychology, Mayo Clinic College of Medicine, Rochester, MN, and Honorio Delgado Chair, Universidad Peruana Cayetano Heredia, Lima, Perú. He reports no conflicts of interest concerning the subject matter of this article.
Medication-Assisted Treatment on a Budget: Two You Should Know

Cornel N. Stanciu, MD, MRO, Samantha A. Gnanasegaram, MD, and Thomas M. Penders, MS, MD

O

f Americans 12 and older, 2 million have a substance use disorder (SUD) that involves prescription pain relievers and 591,000 have a SUD involving heroin. Withdrawal from opioids is extremely unpleasant and individuals often return to substance use to ameliorate symptoms. The individual may be interested in stopping opioid use altogether but has no access to FDA-approved treatment or wishes to pursue a more “natural” alternative.

In recent years, two agents have gained popularity as off-label opioid alternatives—loperamide and kratom. These are readily available at low costs and for these reasons they have at times been referred to as “the poor man’s methadone” and “poor man’s buprenorphine,” respectively. On drug-use websites and online forums, high doses of these agents have been promoted as options for opioid withdrawal management and, less often, for psychoactive effects.

**Loperamide**

Loperamide has been approved by the FDA for medical use since 1976. It is part of the World Health Organization’s List of Essential Medicine and is widely available as an inexpensive and over-the-counter (OTC) remedy used in managing diarrhea. Loperamide is marketed OTC under the brand name Imodium A-D but is also available as store brands and generic versions. As a piperidine opioid in nature, it was once a schedule V drug. At therapeutic doses, its actions are restricted to the gastrointestinal tissue by poor absorption and active efflux from the CNS by membrane transporter P-glycoprotein. The maximum daily dose is 8 mg for adults as OTC use and 16 mg by prescription. When larger than recommended doses are taken, CNS penetration occurs. This practice of ingestion of large doses (in excess of 70 mg daily) has been gaining popularity among users of opioids to manage withdrawal symptoms and, less frequently, to achieve psychoactive opioid-like effects.

**ACTIVITY GOAL**

The goal of this activity is to provide a comprehensive understanding of the opioid-like effects of loperamide and kratom and raise awareness of potential dangers associated with use.

**LEARNING OBJECTIVES**

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

- Explain the evolutionary paths of loperamide and kratom
- Discuss the mechanisms for the opioid-like effects of loperamide and kratom
- Identify the pharmacodynamic/toxicodynamic effects of loperamide and kratom

**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.

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Epidemiology
Early studies showed no abuse potential for loperamide; however, by 2013, reports of recreational use of 70 to 100 mg doses started surfacing. Subsequently, from 2011 to 2014 a 71% increase in loperamide-related presentations was noted by poison control agencies. In recent years, reports of extremely high doses have emerged. Users report using primarily to ease withdrawal symptoms but also, less often, as a substitute for opioids. Most users have a history of opioid use with no reports of loperamide as an initial, gateway drug. Unfortunately, national surveys do not track use, and the Drug Abuse Warning Network (DAWN) does not monitor loperamide use.

Pharmacology
A dose-dependent effect is seen with loperamide that determines the anatomical system it acts on. Within the recommended dose of up to 16 mg daily, μ-opioid receptors are agonized at the large intestinal myenteric and submucosal plexi, stimulating secretion of inhibitory neurotransmitters to intestinal myenteric and submucosal plexi, stimulating secretion of inhibitory neurotransmitters to decreasing peristalsis and allowing for fluid and electrolyte absorption. CNS effects are avoided as transporter P-glycoprotein actively pumps it out at the blood brain barrier.

Above recommended doses, P-glycoprotein systems become saturated, and CNS entry occurs. Several agents (including loperamide) such as antineoplastic drugs, steroids, ketoconazole, and quinidine, can block the P-glycoprotein system, facilitating CNS entry. (Some users may supplement with these.) CYP 3A4 inhibitors allow loperamide to circumvent first pass effect.

Loperamide’s onset of action is 1-hour post-ingestion and reaches peak plasma levels between 3 to 5 hours, with a half-life between 7 to 19 hours. Users typically have to dose every 8 to 12 hours; however, sus- tangenesis between 7 to 19 hours. Users typically have to dose every 8 to 12 hours; however, sus- tained benefit of up to 2 days has also been report- ed by some. Doses range from 70 to 400 mg daily. Although use is with the intent of amelioration of withdrawal, in this range there is also potential for euphoric effects that tend to not be as pleasurable as with opioids. CNS effects do not include any analgesic benefits.

There have been several reports of the development of tolerance after weeks to months of use, resulting in the need to increase the dose by 25% to 50% increments. Withdrawal symptoms are also mentioned, which are similar to opioid withdrawal but milder and less prolonged. Most users report successfully being able to taper with limited sympt- toms. Unlike buprenorphine or methadone tapers, once loperamide is discontinued, cravings for opi- ates subside.

Pharmacodynamic/toxicodynamic effects
At therapeutic doses, there may be constipation, dizziness, nausea, and abdominal cramps. More serious yet rare adverse effects of long-term use include toxic megacolon, paralytic ileus, angioedema, and Stevens-Johnsons Syndrome. When administered in supra-therapeutic doses, cardiac life-threatening adverse effects include QTc prolongation, QRS widening, ventricular dysrhythmias, syncope, and sudden deaths. The FDA has responded by adding a warning to the drug label in 2016 and also has been working with manufacturers to limit the number of doses per package of OTC medication.

Routine drug screens do not pick up lopera- mid use; hence, a high degree of suspicion is re- quired to detect abuse. Opioid users often present with respiratory depression, whereas those using supra-therapeutic loperamide doses will present with arrhythmias (ie, long QT, wide QRS) and may be awake and alert. Patients typically have histories of opioid use with recent discontinuation and will present with unexplained syncope and the electrocardiogram abnormalities. Identification of misuse should open discussion regarding the underlying reason for use, promoting treatment.

Kratom
Kratom, or Mitragyna speciosa, is a deciduous tree related to the coffee family indigenous to Southeast Asia. Historically, its leaves were chewed or brewed as a tea (less commonly smoked) to help cope with the physical demands of laborers by improving endurance and reducing fatigue. In traditional medicine, kratom has also been used as an opium substitute. When used in

Loperamide and kratom are readily available at low costs and have been referred to as the poor man’s methadone and buprenorphine.

US, use and sale of kratom is illegal in Thailand and has been banned in Australia, Poland, Denmark, Sweden, Malaysia, and Vietnam.

Epidemiology
A recent survey suggested that kratom was one of the most widely sold “legal highs,” offered in 44% of online shops. The National Survey of Drug Use and Monitoring the Future survey do not track kratom use and few data exist on the prevalence of kratom use. It is estimated by advocacy organizations that between 3 and 5 million Americans are regular users.

An anonymous online survey of 10,000 current users located through the American Kratom Association and search of social media in October 2016 had 8094 responses. The majority of users were male (57%), nonhispanic white (82%), aged between 21 and 50 years; 40% disclosed their use to their medical provider; 55% were married; 57% were fully employed; and 82% had a college edu- cation. The most common use was as a dissolved powder (49%) taken with a beverage; 37% used capsules, and 13% used kratom as a prepared tea.

The primary reason for use was self-treatment of chronic pain. A similar percentage reported using to relieve depressed or anxious mood. Adverse effects were reported by only 51 users.

It is estimated that 55% of regular users become dependent on kratom. Between 2011 and 2017 the number of calls to Poison Control Centers related to kra- tom exposures increased from one a month to two daily.

Pharmacology
Isolation and chemical characterization of its components has been of interest since the 1960s with over 40 differ- ent alkaloids having been isolated to date, only two of which are active (mitragynine, 7-hydroxymitragynine). The composi- tion of the plant varies significantly depending on the environment in which it is grown, breeding and harvesting techniques, and age of the plant. For example, a plant from Thailand has on average 66% mitragynine alkaloid content whereas one from Malaysia has approximately 12%; younger plants tend to have greater mi- tragynine content. The various different alkaloids found in the plant have unique properties: anti-nociceptive, anti-inflammatory, anti-depres- sant, or muscle relaxant.

Its two active constituents display opioid-like properties in vivo and in vitro. The potency at the opioid receptor has been found to exceed that of morphine. Competitive binding studies further exam- ined affinity at the various opioid receptor sub- types and found a preference for the μ receptors (agonism) followed by the δ (partial agonism) and lastly κ, which is a similar profile to buprenor- phine. The highest potency of 7-hydroxymita- grynine is at the μ receptor. Mitragynine also plays a role in noradrenergic and serotonergic pathways where it stimulates postsynaptic α2 ad- renergic receptors and inhibits 5-H2A recep- tors. These properties explain how kratom counteracts withdrawal in opioid dependent individ- uals.
Mitragynine has a relatively short half-life as well as a large volume of distribution. Individuals using it to counteract opioid withdrawal require dosing as frequent as every 6 to 12 hours with withdrawal symptoms emerging 12 hours after last use and lasting up to 4 days.

When it comes to interactions of its multiple constituents with the CYP 450 system, one study found kratom may inhibit CYP2C9, 2D6, 3A4 isoenzymes and to some extent 1A2.18,19 This raises concern over the impact kratom use can have on clinical populations prescribed pharmacological agents.

Pharmacodynamic/toxicodynamic effects

Case reports document effects such as weight loss, insomnia, constipation and dehydration, skin hyperpigmentation, and fatigue occurring in chronic use of kratom.20,21 Some acute effects include seizures, delusions and hallucinations, respiratory depression, hepatotoxicity, coma, and death. In recent years emergency departments as well as poison call centers across the country have seen an increasing number of presentations related to kratom use. According to the State Unintentional Drug Overdose Reporting System, between July 2016 and June 2017, in 8 of the states reporting to the system a total of 25 deaths involved kratom co-ingestion.22 This number could be an underestimation since kratom testing and assessment for it is not uniform.

In one published report, a male patient addicted to hydromorphone attempted to use kratom to prevent withdrawal. He was admitted to the hospital after mixing kratom and modafinil and sustaining a generalized tonic-clonic seizure. It was deemed unclear whether the seizure resulted from the kratom or the drug combination.

Most reported cases involve mixing kratom with other agents or ingesting contaminated kratom products (eg, Krypton). In a case series from Sweden, researchers reported 9 cases of Krypton intoxication and death. The product known as “Krypton” is an herbal preparation of dried, crushed kratom leaves mixed primarily with another μ-opioid receptor agonist, O-desmethyllumadomarlo which is known to cause seizures.

Abrupt discontinuation of high dose, long-term use of kratom mimics opioid withdrawal: chills, body aches, loose bowels, insomnia, restlessness and irritability, fatigue, anxiety and mood disturbances, among others. Symptoms begin 12 hours from last use and can last upwards of 4 days. Symptoms are positively correlated to the amount and duration of use; they are uncomfortable both physiologically and psychologically, which prompts return to use. Cravings are also present. In managing withdrawal, the best approach involves symptomatic management of a hyperadrenergic state. Use of regulated agents such as methadone and buprenorphine has been hindered from a medico-legal perspective and very few reports exist.

Kratom use during pregnancy can lead to neonatal abstinence syndrome in the neonate. Nothing is known about the extent of placental crossing of kratom’s active alkaloids. In two case reports, symptoms such as jitteriness, irritability, feeding intolerance, and vomiting emerged around day 2 postpartum requiring neonatal intensive care unit admission and standard opioid protocol with intravenous morphine subsequently tapered with oral formulation over 5 days.23,24 Screening for kratom has its challenges. Since it is not detected through the standard urine toxicology screen, special confirmatory testing is necessary. Detection of breakdown products of mitragynine can be detected through gas chromatography coupled with mass spectrometry, liquid chromatography with linear ion trap mass spectrometry, or through electrospray tandem mass spectrometry.

Conclusion

Loperamide and kratom are growing in popularity because of their opioid-like effects. Motives include opioid withdrawal suppression or to taper off opioids as well as less frequently, psychoactive effects. With loperamide, this practice requires above label doses, placing users at risk for cardiotoxicity among other effects. Kratom is concerning because of its variability in alkaloid composition and preparation. Due to its multiple additives, as well as its potential for dependence and withdrawal on discontinuation. Clinicians need to be aware of such substitutional behaviors in those with a history of opioid use to provide proper diagnosis, management, and patient education.

References

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- Advanced education opportunities
- College Tuition reimbursement for dependent children

Qualified candidates should forward their CV to Lan Ma: Opr@northwell.edu
Child and Adolescent Psychiatrist –
Outpatient Consultation Position
Full Time * Multiple locations in New Jersey

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

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

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

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

HackensackMeridianHealth.org
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:

- **Inpatient Attending:** Child/Adolescent and Adult/Geriatric – Carrier Clinic (Belle Mead, NJ)
- **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) and Hackensack University Medical Center (Hackensack, 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:** Red Bank, NJ)
- **Emergency Psychiatry:** Raritan Bay Medical Center (Perth Amboy, NJ)
- **Geriatric Psychiatry:** Hackensack University Medical Center (Hackensack, NJ)

Renee.Theobald@hackensackmeridian.org or call: 732 751-3597

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,”

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.

Renee.Theobald@hackensackmeridian.org or call: 732 751-3597

Hackensack Meridian Health
NATIONWIDE

Aligned Telehealth, Inc. – California
Our mission is to be the leader in innovative, high quality, accessible behavioral health solutions. Explore opportunities in multiple states.

Hiring MULTIPLE Psychiatrists for Telemedicine and Onsite positions in the following states
CA, TX, NV, AZ, FL, OR, and Many other states. Full time and Part Time positions are available.

We offer competitive salaries and excellent benefits!

Immediate Need for BC Psychiatrist Florida
Medical license – Onsite
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PROVIDED, OUTSTANDING
SALARY AND BENEFITS

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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 $325K per year for adult psychiatrist and over $355K per year for child psychiatrist for F/T work.

PT 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@stanbhrs.org

Our generous benefit package includes

- Our generous benefit package includes
- $10,000 in bonuses and a benefit package
- Offering our medical staff team to bring our medical staff team to

TBH is an equal opportunity employer

The doctors of TRADITIONS BEHAVIORAL HEALTH are the largest provider of MD psychiatric services to adult populations in institutional and community based programs in California. We provide services to the seriously and persistently mentally ill and have openings in the San Francisco Bay Area, Santa Barbara, San Diego and Los Angeles. Overall we plan to add 50 more Fulltime psychiatrists in California to bring our medical staff team to 400 psychiatrists. Our packages vary from a minimum of $300,000 per year plus $10,000 in bonuses and a benefit package valued at approximately $90,000, to up to $500,000, for the industrious physician. Our generous benefit package includes almost 7 weeks paid time off per year. If you are creative and think outside the box, if you value diversity and cultural competency, if you like innovative programs that are patient driven, using a rehabilitative, rather than illness model, if you want more time to work with patients, to get the best results, then TBH is the company for you. To learn more about the specific job openings and salary and benefit packages, check out our Website at:

www.tbhcare.com or Email your letter of interest and CV to our company President,
Gary A. Hayes, Ph.D. at: Drhayes3@tbhcare.com

TBH is an equal opportunity employer
Chief Medical Officer – Community Healthlink
Worcester, MA

UMass Memorial Health Care’s Department of Psychiatry and its Community Healthlink (CHL) member institution is looking for a chief medical officer to help lead the largest provider of mental health services in Central Massachusetts.

The position involves supervision of a large group of professionals and participation in the executive team’s strategic, program and organizational development efforts. The ideal candidate will have a demonstrated commitment and passion for community psychiatry and an interest in a leadership role in advocating and promoting the wellbeing of traditionally underserved populations.

CHL has a long tradition of bringing excellent mental health and substance use disorder services to our city and region, from its inception as a community mental health agency to its current role as a key member organization at UMMHCH. Its 1300 employees serve over 22,000 individuals each year and its programs assist patients across the life span. Medical staff are faculty members of the UMass Department of Psychiatry and employees of the medical group practice—they are vital contributors to the department’s missions of training, research, and clinical excellence. We believe this position will be a terrific opportunity for individuals committed to serving their community through the provision of high quality psychiatric care as part of mission driven team.

To learn more about our Community Healthlink locations, please visit our website http://www.communityhealthlink.org/chl/

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

Alan P. Brown, MD
Vice Chairman of UMMS Department of Psychiatry for BH Integration and Population Health
Clinical Professor of Psychiatry, Family Medicine and Community Health
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.

San Joaquin County Behavioral Health Services is seeking to fill Outpatient Adult [General], and Sub-Specialty Psychiatry (Child Psychiatry, Geriatric, Forensic, Addiction and Psychosomatic Medicine) positions in a multidisciplinary, recovery-oriented clinical setting. Services are provided either on-site or using a hybrid model of on-site and tele-psychiatry practice. The positions offer a very competitive salary with a guaranteed base, plus incentive opportunities, board certified Psychiatrists have the potential to easily earn over 300K+ a year; comprehensive health insurance; up to three retirement and pension programs; 35 days of vacation and CME time that increase with tenure. Signing and moving bonuses are also available.

Interested J-1 and H-1B candidates are welcome to apply.
Contact Khurrum Durrani, MD at:
kdurrani@sjchhs.org; Fax CV to 209-468-2399, EOE.

(203) 523-7026

The University of Miami Miller School of Medicine Department of Psychiatry and Behavioral Sciences is in an exciting phase of growth and recruiting full-time child and adolescent psychiatrists, specifically at the assistant or associate professor rank.

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 29th 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 Child and Adolescent Psychiatry
• Active State of Florida Medical License

To be considered for a position, please send a copy of your CV to Barbara J. Coffey, M.D., Professor and Chief of Child and Adolescent Psychiatry, UM Department of Psychiatry and Behavioral Sciences at psychiatry@med.miami.edu

MICHIGAN

MEDICAL DIRECTOR, BEHAVIORAL HEALTH, LARGE HOSPITAL SYSTEM – Seeking Board Certified Psychiatrist for this position in Lansing, MI which consists of 30% administrative time and 70% clinical time. Provide clinical oversight of all behavioral health services at Sparrow Hospital.

Lansing is about an hour from Ann Arbor, Battle Creek and Grand Rapids and an hour and a half from Detroit.

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

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 program. Open to employment, or independent contractor arrangement.

Located in southeast MO near Cape Girardeau, this is a low cost of living, low crime rate area but close to a local airport that has direct flights to Chicago. It’s also only two hours from Memphis and St. Louis. This designated underserved area is also located in the Delta Regional Authority so J1 Waivers can also be obtained through the DRA as well as the state. Position can be inpatient, or outpatient.

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

NEW JERSEY

MEDICAL DIRECTOR, GERIATRIC PSYCHIATRY UNIT – Hoboken: 17-bed unit

Also another opening in Hoboken for Outpatient Psychiatrist seeing ages 12 through adult.

Please contact Terry Good at 804-684-5661,
Email: terry.good@horizonhealth.com;
Fax: 1-804-684-5663.
New Alternatives for Children, a NYC child welfare agency, seeks FT/PT Child & Adolescent Psychiatrist for Art. 31 clinic. Requires MD, DEA & NYS license. Must be Board Certified or Board Eligible. Exp. with child welfare population preferred. Biling. (Eng-Span) pref. Send cover letter/resume with salary requirements to hr@nackidscan.org.

EOE

Exciting Opportunity! Sagamore Children’s Psychiatric Center, a New York State Office of Mental Health Psychiatric Hospital located in Dix Hills, Long Island is seeking a Child and Adolescent Psychiatrist as an inpatient attending as we transition into the new behavioral health landscape. We are seeking a candidate with initiative, vision and creativity to be involved in a full range of clinical pursuits, which may include new program development. This is an opportunity to grow as a clinician and leader helping to implement behavioral health care for our youth.

Long Island has excellent public/private schools, beautiful beaches, great restaurants, cultural and sports events and an easy commute to New York City.

To discuss this exciting job opportunity, a competitive benefits package and eligibility criteria for the State Loan Repayment Program, contact Kenneth C. Spitalny, MD, Clinical Director at (631) 370-1713 or email: kenneth.spitalny@omh.ny.gov. Send your CV to (631-370-1717)

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. 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 457(b), Health, Dental, and other desirable benefits.

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

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