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## In This Issue



This issue of the *Residents' Journal* highlights the theme of complementary medicine. In her article, Nishi Bhopal, M.D., focuses on the history of complementary and alternative medicine and how they are maturing as specialties. Ijeoma Chukwu, M.D., discusses the rise of complementary medicine over the last two decades and how physicians have received limited training. In a case report, Michael Seyffert, M.D., and George C. Gettys, M.D., describe how melatonin provided relief in a posttraumatic stress disorder patient suffering from migraines and nightmares. Finally, Daniel M. Hochman, M.D., comments on the benefits of exercise for psychiatric conditions.

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# Complementary and Alternative Medicine: What Is It and What Does It Mean for Psychiatry?

Nishi Bhopal, M.D.

As evidenced by the popularity of celebrity proponents like Deepak Chopra and Dr. Oz, the cropping up of yoga studios and wellness centers, and media attention to alternative therapies, holistic treatments are becoming mainstream. Patients in the United States are increasingly exploring alternative therapies and turning toward complementary and alternative medicine (CAM). Indeed, medical research is focusing on the investigation of alternative treatments and the potential for integration into standard medical practice, with more than \$10 billion spent on CAM research in the past 10 years (1). This is also relevant to psychiatric treatment, since in 2012, the APA Caucus on Integrative Psychiatry announced its first caucus-sponsored sessions at the APA Annual Meeting.

## What Are CAM and Integrative Psychiatry?

The National Center for Complementary and Alternative Medicine, one of the 27 centers that make up the National Institutes of Health (NIH), defines CAM as a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. Complementary medicine refers to the use of CAM together with conventional medicine, such as the use of acupuncture in conjunction with standard care to treat pain disorders. Alternative medicine refers to the use of alternative treatments in place of conventional medicine. Integrative medicine is defined by the American Board of Integrative Holistic Medicine as “the practice of medicine that reaffirms the importance of the relationship between the practitioner and the patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and

healing” (2). Holistic medicine is defined as integrative medicine within the greater context of our environment and society. Finally, integrative psychiatry refers to the treatment of psychiatric illnesses with integrative medicine.

## The Emergence of Integrative Medicine As a Specialty

The Centers for Disease Control and Prevention estimates that 70% of all deaths are caused by chronic disease (3). The cost of chronic care exceeds \$1.5 trillion per year, equivalent to 75% of all medical expenses, but the current medical model in the United States focuses on acute care rather than prevention. Prevention and cost-effective management of chronic illnesses are vital and represent the purported strengths of CAM. This, along with the increasing use of CAM by patients, has led to the emergence of integrative medicine as a subspecialty. In 1992, the Office of Alternative Medicine was established at NIH to investigate “unconventional” medical practices. In 1998, the office was renamed the National Center for Complementary and Alternative Medicine, with a stated mission to “define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care” (4). In 1996, the American Board of Holistic Medicine was founded, changing its name to the American Board of Integrative Holistic Medicine in 2008. The American Board of Integrative Holistic Medicine and the American Board of Physician Specialties are currently establishing a new board, the American Board of Integrative Medicine.

Specific to psychiatry, the International Network of Integrative Mental Health

was founded in 2010, with a mission to “advance a global vision for an integrated whole person approach to mental health care via education, research, networking and advocacy, by bringing together the wisdom of world healing traditions and modern science” (5).

The number of clinical fellowships is growing. More than 50 U.S. hospitals and medical centers have integrative medicine centers or programs (6); nearly 1,500 American physicians are board-certified by the American Board of Integrative Holistic Medicine; and 60% of medical schools now offer some training in alternative medicine.

## The High Prevalence of CAM Use

The 2007 National Health Interview Survey (7) found that nearly 40% of adults in the United States had used CAM treatments in the previous 12 months. CAM is a growing industry, with total out-of-pocket expenditures exceeding \$40 billion yearly: \$22 billion on CAM classes and materials, \$14.8 billion on natural products (e.g., fish oil, glucosamine), and \$11.9 billion on visits to CAM practitioners (e.g., acupuncturists, massage therapists). The global market for herbal medicines is more than \$60 billion annually and growing steadily.

## Physician Knowledge of Adult CAM Use

Despite the high prevalence of CAM use, most patients (two-thirds) do not inform their physicians (7). The top five reasons cited by patients are 1) their doctors never asked, 2) they did not think that it was relevant to discuss with their doctors, 3) there was not enough time to discuss the use of CAM, 4) they did not think that their doctors knew anything about CAM, and 5) they feared

that their doctors would be dismissive of CAM treatments (8). Thus, only one-third of patients using CAM receive information about it from their medical providers. Patients most commonly learn about CAM treatments by word-of-mouth from family and friends, from the Internet and other media, and from employees at health food stores. The danger, of course, is that patients may receive inaccurate information, and there may be potentially hazardous interactions of herbal treatments with prescription medications.

## CAM Use Among Patients With Psychiatric Disorders

Studies have shown that women are more likely than men to use CAM therapies. Socioeconomic variables are also implicated, with increased use of CAM among populations with higher educational attainment and income status. Patients with medical illnesses, especially those with chronic back, neck, and joint pain, use CAM more commonly (1).

A study in the *American Journal of Psychiatry* (9) examined the use of CAM by psychiatric patients. It was noted that symptoms of depression, anxiety, and insomnia are among the most fre-

quently cited reasons for CAM use and that Americans with depression are more likely to use CAM remedies than conventional antidepressants or psychotherapy. A national survey (10) found that nearly nine-tenths of patients with self-defined anxiety and six-tenths of patients with self-reported severe depression who were seeing a psychiatrist were also using some form of CAM treatment.

There is increasing evidence to support the use of certain CAM therapies in psychiatric illness. Studies of St. John's wort, *S*-adenosyl methionine (SAM-e), omega-3 fish oils, meditation, exercise, and acupuncture are promising and have suggested varying levels of efficacy in the treatment of depression and anxiety disorders (10, 11). Patients may find CAM treatments to be more attractive because they are readily available without a prescription, are often labeled as "natural," and may be perceived as safer than conventional treatment (10). However, patients may opt to pursue CAM before undergoing standard diagnosis, which could result in inadequate or inappropriate treatment and the possibility of delaying effective treatment (10). Furthermore, many patients do not inform their psychiatrists about CAM use, which could result in potentially

dangerous interactions between CAM and conventional treatments; for example, there is a risk of serotonin syndrome when selective serotonin reuptake inhibitors are used in conjunction with St. John's Wort.

## Conclusions

Integrative medicine and integrative psychiatry are maturing specialties. As the evidence for CAM treatments continues to grow, physicians have the opportunity to undertake formal training and certification in integrative medicine. With the increasing use of alternative therapies by patients, clinicians should be aware of the evidence supporting specific CAM treatments. Since most patients do not tell their clinicians about their use of alternative treatments and many turn to CAM for the treatment of depression and anxiety, psychiatrists should routinely ask patients about their use of CAM therapies because of the risk of potential drug interactions and possible delay of other efficacious therapies when treatment response is suboptimal. Further research on CAM treatments in psychiatry is needed. However, the expanding body of evidence for CAM in psychia-

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try is promising and likely to enhance the therapeutic repertoire.

*Dr. Bhopal is a first-year fellow in sleep medicine at Beth Israel Deaconess Medical Center, Department of Pulmonary Sleep Medicine, Boston.*

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# Complementary and Alternative Medicine in Psychiatry

Ijeoma Chukwu, M.D.

It is well documented that the use of complementary and alternative medicine (CAM) in the United States has been on the rise in the last two decades (1). Despite this trend, many physicians remain limited in their ability to guide patients in choosing alternatives to conventional methods of treatment (2). Psychiatrists are no exception to this phenomenon. Estimates of the use of CAM among patients with mental health disorders are purported to be higher than that for the general population (3). Yet many psychiatrists are uncomfortable with the use of CAM practices.

What accounts for this discrepancy? Perhaps part of the issue is that many mental health clinicians lack familiarity with CAM practices. This is in part due to the limited training that psychiatry residents receive in the area of CAM (2). Another part of the problem may be the lack of conclusive evidence to support the efficacy of CAM practices. Aside from the use of St. John's wort for depression and ginkgo biloba for dementia, there have been inconsistent results regarding the use of CAM practices (4). Consequently, many clinicians may be hesitant to employ alternative modes of treatment.

The lack of familiarity with CAM practices may also reflect the fact that psychiatry is still an emerging field in which the mechanisms of many conventional therapeutic agents are poorly understood. As such, the current focus in psychiatric treatment is on improv-

ing our understanding of conventional therapies, and efforts to integrate CAM practices have been neglected in the process. It should also be considered that several studies have demonstrated a lack of disclosure regarding the use of CAM practices among patients with mental health disorders, and thus many clinicians may be unaware of the prevalence rates in their patient population (5).

Whatever the case, as the number of patients using alternative treatments continues to grow, mental health clinicians will find it necessary to take strides toward improving their knowledge and understanding of CAM practices. One consideration in light of efforts to improve competency involves strategies to increase residency training in this area. While several psychiatric residencies offer elective rotations in CAM, few programs mandate training. Perhaps one strategy to improve competency is to implement mandatory residency training in CAM practices. Another consideration is to increase the number of continuing medical education opportunities offered in CAM. Efforts to increase knowledge and awareness of CAM practices should also include training in strategies to elicit the use of CAM for patients who may not be forthcoming.

Arguably, several forms of CAM treatment, particularly those available over the counter, offer affordability compared with conventional psychiatric treatment. In addition to cost savings, improving

competency in CAM can help to identify potential drug interactions, which may result from patient use of CAM in combination with conventional treatments (4). Ultimately, while further consideration should be given to the use of CAM practices in the treatment of mental health disorders, there is still a need for more research in this area.

*Dr. Chukwu is a first-year resident, Department of Psychiatry and Human Behavior, University of California, Irvine Medical Center, Orange, Calif.*

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# Melatonin as Treatment for Migraine Headaches and Nightmares in a Patient With PTSD and REM-Related Central Sleep Apnea

Michael Seyffert, M.D.  
George C. Gettys, M.D.

There is growing appreciation for the neuropsychiatric complexities of polytrauma among returning veterans. This includes a spectrum of pain, posttraumatic stress disorder (PTSD), and traumatic brain and spinal cord injuries (1). Studies have revealed the prevalence of significant sleep disorders in this population, including insomnia, restless legs syndrome, nightmares, and sleep-disordered breathing (2). Untreated sleep-disordered breathing is known to worsen PTSD symptoms, including REM-related nightmares (3) and pain severity. Conventional treatments for pain and restless legs syndrome include oral opioids, which may lead to subjective worsening of sleep (4). Opioids often worsen obstructive and central sleep apnea. Fragmented sleep resulting from opioid use may potentially interfere with rehabilitation efforts required to restore function in patients with polytrauma (4). An integrated therapeutic approach to include the use of complementary and alternative medicine (CAM) modalities, such as melatonin, may mitigate some problems associated with conventional treatments. We present a unique and complex case of a patient with PTSD, migraine headaches, and persistent nightmares, all of which improved with supratherapeutic doses of melatonin.

## Case

“Mr. A” is a 42-year-old male veteran of Operation Iraqi Freedom who has a history of PTSD and intravenous heroin abuse, and he presented with complaints of nonrestorative sleep. He developed chronic migraine headaches after a fall in which he also suffered multiple fractures in his lower extremities. Due to chronic pain, he relapsed to using heroin and was transitioned to methadone (200 mg/day). The patient complained of in-

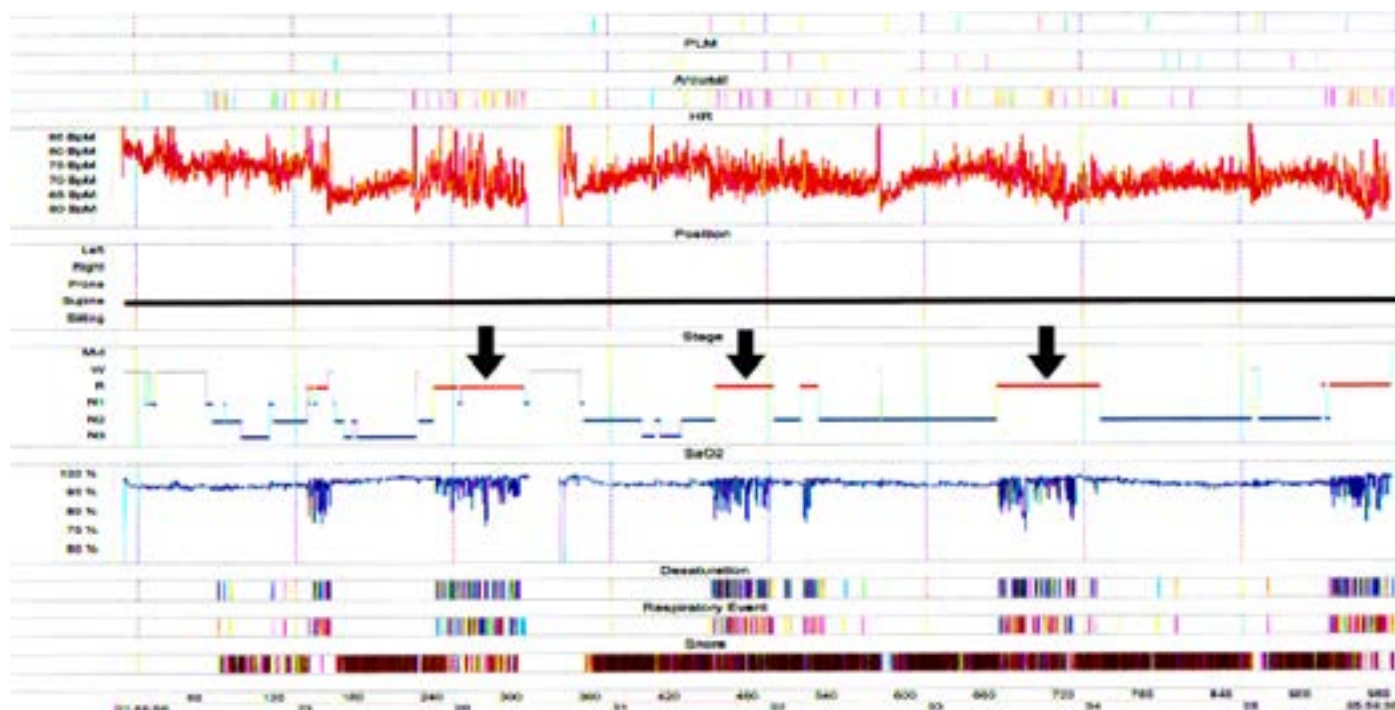
somnia, apneas during sleep, and daytime hypersomnolence. The Epworth Sleepiness Scale rating for Mr. A was elevated at 21/24, and his body mass index was 41. The Epworth Sleepiness Scale is a subjective rating scale for evaluating excessive daytime sleepiness, with a normal range of 6–12. Diagnostic polysomnogram demonstrated normal sleep architecture, with mixed central and obstructive sleep apnea (primarily central). The patient’s central sleep apnea was moderate during non-REM sleep stages and severe during REM, with an apnea-hypopnea index rating of 18 per hour and 49.4 per hour, respectively. The apnea-hypopnea index is a measurement tool used to assess the severity of sleep apnea based on the total number of complete cessations (apnea) and partial obstructions (hypopnea) of breathing lasting 10 seconds or more occurring per hour of sleep. These pauses in breathing are associated with a decrease in oxygenation of the blood. The O<sub>2</sub> saturation nadir in the patient was 69%. While central apneas usually occur during non-REM sleep, in the present patient, they occurred mainly during REM, with few events during non-REM immediately before REM (Figure 1).

During this time, the patient began to complain of sleep-onset insomnia and frequent early-morning awakenings accompanied by severe right-frontal headaches with photophobia, phonophobia, nausea, and emesis. His central apneas improved with bilevel positive airway pressure titration at a maximum pressure of 18/14 cm H<sub>2</sub>O. Bilevel positive airway pressure is a type of non-invasive ventilation that helps keep the upper airways of the lungs open by providing a flow of air delivered through a face mask at a certain pressure. Overall, the patient’s REM remained at less than

10% (normal, 20%) of total sleep, and he continued to complain of sleep-onset insomnia and morning arousals with migraine headaches. He subsequently underwent an adaptive servoventilation titration, which revealed an end expiratory pressure of 6 cm H<sub>2</sub>O, and minimum pressure support of 5 cm H<sub>2</sub>O improved his apnea-hypopnea index to 6.9 per hour, with an O<sub>2</sub> sat nadir of 91%. Adaptive servoventilation is a form of positive airway pressure that continuously monitors and analyzes a patient’s breathing pattern. When the adaptive servoventilation unit detects significant reductions or pauses in breathing, it intervenes with just enough support to maintain the patient’s breathing at 90% of what had been normal for that individual just prior to the decrease in breathing. Mr. A’s total sleep time was minimally increased by 17 minutes, and his REM sleep was again reduced to 12%. During this time, he reported an increase in morning arousal migraine headaches and complained of problems initiating sleep. He developed ruminative thoughts of death related to his chronic migraine headaches and traumatic nightmares.

In order to treat the sleep-onset insomnia, the patient was given a trial of over-the-counter melatonin, starting at a dosage of 5 mg 45 minutes before bedtime. After a week, he reported a notable improvement in his sleep-onset insomnia as well as a reduction in the frequency and intensity of his migraine headaches (decreased from 9/10 [10/10=greatest severity] to 4–5/10). When melatonin was increased to 10 mg at bedtime, the patient reported a complete resolution of his morning headaches and no further nightmares. A repeat polysomnography revealed a dramatic rebound in total REM sleep (28%).

FIGURE 1. Hypnogram for a Patient With PTSD and REM-Related Central Sleep Apnea<sup>a</sup>



<sup>a</sup> Hypnogram from the diagnostic polysomnogram reveals normal sleep architecture with mixed central/obstructive sleep apnea (primarily central). Central apneas occurred mainly during REM (arrows) with few events during non-REM immediately before REM.

## Discussion

PTSD is associated with higher rates of medical and psychiatric comorbidities, including hypertension, sleep disturbances, depression, and substance abuse (2). The association between PTSD, drug abuse, and migraine headaches has only recently been identified (5). The best course of treatment for these complex presentations remains largely undetermined. Our case highlights the complexities of managing comorbid neuropsychiatric and sleep problems in PTSD. In our patient, we hypothesize that insomnia and sleep-disordered breathing worsened PTSD and pain symptoms, marked by ruminative suicidal ideation and decreased REM sleep. While multiple case series have documented the association between opioid use and central sleep apnea (6), only one study, to our knowledge, has found central sleep apnea predominantly in REM sleep, in a patient with suspected Lyme disease (7). The exact mechanism of opioid-related central sleep apnea remains speculative, although it is hypothesized that opioids depress brainstem respiratory chemoreceptors (8).

Despite the complex presentation, treating the sleep-disordered breathing was a logical first step in mitigating our patient's insomnia and normalizing sleep architecture. We followed the small but growing evidence suggesting the use of adaptive servoventilation in treating central sleep apnea related to chronic opioid use (6). However, the patient experienced only minimal improvement in his total sleep time with decreased REM sleep and clinical worsening of his early-morning migraine headaches that he described as the causal reason for his ruminative thoughts of death.

Melatonin, a neurohormone produced in the pineal gland and a chemical precursor to serotonin, has long been known to regulate circadian sleep cycles and improve insomnia, but its role as an analgesic and possible mood enhancer remains to be determined. Previous studies have found that opioids disrupt the regulation of pineal gland activity in mammals, leading to dysfunctions in melatonin secretion (9). We hypothesized that replacing melatonin in a patient with PTSD may improve daytime mood, pain, and recurrent and distressing traumatic dreams,

along with nocturnal sleep problems. The adjunctive use of melatonin in our patient improved his headaches and increased his REM sleep.

Significant improvement in sleep and migraine headaches in our patient suggests an expanded clinical role for melatonin as both an analgesic and a treatment to improve disrupted sleep, in particular REM sleep continuity. Our patient had no circadian disorder (phase advance or phase delay), which may have explained the reduction in total sleep time and total REM on the polysomnogram. He had refractory sleep apnea that may have led to a catecholaminergic surge at night, lowering evening plasma melatonin. There is evidence that absence of normal nocturnal melatonin peak levels causes disturbed sleep-wake patterns (10). It is important to note that melatonin may resolve morning headaches independent of alterations of REM sleep; however, in the present case, it appears that melatonin ameliorated the symptoms of central sleep apnea by restoring REM sleep. The complex causes of PTSD, migraine headaches, and disrupted sleep to include central sleep apnea and the therapeutic potential



of melatonin to restore REM sleep leave the door open for future investigation.

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# Exercise: A Much Overlooked Treatment in Psychiatry

Daniel M. Hochman, M.D.

In light of the ongoing criticism of selective serotonin reuptake inhibitors and other pharmacological treatment for anxiety and depressive disorders, it would be quite nice if psychiatrists had some other “magic bullet”: a treatment that could work about as well in a wide range of illnesses regardless of severity and without any side effects. Fortunately, such a magic bullet does exist in the form of exercise.

The existing literature shows that exercise has a significant effect on mood (1) through several mechanisms, including biological, physiological, and psychosocial mechanisms (2). These reported effects of exercise on mood range from monoamine metabolism, neocortical activation, and hypothalamic-pituitary-adrenal axis-mediated reductions in depression and stress reactivity to improved self-efficacy, behavioral activation, and social engagement. Large reviews and meta-analyses have found effect sizes on par with those for medication and cognitive therapy (2, 3). Exercise has also been shown to be effective for mild and even subclinical forms of depression. And instead of having side effects, exercise in fact decreases the risk of myocardial infarction, stroke, hypertension, glucose metabolism, osteoporosis, dementia, and many forms of cancer, among numerous other benefits (4). Given the high association between mood or antipsychotic medication and obesity, this is particularly important. Even though some forms of exercise in some conditions (such as advanced coronary heart disease) may be dangerous, proper knowledge can allow

clinicians to easily provide individualized treatment in the same manner as medication selection (5).

Most medical students and residents are taught that exercise is beneficial for mood and helps to reduce many other known risk factors. However, brief mention and support of exercise in patient visits fosters just that: only brief mention and support. When clinicians are treating patients, there needs to be much more than a brief and general mention of exercise. For example, exercise type, intensity, duration, frequency, and short- and long-term approaches should all be considered. This level of recommendation requires a deeper understanding of the mechanism of action to inform the specifics of an exercise regimen in the same way we learn and understand the mechanism of action of medications. Many large reviews continue to recommend more studies, specifically with longer-term follow-up, and the investigation of different types of exercise.

Why exercise treatment has been underutilized in psychiatry remains unclear. Some possibilities include that it is perceived as less “medical,” that patients will resist the prescription of exercise, and that it is not as well published as pharmacological treatment because of less direct economic gain for pharmaceutical companies and academic departments. Further research, discussion, and dissemination of practice models for the application of exercise treatments for psychiatric conditions are highly needed. Advances in these areas could contribute in many

ways to our patients’ mental and physical health and well-being.

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# An Encounter With Unconscious Communication as a Novice Therapist

Shaneel Shah, M.D.

What is unconscious? We all have heard about it. We have had didactics on unconscious processes and their contribution to symptom formation. I understand unconscious as the experience that is out of our awareness, which may then result in actions without known motivations. Extending this understanding, it is not hard to imagine the role of unconscious in communication. It is well known that we do not merely communicate through words. In fact, different researchers have shown that nonverbal communication forms 70%–93% of communication between people (1, 2). Words can have both overt and hidden meanings. Often, they may mean something on the surface but carry another symbolic meaning at a deeper level. Attempting to understand a patient involves understanding the content of what is said and how it is said and identifying what may be being withheld from the discussion.

During my interaction with patients, however, I find it difficult to pay attention to all of these elements. My attention is usually preoccupied with the words being said and the feeling that is being conveyed through those words. Nonetheless, a therapeutic encounter allowed me an opportunity to explore the deeper meanings of our sessions.

## Clinical Case

“Ms. A” was a 29-year-old Latina American woman who was a full-time graduate student. She had been in treatment with me for almost 8 months (once a week) for dynamically oriented therapy. She had initially complained about episodic apprehension, particularly during times when she was not involved in some activity. During the previous few months, I had come to recognize her difficulties with experiencing and expressing anger. The patient felt uncomfortable getting angry with people and feared that if she

became angry with a person, the person would either abandon or reject her. This was evident in her relationship with her boyfriend. She preferred to keep her negative feelings private and often suffered silently. Likewise, she also found it difficult to experience anger during sessions. Often, there was silence, with blank stares, as she struggled to find a topic to discuss. She often filled the session with trivial things and excruciatingly small details of her life.

My supervisor and I understood this as her attempts to avoid uncomfortable feelings. He had advised me to confront her about her reluctance, but I had struggled with that advice. I usually find it hard to confront patients directly, which is part of my own personality structure, I suppose. I also felt that an overly direct approach might close the patient down and that I should provide time and space necessary for her to feel comfortable.

The literature shows that nondirective strategies may work to overcome resistance (3). Keeping that in mind, I had tried vainly to overcome the patient’s resistance and defenses by indirect questions or enthusiastic interpretations. Now, looking back at my approach, I can see that providing time and space may help a patient or client who is struggling in discussing his or her intimate feelings but is nonetheless trying. For Ms. A, this struggle, while discomforting, seemed too distant to benefit from time and space. Interpretation is another powerful tool that I feel enthusiastic therapists often use prematurely. If timed correctly, it can help open doors to one’s inner world, but tried prematurely, it may just bolster the lock on those doors.

During one session, I decided to focus on the patient’s resistance rather than trying to move past it. I confronted her about prolonged silences and her difficulties finding something meaning-

ful to talk about. I had expected her to minimize the problem; however, much to my astonishment, she confessed her reluctance to discuss personal matters. She felt that bringing up sensitive issues would make her upset and that she would not know how to handle her frustration after the session. I appreciated her honesty and suggested that it might help if she could express herself more openly. I also pointed out the absence of her anger in the room during our sessions. As this session came to an end, to my surprise I extended my hand to wish her the best for the new year, as this was our first meeting in 2012. I normally do not initiate handshakes with patients, and now I was in unfamiliar territory. She responded by saying that her hands were dirty from the day’s work and asked if I would still like to shake hands with her. I replied with a smile (nervously, I am sure), indicating that maybe we should postpone the handshake and that I would see her again next week.

## Discussion

As Ms. A left, I started to wonder what had just happened. As an inexperienced therapist, I associate confrontation with aggression. I was frustrated with my futile attempts to break through the patient’s defenses and finally had invited her to look at them. She was candid in her response but had also seemed distressed and vulnerable, which made me feel guilty for bringing up the issue. My offer of a handshake was possibly an unconscious attempt at reconciling with her. Even though she had not shown any overt displeasure toward my confrontation, her refusal of my proposal could be interpreted as an expression of anger. Alternatively, it could also be seen as a response to my invitation to talk more openly in therapy about her feelings. It was as if she was telling me that what lay beneath the surface might be “dirty”

and that it might require courage on my part to accept it and work with it. Perhaps she was asking me if I was ready for it. Going with that understanding, I failed her test when I responded “negatively” and avoided the handshake after all.

I could now see what might be making me reluctant to bring up her ambivalence. Perhaps I was afraid all along of what that might lead to. It might have been my projective identification with her. Resistance in treatment can be bidirectional, with both the patient and therapist contributing their own share. I decided to be more candid with Ms. A. In subsequent sessions, whenever I felt that she was struggling to find something important to talk about, I would gently point that out. She often responded positively, and our sessions began to be more meaningful. She still found it hard to discuss her

feelings, but I could see her trying to express herself, wanting to express herself. As she became better at communicating her emotions in our sessions, change began to take place in her life outside of the sessions. She developed a newfound comfort in articulating her feelings to her boyfriend. Her episodic apprehension reduced in frequency and intensity. Unfortunately, we had to conclude treatment 6 months later because I finished my residency year. She still had a long way to go, which she recognized, and she hoped to continue treatment in a private clinic. I was satisfied that the therapy had been helpful to her in achieving a sense of comfort with herself.

I remember what my supervisor once said about therapy and resistance: “Therapy is not meant to be comfortable for the therapist. If you are too comfortable, you

should wonder what’s going on. If what you are doing is not working, change the dance and be assured that something will change between you.”

*Dr. Shah is a first-year child psychiatry fellow in the Department of Psychiatry, St. Luke’s Roosevelt Medical Center, New York.*

## References

1. Mehrabian A, Williams M: Nonverbal concomitant of perceived and intended persuasiveness. *J Pers Soc Psychol* 1969; 13:37–58
2. Barnum C, Wolniansky N: Taking cues from body language. *Manag Rev* 1989; 78:59–60
3. Beutler LE, Moleiro C, Talebi H: Resistance in psychotherapy: what conclusions are supported by research. *J Clin Psychol* 2002; 58:207–217

## ASSOCIATE EDITOR POSITION 2013

### Job Description/Responsibilities

- Frequent correspondence with Residents’ Journal Editor-in-Chief and AJP professional editorial staff
- Frequent correspondence with authors
- Peer review manuscripts on a weekly basis
- Make decisions regarding manuscript acceptance
- Work with AJP editorial staff to prepare accepted manuscripts for publication to ensure clarity, conciseness, and conformity with AJP style guidelines
- Participate in conference calls with the Editor-in-Chief and quarterly conference calls with the AJP Editor-in-Chief and editorial staff
- Collaborate with others as necessary to develop innovative ideas
- Collaborate with the Editor-in-Chief in selecting the 2014 Associate Editor and 2014 Junior Editor
- Attend and present at the APA Annual Meeting
- Commitment averages 10–15 hours per week

### Requirements

- Must be an APA member-in-training
- Must be a PGY-3 in July 2013, or a PGY-4 in July 2013 with plans to enter an ACGME fellowship in July 2014
- Must be in a U.S. residency program

Selected candidate will be considered for a 2-year position, including advancement to Editor-in-Chief. Applicants should e-mail a CV and personal statement of up to 750 words describing their professional interests, qualifications, and reasons for applying for the position, as well as ideas for journal development, to [mseawell@med.wayne.edu](mailto:mseawell@med.wayne.edu). The deadline for applications is **February 28, 2013**.

## JUNIOR EDITOR POSITION 2013 (\*NEW POSITION)

### Job Description/Responsibilities

- Peer review manuscripts on a weekly basis
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- Attend and present at the APA Annual Meeting
- Commitment averages 5–10 hours per week

### Requirements

- Must be an APA member-in-training
- Must be a PGY-2, PGY-3, or PGY-4 resident in July 2013, or a fellow in an ACGME fellowship in July 2013
- Must be in a U.S. residency program or fellowship

This is a 1-year position only, with no automatic advancement to the Associate Editor position in 2014. If the selected candidate is interested in serving as Associate Editor in 2014, he or she would need to formally apply for the position at that time.

Applicants should e-mail a CV and personal statement of up to 750 words describing their professional interests, qualifications, and reasons for applying for the position, as well as ideas for journal development, to [mseawell@med.wayne.edu](mailto:mseawell@med.wayne.edu). The deadline for applications is **February 28, 2013**.



# The American Board of Psychiatry and Neurology: Looking Back and Moving Ahead

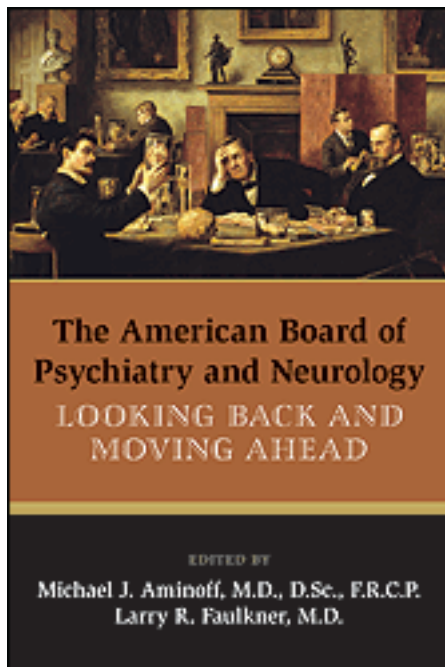
edited by Michael J. Aminoff, M.D., D.Sc., F.R.C.P., and Larry R. Faulkner, M.D.  
Washington, DC, American Psychiatric Publishing, 2012, 363 pp., \$68.00.

David Hsu, M.D.

In chapter 1 of this book, Dr. Aminoff states, "I have sometimes wondered whether anyone will ever read this book" (p. 4). To that I say, "nonsense." Bound to be an instant classic of administrative psychiatry, like Walter E. Barton's *The History and Influence of the American Psychiatric Association*, this book sheds light to the inner workings of the American Board of Psychiatry and Neurology (ABPN) and celebrates its 75th anniversary. I serendipitously happened to be on my neurology rotation while reviewing this book, and to my surprise, neurology residents also took an interest.

In 1935, when the ABPN just formed, there were only four board examinations taking place nationally, namely obstetrics and gynecology, dermatology and syphilology, ophthalmology, and otolaryngology. It was Adolf Meyer who, in 1928 as APA President, called for better standards in psychiatry. He praised the British system of examinations and certification. Organizations that helped to form the ABPN included APA, the American Neurological Association, and the American Medical Association.

Originally, all psychiatry and neurology trainees took the same examination. Later, they would take different oral examinations, then different written examinations. In the past decade, both specialties would do away with the oral examination altogether. Now, most psychiatrists think of the ABPN during times of maintenance



of certification exams. The leadership of the ABPN continues to address ongoing concerns of psychiatrists and the maintenance of standardized psychiatric care for the community at large.

A large part of the book focuses on subspecialties in psychiatry and neurology, with one chapter devoted to each subspecialty. The five traditional subspecialties in psychiatry are addiction psychiatry, child and adolescent psychiatry, geriatric psychiatry, psychosomatic medicine, and forensic psychiatry. The first and by far the oldest APBN subspecialty is child

and adolescent psychiatry, which was established in 1959. The second, geriatric psychiatry, would not be established until 32 years later in 1991.

As a combined psychiatry/internal medicine resident and budding geriatric psychiatrist, I found those respective sections of the book fascinating. Prior to the establishment of geriatric psychiatry as a recognized specialty, the ABPN consulted the American Board of Internal Medicine. Also, with regard to combined programs, I like that the editors provide thoughtful discussions for development and potential improvement of such programs.

The editors highlight the fact that the reason for the joint board stems from the continuing friendships of the executive committee. This struck home with me, as I was taking care of my neurology patients on the wards. Not only is there much overlap between psychiatry and neurology clinically, but psychiatrists and neurologists are also trained similarly. I had a mentor once say to me, "The difference between psychiatry and neurology is political, not scientific." As psychiatrists, we may need reminders every now and then of our neurological roots.

*Dr. Hsu is a fifth-year, Chief Resident in the Departments of Internal Medicine and Psychiatry, University of California Davis Medical Center, Sacramento, Calif.*



# TEST YOUR KNOWLEDGE

In preparation for the PRITE and ABPN Board examinations, test your knowledge with the following questions.  
(answers will appear in the next issue)

This month's questions are courtesy of Jessica Cohen, M.D., a second-year resident in the Department of Psychiatry at Emory University, Atlanta.

## Question #1

"Mr. JW" is a 55-year-old man with a 15-year history of HIV who presents with increased irritability, distractibility, and forgetfulness. He also has a history of major depression, with a good response to citalopram. He has been missing his work deadlines and forgetting scheduled meetings. He describes his mood as "okay," with reasonable sleep and appetite and reports no thoughts of suicide or feelings of worthlessness. He notes some loss of interest in activities, such as building toy model cars, and finds it increasingly difficult to use his hands in putting the models together. A collateral history from his brother reveals a 1-year history of gradual forgetfulness and confusion. Apart from some slightly increased deep tendon reflexes, the patient's neurological examination is normal. A review of his medical chart reveals that he is receiving highly active antiretroviral therapy and has a recent CD4 count of 675. What is the next best step in evaluating this patient?

- A. Obtain a viral load and CD4 count
- B. Change the patient's selective serotonin reuptake inhibitor and titrate to a higher dose
- C. Have the patient complete a Mini-Mental State Examination
- D. Have the patient complete the HIV Dementia Scale
- E. Obtain immediate head imaging for the patient

## Question #2

Which of the following is *not* part of the diagnostic criteria for HIV-1 associated dementia complex?

- A. Change in speed of processing information
- B. Acquired abnormality in motor function or performance
- C. Apraxia
- D. Decline in motivation or emotional control
- E. Difficulty completing clock-drawing task

## ANSWERS TO DECEMBER QUESTIONS

### Question #1

**Answer:** D. Dosage is the most significant risk factor for neuropsychiatric side effects of glucocorticoid therapy.

Doses as low as 2.5 mg of prednisolone per day have been reported to cause neuropsychiatric side effects. There is a significant dose-response relationship in the development of neuropsychiatric side effects of glucocorticoid therapy. These side effects include insomnia, restlessness, mania, anxiety, depression, and psychosis. The onset of symptoms has been reported to be as early as hours after treatment, although most side effects have been reported within the first week to month of steroid initiation. While systemic administration of glucocorticoids can precipitate these complications, neuropsychiatric side effects have been reported with any mode of administration (i.e., intra-articular, epidural, intranasal, and topical).

### Reference

1. Dubovsky AN, Arvikar S, Stern TA, Axelrod L: The neuropsychiatric complications of glucocorticoid use: steroid psychosis revisited. *Psychosomatics* 2012; 53:103-115

### Question #2

**Answer:** A Triiodothyronine (T<sub>3</sub>)

Whereas T<sub>4</sub> (levothyroxine) is typically given to patients who are hypothyroid, T<sub>3</sub> has been shown to be effective in both augmenting and accelerating the response of the antidepressant effect of tricyclic antidepressants and selective serotonin reuptake inhibitors in major depressive disorder. Thyroid-stimulating hormone is the hormone secreted from the anterior pituitary in response to the hypothalamic thyroid-releasing hormone. Iodine is an important component of T<sub>3</sub> and T<sub>4</sub>, which are produced in the thyroid gland.

### Reference

1. Rosenthal LJ, Goldner WS, O'Reardon JP: T<sub>3</sub> augmentation in major depressive disorder: safety considerations. *Am J Psychiatry* 2011; 168: 1035-1040

We are currently seeking residents who are interested in submitting Board-style questions to appear in the Test Your Knowledge feature. Selected residents will receive acknowledgment in the issue in which their questions are featured.

Submissions should include the following:

1. Two to three Board review-style questions with four to five answer choices.
  2. Answers should be complete and include detailed explanations with references from pertinent peer-reviewed journals, textbooks, or reference manuals.
- \*Please direct all inquiries and submissions to Dr. Vahabzadeh: [arshya.vahabzadeh@emory.edu](mailto:arshya.vahabzadeh@emory.edu).

# Author Information for *The Residents' Journal* Submissions

*The Residents' Journal* accepts manuscripts authored by medical students, resident physicians, and fellows; manuscripts authored by members of faculty cannot be accepted. To submit a manuscript, please visit <http://mc.manuscriptcentral.com/appi-ajp>, and select "Residents" in the manuscript type field.

- 1. Commentary:** Generally includes descriptions of recent events, opinion pieces, or narratives. Limited to 500 words and five references.
- 2. Treatment in Psychiatry:** This article type begins with a brief, common clinical vignette and involves a description of the evaluation and management of a clinical scenario that house officers frequently encounter. This article type should also include 2-4 multiple choice questions based on the article's content. Limited to 1,500 words, 15 references, and one figure.
- 3. Clinical Case Conference:** A presentation and discussion of an unusual clinical event. Limited to 1,250 words, 10 references, and one figure.
- 4. Original Research:** Reports of novel observations and research. Limited to 1,250 words, 10 references, and two figures.
- 5. Review Article:** A clinically relevant review focused on educating the resident physician. Limited to 1,500 words, 20 references, and one figure.
- 6. Letters to the Editor:** Limited to 250 words (including 3 references) and three authors. Comments on articles published in *The Residents' Journal* will be considered for publication if received within 1 month of publication of the original article.
- 7. Book Review:** Limited to 500 words and 3 references.

Abstracts: Articles should not include an abstract.

## Upcoming Issue Themes

*Please note that we will consider articles outside of the theme.*

### March 2013

Section Theme: Women's Mental Health  
Guest Section Editor: Harita Raja, M.D.  
[hbr01@gunet.georgetown.edu](mailto:hbr01@gunet.georgetown.edu)

### April 2013

Section Theme: Military Psychiatry  
Guest Section Editor: George Loeffler, M.D.  
[George.Loeffler@med.navy.mil](mailto:George.Loeffler@med.navy.mil)

### May 2013

Section Theme: DSM-5  
Editor-in-Chief: Monifa Seawell, M.D.  
[mseawell@med.wayne.edu](mailto:mseawell@med.wayne.edu)

### June 2013

Section Theme: Psychiatry and Social Justice  
Guest Section Editor: Megan Testa, M.D.  
[Megan.testa@mh.ohio.gov](mailto:Megan.testa@mh.ohio.gov)