The Residents' JOURNAL
a publication of
The American Journal of Psychiatry

November 2012 Volume 7 Issue 11

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In This Issue

This issue of the *Residents' Journal* includes articles on the theme of "transitions." In a commentary, Juliet Muzere, D.O., describes her transition from medical student to resident and teacher. Holly S. Peek, M.D., M.P.H., discusses the transition to electronic health records and how this affects safety, efficiency, and quality of patient care. Continuing with the topic of electronic medical records, Rachel Pope, M.D., outlines issues concerning patient privacy in an electronic records system. Alik Widge, M.D., eloquently discusses the upcoming transition to DSM-5. Lastly, Megan Testa, M.D., provides a review of issues specific to patients transitioning from jail or prison to community life.

Commentary

Metamorphosis: Transition From Student to Teacher

Juliet Muzere, D.O.

The metamorphosis from medical student to resident and teacher can be compared with the life cycle of a butterfly. Medical students enter their training as inquisitive caterpillars. Their activities are closely monitored to ensure that they can learn in a protected environment, similar to a cocoon. At the conclusion of medical school, they emerge as butterflies and enter the world of residency.

However, a butterfly immediately encounters adversity as it leaves the cocoon. Its body is delicate, and it must quickly learn to fly. My transition from medical student to resident and teacher was rather abrupt. No longer was I shielded by a cocoon; I was on my own. Although several inches of fabric were added to the length of my white coat, I was still a student in the field of medicine. At times, I would doubt my diagnostic and clinical abilities and would reluctantly seek help to alleviate the uncertainty. I was often correct with my initial stance. It was imperative that I gained confidence in my capabilities. This was achieved through continuous reading to strengthen my knowledge base and maintained by conveying the acquired information through teaching.

The role of teacher presented several challenges. I had to educate medical students to the best of my ability. This required being humble and recognizing my areas of weakness. If I was unable to provide a strong impromptu lecture, the students were immediately informed, and the discussion would be postponed to the following day. I did not want to deprive the students of a quality learning experience, and by selecting this approach, they were able to receive a rewarding lecture on their topic of interest.

Another hurdle I encountered when educating students was learning to utilize various forms of teaching. Some students opt for visual aids, while an oral lecture will suffice for others. One-on-one learning may be preferred over group sessions. I had to remain cognizant as well as flexible in conveying information in various formats to ensure maximum retention. Furthermore, I had to learn not to let my past learning experiences dictate the way in which I taught others. I dislike aggressive, serial questioning because of the anxiety and uneasiness that it provoked in me. However, I have worked with students who prefer that approach and have encouraged me to constantly test their knowledge. I have learned to be more accepting of different methods of teaching.

Although I am now a resident and a teacher, I will always remain a student through ongoing learning. I have learned from my students how to strengthen my skills as an educator as well as a leader. As I embark on my second year of residency, I am no longer the fragile butterfly of a year ago, but a confident physician who will continue to soar onto greater heights, acquiring valuable lessons along the way.

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Improving Safety, Efficiency, and Quality of Care: Transitioning to Electronic Health Records

Holly S. Peek, M.D., M.P.H.

Electronic health records have the potential to revolutionize the practice of medicine by improving patient safety, efficiency, and the quality of patient care.

At the most basic level, patient safety is improved by electronic entry of medication lists, allergies, and diagnoses. Compilation of this information allows for automatic medication reconciliation and drug-drug/drug-allergy interaction checks (1).

Rapid exchange of information allows for more efficient health care. Documented benefits of electronic health records currently in use include increased organization, accessibility, and accuracy of patient documentation, as well as improved communication between physicians, staff, and patients (2). When prescriptions and medical orders are transmitted electronically, efficiency is improved and medical errors can be quickly resolved (1). Health records and reminders for preventive and follow-up care can easily be provided to patients.

It is our responsibility as physicians to provide quality services that are up-to-date and evidence based. Government guidelines require clinicians and hospitals to demonstrate documentation of the clinical quality measures of electronic health records, which can be used to quantify practice processes and outcomes (1). For example, a behavioral health expert panel has convened to create measures in clinical decisions and outcomes in the domains of depression, suicide, trauma, autism, and substance abuse (3). The documentation of this information can be used to analyze practices in these domains in order to improve the quality of care. Collection of these data electronically rather than from paper chart reviews allows for easier and instantaneous data collection.

More advanced electronic health record functions include clinical decision support, which can potentially improve decisions and outcomes by issuing up-to-date and evidence-based clinical reminders that are patient specific (1, 4). For example, there is a disparity between evidence-based practice and actual practice in the treatment of depression, contributing to low rates of remission. Historically, physician adherence to evidence-based guidelines has been poor, with barriers to adherence including lack of awareness and self-efficacy (4).

Electronic health records contribute to improved quality of care on a large scale. Surveillance data collected with such records can be aggregated to indicate populations that are not receiving adequate care or that are not achieving goal health outcomes. These data can be submitted to public health agencies and thereby inform policy decisions to alleviate disparities (1).

Despite the benefits of electronic health records, there are criticisms regarding lack of time for training, lack of technical support, and disorganization during the implementation phase. These challenges have proven to be manageable in practices that plan well for transition in advance by restructuring office work flow and ensuring adequate technical support and staff training (2).

Although there exists concern about the confidentiality of online electronic health records, the necessity and convenience of secured online health information is similar to personal online banking. In fact, personal access to online records has been significantly associated with patient satisfaction in health organizations such as Kaiser Pemanente, which has been using an extensive electronic health record system for years (5).

As technology continues to develop, so will the capabilities and potential of electronic health records to improve patient safety, efficiency, and quality of patient care.

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See the current issue of the American Journal of Psychiatry *for another doctor's experience with electronic health records (Am J Psychiatry 2012; 169:1141–1142).*

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Electronic Medical Records: Ensuring Privacy in the Digital Age

Rachel Pope, M.D.

"People who see psychiatrists must feel secure that their revelations will remain private," said Daniel Borenstein, former president of APA (1). Federal standards to protect the privacy of patients are regulated under the Health Insurance Portability and Accountability Act (2). More recent legislation calls to adopt electronic medical records for all health care by 2014. Providers not complying in 2015 will face reductions in Medicare reimbursements (3).

Aside from the obvious financial incentive of transitioning to electronic records, one has to reflect on the possible negative consequences for psychiatric patients and effects on the relationship between patients and health care providers. A shared concern of patients and mental health professionals involves issues of confidentiality. As records "go online," access to sensitive information that nonauthorized persons could obtain has made some people wary of documenting psychiatric information electronically. A study conducted at Vanderbilt University in 2005 surveyed a group of mental health professionals to determine the acceptability of electronic medical records. Providers did have the impression that electronic records would facilitate improved quality of care. However, they also reported that they were less likely to put sensitive data into the records. While providers attempt to protect their patients' privacy, they in turn may be creating documentation that does not give a complete picture of a patient's history and presentation. Patients seem to share these concerns. In the Vanderbilt University survey, one provider noted that a patient was nervous about the possibility of a family member who worked in the facility being able to access their mental health records (4). A study conducted at the University of Michigan directly explored patients' concerns. The study indicated that patients were apprehensive about possible access to sensitive information by nonauthorized people within the hospital system. This was true for both patients who agreed to have their records entered into electronic format and those who refused (5). In a lecture, Dr. Lo (6), of the University of California, San Francisco, discussed professional and ethical concerns associated with electronic health records. He noted that given the concerns that patients have about access to their personal information contained in electronic records, they should be informed of how the electronic records work in a particular institution and about who would have access to these records.

As electronic health records become more widespread, it is important for mental health care workers to be aware of potential implications and patient concerns. Patients need to be able to have trust in their ability to share information freely with their psychiatrist without concerns regarding confidentiality. Health care workers need to be comfortable documenting sensitive information without fear of causing harm to the patient should information be accessed without authorization. In a field of medicine that does not solely rely on physical examinations, laboratory tests, and imaging studies but is dependent on the narration of patients' stories, the subjective description of their symptoms, and ultimately trust in their physician in disclosing the most intimate details of their lives, ensuring confidentiality is a must.

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Transition to DSM-5: The More Things Change, the More They Stay the Same

Alik Widge, M.D.

As we train in the art of psychiatric diagnosis, the foundation of that art is shifting. In May 2013, DSM-5 will go on sale. Overnight, psychiatric diagnosis will change, patients will be reclassified, and nothing will ever be the same, or so the lay press has claimed. My prediction, from a vantage point on APA's Board of Trustees, is that this transition will be barely noticed once we pass through it. I believe this for two reasons: the level of scientific oversight in the process and the way DSM-5 reflects changes in practice since DSM-IV.

As a trustee, I will vote for or against each revised diagnosis. However, before any revision receives a vote, it has been analyzed by the workgroup for the disorder, undergone independent review by the Scientific Review Committee and, sometimes, the Clinical and Public Health Committee, and then undergone a final screening by the Board's Executive Committee. If any of these groups believe that the evidence does not support a proposed change from DSM-IV, the disorder goes back to the drawing board. These hurdles mean that a disorder will likely maintain its DSM-IV structure unless there is very strong reason for change. From the process I have observed, controversial and unproven concepts will get screened out, not passed along. This transition will be mild because many diagnoses may not change substantially from DSM-IV.

Moreover, psychiatrists do not adhere well to DSM-IV. Diagnoses made with the Structured Clinical Interview for DSM-IV yield very different results from those made through a standard assessment (1). This is not simply sloppy practice; there are legitimate reasons why psychiatrists may diagnose a disorder even without all criteria. For example, consider posttraumatic stress disorder (PTSD), for which the workgroup has proposed expanding criterion A to include repeated exposure to low-level traumatic events (such as being a deployed war fighter and repeatedly hearing of others' deaths) (2). As detailed in the workgroup's rationale for the proposal (3), as well as in articles from the lay press (4), the revised criterion is not truly a change, since individual practitioners and Veterans Administration rules have enshrined such PTSD expanded criteria for years. I and many of my colleagues have prescribed selective serotonin reuptake inhibitors for subthreshold PTSD-like illness. There are no national data on the prevalence of such "loosened" diagnosing and prescribing for most disorders. The best that I can say is that the proposed criterion A fits the way I already practice.

It is not a trivial problem when many of us do not follow our gold-standard manual. That places us all at risk of increased payer review and public criticism, even (as with PTSD) when there is good evidence to diverge from DSM-IV. This was one of several reasons to create DSM-5 now; general psychiatric practice has changed and should be documented (5). However, it also means that even if DSM-5 criteria differ in wording, the practical impact of the transition could be quite small. DSM-5 is not a transition in and of itself; it is the documentation of a transition that began the moment DSM-IV was published.

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Working With Patients Who Are Transitioning From Jail or Prison

Megan Testa, M.D.

Hypothetical Case

Imagine that you are in your outpatient clinic. "Jason" is a 35-year-old man who presents to establish care. When he arrives for his appointment, he is very confrontational with the receptionist. He is disruptive in the waiting room by demanding to sit in a particular chair. He intimidates the patient who is sitting where he wants to sit by being verbally aggressive and assuming a physically threatening pose. When you bring him into your office, he sits on the edge of his seat. He looks around the room constantly and makes little effort to engage with you. He either avoids eye contact or glares at you suspiciously. When you attempt to take his history, he is not forthcoming. He denies all symptoms of mental illness and does not believe that he needs to see a psychiatrist.

When faced with a patient like Jason, it is easy to make assumptions. You probably wonder whether he is paranoid and likely consider whether he has posttraumatic stress disorder (PTSD). You may become frustrated because it seems as though the patient does not want treatment. His behavior may lead you to believe that he has antisocial personality disorder. These are reasonable clinical assumptions given the patient's presentation. However, in some cases, this presentation can be indicative of a transitional state that is unfortunately common among individuals with mental illness: the transition from jail or prison into the community.

In the United States, two to three times more people with serious mental illness are in prison than in psychiatric hospitals (1). In fact, the three largest psychiatric facilities in the United States are the Los Angeles County Jail, Cook County Jail, and Rikers Island (2). The Los Angeles County Jail has the capacity to hold 19,000 inmates and provides psychiatric services to approximately 10% of inmates, while Cook County and Rikers Island correctional facilities hold a collective capacity for 15,000 inmates, and a similar percentage of inmates receive mental health services.

Of individuals entering jails, 6% of men and 12% of women have severe mental illness, specifically schizophrenia or bipolar disorder (3). Other psychiatric illnesses are also highly prevalent in the correctional population, particularly PTSD, which is present in approximately 10% of male and 40% of female prison inmates (2). Many times, people with mental illness are arrested for nonviolent "nuisance offenses," such as disorderly conduct. Often, these offenses represent public displays of signs of mental illness, for example, street preaching or arguing with hallucinations. Additionally, police encounters with an individual with mental illness can escalate and lead to an arrest even if the individual was not breaking the law when he or she was initially approached (4).

Correctional Environment

The correctional environment is designed for control over inmates. Inmates have no ability to make basic amenities for comfort that we take for granted. The correctional environment is noisy. With many people in close quarters, it is not possible for an individual to escape to a quiet place. Additionally, inmates cannot control the temperature and are not provided with clothing or extra blankets for comfort at night. Furthermore, there is no privacy. Imagine using the toilet in a cell that is 9 square feet, which you share with at least one other person. Inmates are deprived of social and sexual contact with loved ones. They cannot pursue their hobbies and are deprived of coping skills that they had when living outside jail or prison.

The correctional environment is also a hostile and dangerous environment in which physical assault, exploitation of the weak, harassment, and rape occur. At one point, the occurrence of prison rape was so high that a bill entitled the Prison Rape Elimination Act of 2003 was passed by the Bush Administration to protect inmates from being sexually violated.

Correctional Adaptations

The research of Merrill Rotter identified predictable "correctional adaptations" made by individuals in order to survive in the jail or prison environment (5). One example is hypervigilance, which is very adaptive in the correctional environment, since the environment is hostile, unpredictable, and potentially violent. Other correctional adaptations are informed by what is known as the "inmate code." The inmate code is informally written by inmates, and if an inmate breaks this code, he or she can face severe consequences, including harassment and physical or sexual assault.

The inmate code has three rules, and inmates develop behaviors that help them prove to other inmates that they are following the code. The first rule is, "Do your own time." This means to mind your own business and not get involved with the business of others. Even attempts to help others are frowned upon among inmates. Inmates become accustomed to not engaging with others in order to show that they are doing their own time. Thus, guardedness is adaptive in the jail and prison environments. The second rule is, "Do not snitch." Inmates become reluctant to share information with correctional staff, which includes psychiatrists, because they do not want to be seen as snitching. The third rule of the code is, "Do not appear weak." Inmates engage in intimidation of others in order to not appear weak. They often hide symptoms of mental illness and refuse psychiatric care so that others do not discover that they have such illness and subsequently perceive them as weak. This

is often true even for individuals who have insight into their disorders (5).

Adaptations are difficult to break once individuals transition from jail or prison to the community. Individuals often carry these behaviors with them into social life outside the walls of the correctional system, where the behaviors are socially maladaptive and counterproductive to receiving proper psychiatric care. If it is at this point that we encounter the above patient, Jason, with the knowledge that he has just been released from prison, we can see that many of his behaviors may represent difficulty transitioning from the correctional environment to community life.

Working With Formerly Incarcerated Patients

Given that so many of our patients will have been involved with the correctional system at some point in their lives, it is important that all psychiatrists know how to work effectively with patients who have been in jail or prison. The first step in providing compassionate, effective care to our patients with correctional histories is to take a legal history on all patients in a nonjudgmental manner. As uncomfortable as it might feel to ask someone we meet for the first time whether he or she has ever been involved with the legal system, a psychiatric evaluation is not complete without a thorough legal and correctional history.

If you do find that your patient has been in the correctional system, it is important to talk to the patient about his or her experiences in the system. Screen for trauma that the patient may have experienced while incarcerated. Ask what it was like and how he or she coped. Do not jump to conclusions without exploring whether the symptoms you are observing fit into a larger clinical picture or are better attributed to correctional adaptations.

Most importantly, ask patients how they feel about being back in the community. The transition to societal life after leaving jail or prison can be extremely difficult, particularly for people with felony convictions. They often have difficulty finding jobs and housing, as well as with reestablishing relationships. Psychiatrists are in a unique position to help these individuals by pointing out how they may be using correctional adaptations in society, where they are maladaptive. By helping these patients to make the transition to adaptive societal behavior, you may prevent recidivism, benefitting both your patient and society.

Dr. Testa is a sixth-year Public and Community Psychiatry Fellow at Case Western Reserve University, Cleveland. *The author thanks Dr. Sara West, Psychiatrist at Northcoast Behavioral Healthcare and Assistant Professor at Case Western Reserve University, for being an inspiring role model and involved mentor.*

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Case Report

First, Do No Harm: My Dual Obligation as Psychiatric Resident and Aspiring Clinical Researcher

Mark Niciu, M.D., Ph.D.

I participated in a research training curriculum at Yale School of Medicine called the Neuroscience Research Training Program. During my outpatient PGY-3 year, I worked in several research clinics, including the depression research clinic. In this capacity, I managed to juggle responsibilities as both clinical researcher and psychiatric resident. However, in one instance, these dual roles posed a particularly challenging dilemma, as elucidated in the present case report.

Case

"Mr. P" is a 48-year-old single, Caucasian man who came to the clinic for potential participation in an upcoming study of riluzole, a Food and Drug Administration-approved medication for amyotrophic lateral sclerosis with preliminary antidepressant and anxiolytic effects in preclinical (1) and clinical (2) studies, as augmentation for selective serotonin reuptake inhibitor (SSRI)-refractory unipolar depression. The patient had been in a major depressive episode for the past 2 years when lamotrigine (with a putative glutamatergic mechanism of action [3]) was discontinued after he developed a rash suspicious for Stevens-Johnson syndrome. Since that time, his depression had been refractory to numerous antidepressant trials (including buspirone, trazodone, escitalopram, fluvoxamine, paroxetine, fluoxetine, quetiapine, and selegeline patch).

Mr. P had a history of major depressive disorder and generalized anxiety disorder that started in the mid-1980s. He had four prior inpatient psychiatric hospitalizations and was in outpatient treatment with a nonaffiliated psychiatrist for medication management and an independent psychotherapist for cognitive-behavioral therapy. He denied current substance misuse but had a history of prescription fentanyl abuse.

At the time of screening, the patient's medications were escitalopram (10 mg by mouth once daily), clonazepam (1 mg by mouth every night), and trazodone (12.5 mg by mouth every night). Study initiation was delayed by several months due to protracted negotiations between Yale and the manufacturer of riluzole. During this time, we met with the patient weekly. Because his current antidepressant regimen met criteria for adequate dose/duration on the Antidepressant Treatment History Form (4) in the presence of a high side-effect (especially gastrointestinal) burden, we did not titrate the dose of the SSRI prior to the start of the study.

Mr. P was the first enrolled participant at our site. He stood a 5/8 chance of being assigned to the active medication (50 mg by mouth b.i.d.) during the 8-week double-blind placebo-controlled study.

During the first 4-week epoch, his mood and anxiety minimally fluctuated, with an ever-expanding list of side effects. Rerandomization occurred in the second 4 weeks. Again, there was little improvement in the patient's mood and anxiety symptoms.

Since the blind will not be broken until study completion, Mr. P and I agreed to commence an open-label trial of riluzole. After 4 weeks, he demonstrated minimal improvement with new-onset neurological side effects. We then discontinued the SSRI in favor of stand-alone riluzole via slow SSRI tapering to minimize the risk of serotonin withdrawal. He reported worsening constipation that was nonresponsive to an aggressive bowel regimen. We then decided to discontinue riluzole because of the high risk/benefit ratio with little to no benefit on his psychiatric symptoms.

Discussion

Our weekly appointments occurred for several months prior to study initiation. During this time, my responsibilities slowly encompassed the role of psychiatrist and supportive psychotherapist, in addition to clinical researcher. In these months, Mr. P and I developed a close therapeutic alliance, and I experienced an intense desire to advocate for the amelioration of his psychiatric symptoms. Albeit he demonstrated little improvement during the protocol, Mr. P was a model research subject. He never missed a study appointment, fully participated in all study-related measures, took the study medication at the prespecified times, and diligently completed all study medication logs. On the sole instance that he missed a single dose, he was profusely apologetic and actively brainstormed ways to ensure complete treatment adherence for the remainder of the protocol. His unflagging passion for our clinic's academic mission further augmented my commitment to his psychiatric recovery. To wit, he even performed his own "research" into novel neuroscientific approaches to the treatment of mood and anxiety disorders, which we would frequently discuss in-session.

Toward the end of the open-label riluzole phase, another major pharmaceutical company approached our clinic about a phase-III protocol with a proprietary *N*-methyl-D-aspartate (NMDA) receptor antagonist with preliminary efficacy as a rapidly acting antidepressant. As might be expected, Mr. P expressed tremendous interest in enrolling. However, individuals could not participate if they had partaken in a major depressive disorder treatment study in the prior 6 months. As excited as I was about this novel protocol, it pained me to see Mr. P continually suffer from his intractable symptoms.

After having exhausted many standard medication and psychotherapeutic op-

tions, my treatment recommendation was a course of ECT. I consulted with Mr. P's outpatient cognitive-behavioral therapist, who also supported an ECT trial but was concerned about exposing the patient to additional experimental medications with unclear benefits. Mr. P ultimately refused ECT because of logistical concerns (e.g., shared bathrooms in an inpatient milieu and unreliable transportation to and from the ECT suite). Yet, this spurned me to ponder the potentially confusing (and even conflicting) roles of psychiatrist/psychotherapist in a clinical research milieu. I strongly advocated a course of ECT, the most efficacious treatment in refractory depression (5), but also appreciated the need to bring antidepressants with novel mechanisms of action closer to market because of the inadequacy of current monoaminergic-based antidepressants in treatment-resistant depression. There are often tremendous difficulties in recruitment/retention in human-based psychiatric research, and I knew that Mr. P would continue to be a model subject in the new protocol. Even though he was guaranteed to receive the proprietary NMDA receptor antagonist in the study's open-label phase, the protocol was yet to receive institutional approval, and his recent participation in the riluzole study would further delay standard treatment. More importantly, though, he may receive little to no benefit from this experimental glutamatergic medication, and, as with the rapidly acting antidepressant ketamine at subanesthetic doses (6, 7), NMDA receptor antagonists have their own risks (e.g., psychotomimetic and gastrointestinal side effects, although ketamine appears safe in a controlled neuropsychiatric research milieu [8])."

Because of Mr. P's medication sensitivity, I expressed grave concern that the risk/benefit ratio of an additional research trial would be much higher than an acute course of ECT. Throughout, he remained resistant to this recommendation. Yet we maintained our excellent therapeutic alliance. At my behest, he volunteered to be interviewed by a senior clinician in front of the entire psychiatry residency for our interview and formulation course. "Whatever I can do to help, doc," he offered in his prototypically kind and appreciative manner. During the interview, not only did he cite his religious faith and relationship with his mother as protective factors against suicide, he also stressed that the sympathetic *clinical* care that he received from all his doctors (and specifically mentioning me) was also a major source of strength and solace during this trying time.

Conclusions

This patient presented particular challenges to me as I tried to balance the dual tasks of psychiatric resident and aspiring clinical researcher. The Hippocratic oath that we all recited at our medical school graduation emphasizes that we must "first, do no harm," and, based on my continuing advocacy for the most evidence-based treatment in refractory depression, I remained steadfast in this dictum. The need for patient advocacy in clinical research will arise throughout my academic career, and, when future dilemmas like this arise, I will remind myself of this formative case from residency.

At the time this article was accepted for publication, Dr. Niciu was a fourth-year resident in the Neuroscience Research Training Program, Yale School of Medicine, New Haven, Conn. He is currently a clinical research fellow at NIMH in the Experimental Therapeutics and Pathophysiology Branch, where he is continuing with clinical neuroscience research in mood disordered patients. *Salary support was provided to Dr. Niciu by NIMH grant T32 MH-019961 (principal investigator, Robert Malison, M.D.) and by the Robert L. McNeil, Jr. Fellowship in Translational Research. Funding for the research protocol cited in this article was provided by NIMH grant R01 MH-085055 (principal investigator, Gerard Sanacora, M.D., Ph.D.).*

The author thanks Dr. Sanacora for his clinical and research supervision during residency and the support staff at the Yale Depression Research Program, especially Ms. Madonna Fasula, A.P.R.N., and Elizabeth Cooper, B.A.

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Exposure to Drug-Related "People, Places, and Things" Through Online Social Networking Sites Among Adolescents in Substance Abuse Treatment Programs

David Tran, B.A.

Exposure to environmental cues previously associated with drug use ("people, places, and things") is a common precipitant of drug relapse among persons receiving treatment for drug addiction (1). Social networks also influence substance use in adults (2, 3) and adolescents (4), and these effects may be mediated through environmental cues. Use of online social networking media has increased substantially, especially among youths. Yet, the extent to which online social networking may expose youths in substance abuse treatment to "people, places, and things" associated with drug use that may prompt relapse is not known. In the present study, pilot data were collected to assess the effect of online social network use and exposure to drug-related cues among a sample of youths attending a community substance abuse treatment program in East Los Angeles. The objectives were 1) to determine the proportion of youths in substance abuse treatment who use online social networking sites and assess the frequency of use among those who do use such sites and 2) to assess exposure to drug-related as well as recovery oriented content on online social networking sites.

Method

A 20-question survey was administered to 19 male and 17 female participants (one participant [1/37] did not report sex), ages 12–18 years, who were receiving substance abuse treatment. Participation in the study was voluntary, and refusal did not affect individuals' participation in the substance abuse treatment program. Youths who were interested were seated in a private area of the clinic to complete the questionnaire. After completion of the questionnaire, participants received a $5.00 gift card. The study was approved by the institutional review board of the University of California, Los Angeles.

Participants' use of online social networking sites was assessed with questions regarding the frequency of use, method of access, and content of drug-related posts on their own profiles and on the profiles of their friends. Responses were on a 4-point scale ("never=1," "sometimes=2," "most of the time=3," and "all of the time=4")

All data analyses were performed using Stata 9.0 (StataCorp, College Station, Tex.). Responses between male and female participants were compared. The proportion of youths who reported use of online social networking sites and the proportion who reported exposure to drug-related cues and recovery oriented posts were calculated. T tests and chi-square analysis were utilized.

Results

A total of 37 youths (male, 19; female, 17; unreported sex, 1) completed the survey. The mean age was 15.6 years (SD=1.44). The racial/ethnic composition of the participants was as follows: Hispanic/Latino, 94.4%; Asian, 2.8%; black/African American, 2.8%. Marijuana was the most commonly reported drug of choice (male, 95%; female, 82%). Thirty-three participants (89%) reported use of online social networking sites (Table 1).

Among youths who reported use of online social networking sites (N=33), 94% (N=31) reported using Facebook, 33% (N=11) reported using Myspace, and 15% (N=5) reported using Twitter. The most common reported means of accessing these sites was a home computer (64%, N=21), and 64% (N=21) of participants reported accessing online social networking sites daily. Forty-four percent (N=14) reported posting drug-related content on social networking sites, while 94% (N=30) reported that their friends posted drug-related content, and 66% (N=21) reported that a post had caused them to have an urge or craving for drugs (Table 2). In contrast, only 22% (N=7) reported that their friends posted recovery oriented content on social networking sites. The majority of youths (97%, N=31) reported having friends on social networking sites who use drugs (Table 2).

TABLE 1. Demographic Characteristics of Youths in Online Social Networking Sites[a]

	Use of Online Social Networking Sites				
Characteristic	**Reported Use**		**No Reported Use**		**p**
	N	**%**	**N**	**%**	
Gender[b]					
Boys	16/19	84	3/19	16%	
Girls	17/17	100	0/17	0%	0.087
Ethnicity[c]					
Latino	30/32	93.8	4/4	100%	
Other	2/32	6.3	0/4	0%	0.876
Drug of choice					
Marijuana	29/33	87.9	4/4	100%	0.461

[a] The mean age (years) of youths who did and did not report use of online social networking sites was 15.45 (SD=1.46) and 16.75 (SD=0.5), respectively.
[b] One participant did not report gender.
[c] One participant did not report ethnicity.

TABLE 2. Exposure to Drug-Related and Recovery Oriented Content Through Online Social Networking Sites

Site Content	Total[a] (N=32)	Boys (N=16)	Girls (N=17)	p[b]
Drug-related				
Youth posts drug-related content	44%	27%	59%	0.07
Youth's friends post drug-related content	94%	87%	100%	0.12
Youth reports that a post caused urge to use drugs	66%	53%	77%	0.17
Youth reports friends on the site who use drugs	97%	93%	100%	0.83
Recovery oriented				
Youth's friends post recovery related content	22%	7%	35%	0.05

[a] Of the 33 youths who reported use of online social networking sites, one did not answer the drug-related question.
[b] Comparison of gender.

Discussion

In this study, a majority of youths reported using online social networking sites. Most youths who reported using these sites also reported exposure to people who use drugs and drug-related content, which caused them to feel the urge to use drugs. In contrast, a minority of youths reported exposure to recovery oriented content. No statistical significance was found between male and female participants regarding exposure to drug-related content online, which was most likely because of the small sample size.

There were limitations to this study. The homogenous demographic characteristics of the participants and the small sample size are not representative of the general adolescent population. In addition, data on drug use during treatment were not collected. Regardless, exposure to drug-related content on social networking sites may negatively affect outcomes of substance abuse treatment. As a result, studies examining the use of online social networking sites during substance abuse treatment and treatment outcomes among youths are warranted. Although the results highlight the potential negative influence that online social networking sites may have on youths in treatment through exposure to drug users and drug cues, the low rate of exposure to recovery oriented content on these sites suggests that there is a missed opportunity to use the power of social media to support recovery. Interventions aimed at lowering exposure to drug-related content in online social networks or increasing the number of nondrug users in these networks may improve outcomes among youths receiving substance abuse treatment.

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The author thanks Dr. Keith Heinzerling, from the David Geffen School of Medicine, and Felipe Rodriguez and Henry Van Oudheusden, from the Behavioral Health Services Adolescent Substance Abuse Treatment Program, as well as Michelle Tran.

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2. Mason MJ: Mental health, school problems, and social networks: modeling urban adolescent substance use. J Prim Prev 2010; 31:321–331
3. Rosenquist JN, Murabito J, Fowler JH, Christakis NA: The spread of alcohol consumption behavior in a large social network. Ann Intern Med 2010; 152:426–433
4. Mednick SC, Christakis NA, Fowler JH: The spread of sleep loss influences drug use in adolescent social networks. PLoS One 2010; 5:e9775

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)

Question #1

Which one of the following is not part of the DSM-IV criterion C (avoidant/numbing) for posttraumatic stress disorder (PTSD)?

A. Feeling detached or estranged from others
B. Efforts to avoid places associated with the trauma
C. Intense feelings of worthlessness
D. Decreased range of affect

Question #2

Nightmares can be a particularly troubling symptom in PTSD. Which one of the following medications has the greatest evidence to suggest its efficacy in treating nightmares in PTSD?

A. Bupropion
B. Prazosin
C. Melatonin
D. Quetiapine

ANSWERS TO OCTOBER QUESTIONS

Question #1

Answer: B Fregoli syndrome

Fregoli syndrome is a misidentification syndrome in which the patient falsely believes that multiple people he or she encounters are in fact the same one person who is continuously changing disguises (1). The syndrome is named after Leopoldo Fregoli, an Italian actor who specialized in rapid changes in appearance. This syndrome is in contrast to Capgras syndrome, in which the patient has a delusional belief that a specific person, usually a spouse or close family member, has been replaced by an identical-looking imposter. Cotard's syndrome refers to a patient's nihilistic delusion that he or she is actually dead or does not exist. The patient may believe that his or her bodily organs are rotting or disintegrating. Münchausen syndrome is a factitious disorder in which the patient feigns illness in order to draw attention.

Reference

1. Fish FJ: Fish's Clinical Psychopathology: Signs and Symptoms in Psychiatry. Edited by Hamilton M. Bristol, United Kingdom, John Wright and Sons, 1974

Question #2

Answer: D 5-HT_{1A}-receptor partial agonist

Buspirone is an anxiolytic medication that is a 5-HT_{1A} receptor partial agonist targeting pre- and postsynaptic receptor sites in the limbic system. It requires long-term administration over several weeks to produce its anxiolytic effect (1).

Reference

1. Schatzberg AF, Nemeroff CB: The American Psychiatric Publishing Textbook of Psychopharmacology, 4th ed. Washington, DC, American Psychiatric Publishing, 2009

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.**

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.

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

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Section Theme: Open
E-mail Editor: Monifa Seawell, M.D.
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March 2013
Section Theme: Women's Mental Health
Guest Section Editor: Harita Raja, M.D.
hbr01@gunet.georgetown.edu