

**The Frontline Reports column features short descriptions of novel approaches to mental health problems or creative applications of established concepts in different settings. Material submitted for the column should be 350 to 750 words long, with a maximum of three authors (one is preferred) and no references, tables, or figures. Send material to Francine Cournos, M.D., at the New York State Psychiatric Institute (fc15@columbia.edu) or to Stephen M. Goldfinger, M.D., at SUNY Downstate Medical Center (smgoldfingermd@aol.com).**

## Engaging U.S. Veterans With PTSD in Online Therapy

Approximately one-quarter of combat veterans meet diagnostic criteria for posttraumatic stress disorder (PTSD), and many more struggle at subclinical levels. Many service men and women experiencing PTSD symptoms are reluctant to engage in treatment, and nontraditional online health care pathways have been proposed as a possible solution.

We recently completed a year-long project to evaluate the efficacy of several innovative online engagement and assessment methods in a group of 86 male veterans aged 18 to 65, about half of whom had combat-related PTSD. We developed a private, secure, social networking Web site that featured forums and blogs on which users could post openly and interact with other veterans. The site, launched in 2011, also included detailed structured assessments, satisfaction surveys, and other opportunities for users to provide feedback, and it gave access to a library of PTSD educational materials. The veterans were asked to contribute content anonymously on topics of their choosing several times weekly. A psychiatrist served as a facilitator (identified, not anonymous), who logged in daily, checking for any possible abusive language or interactions, monitoring the posts for threats of possible self-harm or

dangerousness, and contributing to and facilitating some of the conversations.

Veterans with combat-related PTSD were substantially more difficult to engage than veterans without PTSD. We had greater difficulty recruiting them to the program, and overall they participated much less in the online environment. Veterans with PTSD who were active users of the site were more likely to have already had PTSD treatment before starting the program. We posit that engagement difficulty was at least in part due to the trauma-avoidance features of PTSD. Veterans with more extensive treatment histories may have participated more fully because they were effectively “immunized” by previous treatment to the possible effects of recall of trauma. These findings suggest that the nature of PTSD (trauma avoidance) and the associated cognitive issues (difficulty concentrating and remembering) and related symptoms (substance abuse, depression, and anger) may reduce the likelihood of engagement in, and effectiveness of, online programs, just as these issues do with traditional in-person programs.

Our other engagement-related and retrospective observation is that we did not undertake a sufficiently comprehensive assessment of “e-health literacy” despite asking what we thought were detailed screening questions about computer knowledge and access to ensure the veterans could use the Web site effectively. E-health literacy has been defined as the ability of a person to seek, find, understand, and use health information from electronic sources and then apply that knowledge to the resolution of a particular health problem. To be considered e-health literate, an individual needs to initially possess the skills required for traditional literacy (sufficient reading and writing skills) as well as adequate computer skills. Even though most of the veterans in the program had these skills, a significant proportion did not, which may have hampered their participation. Web sites for veterans should be planned carefully to ensure that the design is appropriate for and acceptable to this

group and that site navigation is straightforward.

Despite the barriers noted, we obtained large amounts of written language to analyze with machine learning techniques for the purpose of assessing veterans for PTSD. The main themes discussed on the site were support and sharing, which often involved stories of personal pain and distress. Advice and help were offered, especially about how to navigate health systems to obtain good care. Many veterans compared experiences over time, particularly across different war environments (Vietnam and Korea versus Iraq and Afghanistan). Overall, veterans reported that the online experience was helpful and beneficial, although a few believed that the online conversations triggered their PTSD symptoms and thus their choice to discontinue engaging with the site. These individuals had received minimal prior treatment.

In summary, we found that the nature of PTSD and associated issues, such as trauma avoidance, may make veterans with combat-related PTSD particularly difficult to engage in online programs and that prior treatment experience may be a factor in online intervention effectiveness with this group. Furthermore, we believe that e-health literacy is an important issue to consider when developing online clinical assessment tools and environments and when considering online interventions.

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## Schizophrenia Treatment Satisfaction in Nigeria

Traditionally, evaluations of health care quality have primarily used measurements based on physiologic and

therapeutic outcomes. Increasing recognition of the need for patient-centered evaluative approaches to health care service has led to greater use of patient satisfaction surveys in program evaluation to give patients a voice in the audit process.

The use of satisfaction surveys in mental health care lags behind satisfaction surveys in other fields of medicine. However, a growing body of research has demonstrated that including patient perspectives in the evaluation of the delivery of care can add an important dimension to our performance improvement efforts.

In Nigeria, similar to other low-income countries, satisfaction surveys are rare. Mental health professionals and administrators place a low premium on the assessment of patient satisfaction as an important indicator of hospital performance and service delivery. The dearth of satisfaction surveys deprives patients of the opportunity to provide input about service delivery to enhance sensitivity to their needs. Further, for patients who will need long-term follow-up, low satisfaction with service delivery can have a significant impact on their participation in and compliance with treatment interventions, appointment schedules, and the overall outcome of their care. Patients undergoing long-term psychiatric care are a major group with schizophrenia, a group whose feelings about their services are rarely studied in poorer countries.

Between July and September of 2011, we conducted a cross-sectional random survey of patients with schizophrenia

attending the outpatient clinic of the largest psychiatric institution in Lagos, the Federal Neuro-Psychiatric Hospital in Yaba. The survey was done with the 15-item Charleston Psychiatric Outpatient Satisfaction Scale. Informed consent was obtained from each participant; the Hospital Ethical Committee approved the study protocol. Over three months, we recruited 110 patients between ages 19 and 81. Patients graded their level of satisfaction on a 5-point E5 response format ranging from 1, poor, to 5, excellent. Thirteen of the items were scored, for a possible range of 13–65.

The mean  $\pm$  SD score for overall satisfaction was  $40.17 \pm 7.00$ . The highest scores were recorded in areas assessing helpfulness of the services received ( $3.73 \pm .99$ ), helpfulness of the records clerks ( $3.69 \pm 1.07$ ), matching of treatment plan to patient's needs ( $3.67 \pm 1.16$ ), overall quality of care ( $3.62 \pm .88$ ), and willingness to recommend the service ( $3.42 \pm .77$ ). All but two of the scores were rated  $\geq 3$ . The lowest mean scores were recorded for the amount of time waiting to be seen ( $2.67 \pm 1.08$ ) and the cost of services and medication ( $2.50 \pm 1.63$ ).

We were delighted to find that the areas of highest endorsement were those that reflected staff-patient interactions and perceptions of the value and quality of the overall care provided. Domains in which employees could provide positive experiences without additional cost were perceived favorably. The areas of low satisfaction reflected patients' dissatisfaction with

cost and waiting time at the outpatient clinic, which are largely a result of the lack of resources available and the high patient-doctor ratio in Nigeria. Although these shortcomings are more difficult to change than other factors, knowing outpatients' perceptions has spurred us to begin making inroads into addressing these issues.

For example, since the survey was completed, the hospital has increased the number of doctors in its employ, which has helped in reducing waiting times. Cheaper generics of various antipsychotics are now available, which has made the cost of medication more affordable. Other hospital units have followed our lead and embarked on conducting surveys of satisfaction among all categories of patients. The hospital's patient advocacy service has undergone reorganization and now employs a consultant psychiatrist.

The ease of conducting satisfaction surveys and the important information that they can gather makes them an easy-to-use, inexpensive, accessible, and effective evaluative method in assessing the quality of mental health care delivery. In Nigeria, it has begun to provide health care administrators with a template for building a patient-centered mental health service.

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