A Descriptive Model of the Current PTSD Care System: Identifying Opportunities for Improvement

Jukrin Moon, Alec Smith, Farzan Sasangohar, Justin K. Benzer, Hye-Chung Kum
Texas A&M University, College Station, Texas, USA

Post-traumatic stress disorder (PTSD) is a mental health disorder may be developed after witnessing or living through distressing events or situations. PTSD is estimated to impact 23 percent of veterans from recent wars in Iraq and Afghanistan (Kessler et al. 1995). To support PTSD patients with usable, interactive, and effective support tools, such tools should be informed by the understanding of current PTSD care system and the needs and expectations of all stakeholders. Although two smartphone apps (CPT Coach and PE Coach) have been developed for treatment-supportive purposes, lack of capabilities to provide remote care and integration into clinicians' on-going treatment is a general gap. The lack of systems perspective in currently available tools which could lead to a loss of potential opportunities for improvement is partly due to the absence of clear understanding of the current PTSD care system for Veterans to inform the design of such tools. Thus, in this on-going study, semi-structured subject matter expert (SME) interviews are being conducted with clinicians and Veterans to provide a descriptive model of the current PTSD care system, and accordingly, to inform the design of a new PTSD tool to support efficient treatment. As a result of iterative interview analysis processes, we have built an end-to-end descriptive model of the current PTSD care system with six phases. Quick Screening, Screening & Diagnosis, Prescription, Treatment, Homework/Self-assessment, and Follow-up & Diagnostic Re-assessment. After constructing the healthcare model for veterans with PTSD, three possible areas for improvement have been identified based off of the interviews and analysis: 1) lack of communication: Since the treatment and care for PTSD could occur outside of Veterans Affairs (VA), the Veterans could receive prescriptions from two or more different psychiatrists/psychologists. This could lead to a potential problem because the non-VA and VA medications may counteract each other. Even inside the VA system, the lack of communication between clinicians (i.e., psychiatrists and psychologists) could lead to their conflicting prescriptions (e.g., pharmacotherapy and psychotherapy); 2) lack of consideration of patient's characteristics: They tend to be forgetful (i.e., they are not good at recognizing when triggered; they need reminders), and avoidant (i.e., escapism; lack of emotion; they need to be motivated; their supportive tool needs to have persuasive design). When undergoing treatment, veterans forget to do homework or choose not to do it because they tend to escape certain feelings or emotions; and 3) lack of treatment control in-between sessions: In-between sessions are not being sufficiently leveraged as part of the treatment in the current PTSD care system. Oftentimes, veterans with PTSD will attend their sessions once a week and not do any further activities until the next session. Since they spend only one out of 168 hours with clinicians in a week, the remaining 167 hours of in-between sessions need be to leveraged as treatment with practice of the skills they learned during sessions. Because of this problem, there exists a need for more in-between activities for the veteran and more information about the veteran so that the clinicians can treat them better. Areas of improvement may include communication between clinics and clinicians, memory-aid and self-assessment tools, and patient- and clinician-facing interfaces and objective assessment, respectively. The findings from this study are expected to provide an unconventional, systematic, and user-centered perspective that enables the design of PTSD tools to be integrated with treatment.

Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. Archives of general psychiatry, 52(12), 1048-1060.

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