

## **Evaluation of medication non-adherence and associated factors in posttraumatic stress disorder**

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### **Abstract**

Posttraumatic stress disorder (PTSD) is a condition in which symptoms develop following a traumatic event and are characterized by intrusive thoughts, nightmares, and flashbacks of past traumatic events, avoidance of reminders of trauma, hypervigilance, and sleep disturbance, all of which lead to considerable social, occupational, and interpersonal dysfunction. The lifetime prevalence of PTSD ranges from 7.8 to 12.3%; moreover, PTSD is a chronic disorder for up to 50% of subjects. The risk of PTSD may be higher in military veterans than the general population, and may be even more prevalent in newly returning Operation Iraqi Freedom (OIF) soldiers than soldiers of previous wars. PTSD is associated with significant medical and psychiatric comorbidity. Patients with PTSD have greater levels of disability, use of prescription medications and healthcare visits, and work impairment. Treatment can shorten the course of PTSD and may include psychotherapy, pharmacotherapy or both. Antidepressants, specifically selective serotonin reuptake inhibitors (SSRIs), improve core PTSD symptoms, comorbid depression, resilience and disability. They are considered first line pharmacotherapeutic agents in the Veterans Affairs (VA)/Department of Defense (DoD) Practice Guidelines for PTSD. Maintenance studies indicate a higher risk of relapse in patients with medication (SSRI) withdrawal versus those continuing treatment for at least six months. Antidepressant therapy is generally continued for at least one year and often longer in patients with multiple risk factors for relapse or other psychiatric co-morbidities. Adherence to medications for most psychiatric illnesses has been shown to be poor. While the extent of non-adherence in PTSD is unknown, patients with PTSD from all causes are more likely to overuse some psychoactive medications and underuse medical prescription medications, leading to poorer medication outcomes. PTSD has also been associated with poorer adherence in patients with HIV, post myocardial infarction and children undergoing liver transplant. However, there is very limited data addressing adherence in veteran patients with PTSD or on the impact that veterans' medication beliefs have on medication adherence. To evaluate non-adherence in veterans with PTSD, we propose 3 specific objectives, 1) to identify the extent of medication non-adherence in patients being managed in a specialty PTSD outpatient treatment program at the Veterans Affairs Medical Center (VAMC) in Lexington, Kentucky, 2) to determine the association of medication-beliefs with non-adherence and 3) to determine the association of the level of the veterans resilience with medication adherence. Adherence and medication beliefs will be assessed by questionnaire and adherence validated by electronic claims for prescription refills. Resilience will be assessed with a 2-item self-assessment indicating the veteran's ability to successfully adapt to change. Given the severity of the disability associated with PTSD, the impact of non-adherence is expected to be tremendous to both patient and the health care system. The proposed research may lead to successful pharmacist-driven interventions that could be easily adopted across multiple facilities to facilitate optimal patient outcomes.