

Submission Id: 2815

Title

Characterizing posttraumatic stress disorder in primary care using electronic medical records: a retrospective cohort study

Priority 1 (Research Category)

Behavioral, psychosocial, and mental illness

Presenters

Dhasni Muthumuni, MD, BSc, Leanne Kosowan, MSc, Alan Katz, CCFP, MBChB, MSc, MBChB, Sabrina Wong, PhD, RN, J Don Richardson, John Queenan, PhD, BA, MSc, Hasan Zafari, PhD, Alexander Singer, MD, CCFP, Tyler Williamson, PhD, Farhana Zulkernine, PhD, Brent Wolfrom, MD, Jitender Sareen

Abstract

Context: Posttraumatic stress disorder (PTSD) is a chronic mental health disorder associated with significant morbidity and economic cost. Primary care providers are frequently involved in the ongoing management of patients experiencing PTSD, as well as related comorbid conditions. Despite recognized need to enhance PTSD management in primary care settings, knowledge regarding its prevalence in these settings is limited. Objective: To apply a validated case definition of PTSD to electronic medical records (EMRs) of family physicians and nurse practitioners participating in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN). Study Design: Retrospective cross-sectional study. Dataset: This study accessed de-identified EMR from 1,574 primary care providers participating in the CPCSSN. Population studied: The study population included all patients with at least one visit to a primary care provider participating in the CPCSSN between January 1, 2017 and December 31, 2019 (N = 689,301). Outcome Measures: We identified patients with PTSD and described associations between PTSD and patient characteristics (including sex, age, geography, depression, anxiety, medical comorbidities, substance use and social and material deprivation) using multivariable logistic regression models. Results: Among the 689,301 patients meeting inclusion criteria, 8,213 (1.2%) had a diagnosis of PTSD. Patients with PTSD were significantly more likely to reside in an urban location (84.9% vs. 80.4%; p-value <.0001) and have one or more comorbid conditions (90.8% vs. 70.2%; p-value <.0001). On multivariable logistic regression analysis, patients with depression (OR 4.8; 95%CI 4.6-5.1) and anxiety (OR 2.2; 95%CI 2.1-2.3) had increased odds of having PTSD compared to patients without depression or anxiety. Patients with alcohol (OR 1.8; 95%CI 1.6-1.9) and drug (OR 3.1; 95%CI 2.9-3.3) use disorders had significantly higher odds of PTSD compared to patients without these disorders. Patients in the most deprived neighborhoods based on census data had 4.2 times higher odds of have PTSD (95%CI 3.2-5.43) compared to patients in the least deprived areas. Conclusions: This is the first study to describe PTSD

prevalence in a large Canadian sample of primary care patients using an EMR-based case definition. Characterizing patients with PTSD in primary care may improve disease surveillance and inform the interdisciplinary care required to manage PTSD symptoms.