

Poster

3122 — Risk Factors for Headache and Persistent Headache in an Inception Cohort of Iraq and Afghanistan War Veterans

Pugh MJ, South Texas Veterans Healthcare System; Eapen BE, South Texas Veterans Healthcare System; Jaramillo CJ, South Texas Veterans Healthcare System;

Objectives:

Iraq and Afghanistan war veterans (IAV) suffer from difficult to treat persistent headaches that have been found to co-occur with traumatic brain injury and psychological disorders. We examined prevalence and persistence of headache and associated conditions in an inception cohort of IAV to determine if baseline comorbidity predicts headache persistence.

Methods:

This longitudinal retrospective cohort study used VA data for IAV who first received VA care in 2008 (baseline) and also received care each year in 2009, 2010 and 2011. We used ICD-9-CM codes, to identify those treated for headache each year (2008-2011). Individuals with headache diagnosed each year were classified as having persistent headache. We also identified comorbidities at baseline that may be associated with headache using algorithms validated for use with ICD-9-CM codes. Comorbidities included TBI, PTSD, and/or depression, and conditions associated with these diagnoses (anxiety, memory/attention/cognition, neck pain, tinnitus, photosensitivity/photo blurring, insomnia, malaise/fatigue, vertigo). Multivariable logistic regression analysis was used to determine baseline characteristics associated with headache in 2008 and those with persistent headache.

Results:

Among all IAV, 38,426 received their first year of VA care in 2008 and had care each year 2009-2011: 13.7% of these were diagnosed with headache in 2008. Veterans diagnosed with headache in 2008 were more likely to have a diagnosis of TBI alone (AOR 6.75; 95% CI 5.79-7.86), TBI+depression (AOR 7.09; 95% CI 5.23-9.66), TBI+PTSD (AOR 10.16; 95% CI 8.96-11.53), TBI+PTSD+depression (AOR 9.40; 95% CI 8.12-10.09), and neck pain (AOR 2.44; 95% CI 2.14-2.77). Persistence was more likely for individuals with baseline tinnitus (AOR 1.21; 95% CI 1.02-1.45), insomnia (AOR 1.19; 95% CI 1.02-1.39), and vertigo (AOR 1.83; 95% CI 1.30-2.57).

Implications:

While TBI was a strong predictor of headache in the first year of VA care, baseline tinnitus, insomnia, and vertigo were associated with headache persistence.

Impacts:

These results suggest that attention to symptoms early in the diagnosis and treatment of headaches may be important for understanding prognosis, and use of VA data may be used as part of a learning healthcare system to identify potential targets for interventions that may help address post-deployment headaches.