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The Impact of Social Determinants of Health on Wellbeing and Resource Utilization in Patients with Post Traumatic Stress Disorder

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Background: While Post Traumatic Stress Disorder (PTSD) is well recognized among military veterans, it is discussed to a far lesser degree among civilians, even though over 10 million civilians suffer from the condition, compared to approximately 1.5 million veterans. Identification and diagnosis of PTSD among those experiencing chronic societal stressors such as homelessness, food insecurity, domestic stress, and economic instability have increased. This study was conducted to understand the contributory impacts of social determinants of health (SDoH) on the health outcomes of those with PTSD.

Methods: This project utilized data from 2018-2022 in the All of Us database to assess the impact of SDoH on healthcare resource utilization (HCRU) and self-reported mental health and quality of life (QoL) in civilians and veterans with PTSD.

Results: Propensity-matched sample populations consisted of 841 civilians and 446 veterans with PTSD. Civilians with PTSD had 35% fewer mean outpatient visits than their civilian counterparts (16.79 vs. 26.05) and 65% fewer psychiatric visits (2.54 vs 7.18). Concerningly, civilians with PTSD fared worse in well-being outcome measures, reporting statistically significantly lower mean-rated mental health (2.71 vs. 3.04) and QoL (2.97 vs. 3.38) compared to veterans with PTSD. Employment Status was one of the most impactful domains on HCRU and well-being outcomes in both the civilian and veteran PTSD populations. Within the Employment domain, "Unable to Work" had the largest impact on outcomes in both populations but was less prominent in the veteran PTSD population (1.6 vs 0.7 additional outpatient visits for civilian vs veteran PTSD). The Stress and Relationships domains impacted well-being outcomes in both populations as well. For healthcare resource utilization, Marital Status was significant for veterans and Support (particularly questions regarding activities of daily living and social support) for civilians. Overall, SDoH contributed an outsized effect on the health outcomes of civilians compared to veterans relative to PTSD, at 60-70% by outcome for the civilian group versus around 50% by outcome for the veteran group.

Conclusion: Veterans with PTSD had higher rates of outpatient treatment versus civilian counterparts, which may indicate that appropriate outpatient treatment for PTSD may be more accessible to veterans. In addition, the inability to work had a lesser impact on outcomes for the veteran group versus the civilian group, likely due to PTSD disability support. Employment status, stress, and relationships played an important role in outcomes among both veterans and civilians with PTSD and should be considered during treatment.