



PTSD and depression symptoms are associated with binge eating among US Iraq and Afghanistan veterans

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ABSTRACT

“OBJECTIVE: US Iraq and Afghanistan Veterans with post-traumatic stress disorder (PTSD) and depression are at increased risk for obesity. Understanding the contribution of health behaviors to this relationship will enhance efforts to prevent and reduce obesity. Therefore, we examined the association of PTSD and depression symptoms with binge eating, a risk factor for obesity, among Iraq/Afghanistan Veterans. **METHOD:** Iraq/Afghanistan Veterans were assessed at intake to the VA Puget Sound Healthcare System-Seattle post-deployment clinic (May 2004-January 2007). The Patient Health Questionnaire was used to measure depression and binge eating symptoms, and the PTSD Checklist-Military Version assessed PTSD symptoms. **RESULTS:** The majority of the sample (N=332) was male (91.5%) and Caucasian (72.6%), with an average age of 31.1 (SD=8.5) years; 16.3% met depression screening criteria, 37.8% met PTSD screening criteria, and 8.4% met binge eating screening criteria. In adjusted models, those meeting depression (odds ratio (OR)=7.53; 95% CI=2.69, 21.04; p<.001) and PTSD (OR=3.37; 95% CI=1.34, 8.46; p=.01) screening criteria were more likely to meet binge eating screening criteria. Continuous measures of PTSD and depression symptom severity were also associated with meeting binge eating screening criteria (ps<.05). **CONCLUSION:** PTSD and depression are common conditions

among Iraq/Afghanistan Veterans. In the present study, PTSD and depression symptoms were associated with meeting binge eating screening criteria, identifying a possible pathway by which psychiatric conditions lead to disproportionate burden of overweight and obesity in this Veteran cohort. Tailored dietary behavior interventions may be needed for Iraq/Afghanistan Veterans with comorbid obesity and psychiatric conditions.”

RESEARCH HIGHLIGHTS

- Previous researchers have found that veterans with PTSD have an increased risk for obesity and other health related conditions. However, little is known about the associations of PTSD and depression with dietary behavior among Iraq and Afghanistan veterans. This study assesses the association between symptoms of PTSD, depression, and binge eating among veterans who served in Iraq or Afghanistan.
- Consistent with research on veterans from other war eras, the researchers found that PTSD and depression symptoms are associated with binge eating in veterans who served in Iraq or Afghanistan. These findings elucidate a potential pathway by which psychiatric conditions might contribute to the disproportionate burden of obesity amongst veterans.
- The prevalence of binge eating among the veterans (8.4%) was higher than the prevalence in the general population (2-5%). Moreover, veterans with PTSD or depression symptoms reported binge eating at rates significantly higher than veterans without psychiatric symptoms, 14.6% and 26.4%, respectively.
- Given these findings, it might be necessary to provide targeted and tailored dietary interventions to Iraq/Afghanistan veterans with PTSD and/or depression who also engage in binge eating.



IMPLICATIONS

FOR PRACTICE

Veterans with a propensity to binge eat should speak with their healthcare providers regarding a plan to address their behavior. Veterans with PTSD, depression, or other mental health conditions should work with their therapist, nutritionist, and practitioner to develop a plan that addresses both their mental and physical health. Veterans who are overweight or obese should consider participating in the VA's MOVE! program, a behavioral weight loss program. Practitioners who have veteran patients with PTSD or depression symptoms should talk with their veterans about healthy ways to deal with stress, anxiety, and symptoms associated with their mental health condition(s), such as exercise and counseling. Healthcare providers should monitor their veteran patients' eating habits and stress levels. Mental healthcare providers are in a good position to address the psychological contributors to binge eating while supporting health behavior change.

FOR POLICY

The VA might modify their MOVE! behavioral weight loss program to include tailored behavior change approaches for veterans with PTSD and other mental health conditions. One approach the VA could use is adjunctive or standalone Acceptance and Commitment Therapy, an evidence-based psychotherapy; this therapy addresses factors that may contribute to binge eating such as mental health status and use of food and eating to modulate distress. The VA might offer veterans with PTSD and other mental health conditions who report binge eating regular contact with a nutritionist. Given the association between mental health and weight, the VA might form more multi-disciplinary health teams that include a nutritionist, counselor, and personal trainer. The VA might continue studying mental health and eating disorders in veterans who have served in Iraq and/or Afghanistan, as well as in other veteran service eras.

FOR FUTURE RESEARCH

Despite the significance of this study, there are several limitations. A limitation of this study is its cross-sectional study design. Future researchers should apply a longitudinal study design to further understand the association between PTSD and depression symptoms with binge eating in Iraq/Afghanistan veterans. The clinical sample could be unique, thus limiting the generalizability of the findings. Researchers should utilize random sampling to ensure generalizability and reduce potential biases. Another limitation of this study is that the intake data \ PTSD, depressive, and binge eating symptoms were self-reported and not confirmed through an in-person interview. To minimize this bias, future researchers should either conduct interviews with the veterans or use verifiable data, such as medical records. Another limitation of this study is that the sample was assessed prior to the release of the current Diagnostic and Statistical Manual of Mental Disorders (DSM-5) psychiatric condition diagnostic criteria. Future researchers should ensure the most current DSM-5 is applied to their sample. Other limitations of this study are that height and weight were not collected, which could have provided additional information on the health consequences of binge eating among veterans. A majority of the participants in this study were male, Caucasian, and employed. Future research should have a representative sample of women, other races and ethnicities, and veterans who are currently unemployed or retired. To improve generalizability, future studies should also be more diverse in terms of income and branch of service. Further research is needed to understand why PTSD and depression symptoms are associated with binge eating among Iraq/Afghanistan veterans. Future researchers should also study how evidence-based lifestyle interventions can be used to lessen the association between mental health conditions and binge eating in veterans.

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