Posttraumatic Stress Disorder Diagnosis and Gender are Associated with Accelerated Weight Gain Trajectories in Veterans During the Post-deployment Period


**SUMMARY:** Veterans may be prone to being obese and overweight; however, the reason for this is unclear. This study examined the Veterans Affairs (VA) health record data of 248,089 Veterans who returned from war. Results indicated that over half of the Veterans were overweight or obese; furthermore, the posttraumatic stress disorder (PTSD) diagnosis was associated with the body mass index (BMI) trajectory of both male and female Veterans, with a slightly stronger association for female Veterans.

**KEY FINDINGS:**
- Over half (59%) of female Veterans and 77% of male Veterans were classified as obese or overweight.
- Compared to female Veterans without PTSD, those with PTSD were more likely to gain weight (gaining 0.11 more BMI each year).
- Male Veterans with PTSD were more likely to gain weight than male Veterans without PTSD (those with PTSD gained 0.07 more BMI each year), but the difference was slightly smaller than in the female subsample.

**IMPLICATIONS FOR PROGRAMS:**
Programs could:
- Offer support groups for female Service members who experience PTSD symptoms post-deployment
- Provide weight management workshops for Service members who are obese or overweight
- Disseminate information regarding the associations between PTSD and weight problems for Service members and where to access resources and services to help with weight management

**IMPLICATIONS FOR POLICIES:**
Policies could:
- Recommend post-deployment weight management services for Service members in order to help them prevent weight problems
- Raise awareness on military basis regarding the association between PTSD symptoms and weight problems
- Recommend education of professionals working with Service members and their families on the risk of weight problems after deployment and how to help Service members to prevent it

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METHODS
- Data were obtained from the Veterans Affairs electronic health record; each Veteran had to have at least one medical visit between 2001 and 2009 and also had to have more than one BMI measurement during the study period to qualify for the study.
- Measures included each Veteran's PTSD diagnosis and BMI.
- Data were analyzed to examine the associations between PTSD diagnosis, gender, and the trajectory of weight gain for Veterans.

PARTICIPANTS
- Participants were 248,089 Veterans (87% male); the median age of the female Veterans was 27.60 years whereas the median age of the male Veterans was 28.90 years.
- The majority of the female Veterans were White (49%), followed by Black (31%), Latino (11%), and other (9%); similarly, the majority of the male Veterans were White (66%), followed by Black (16%), Latino (12%), and other (6%).
- The military branches that the Veterans served were not reported.

LIMITATIONS
- The sample was limited to Veterans who used the VA health care services, so the findings cannot be generalized to Veterans who did not use the VA services.
- The study design made it difficult to examine the causal relationship between PTSD diagnosis and BMI.
- The study was solely based on participants' medical data; without examining each individual in person, the results may be subject to errors.

AVENUES FOR FUTURE RESEARCH
Future research could:
- Recruit Veterans not only from VA but also from other sources to increase the generalizability of the study
- Examine the causal relationship between PTSD diagnosis and BMI
- Explore other factors (e.g., anxiety diagnosis, number of deployment) that are related to Veterans' weight problems

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