

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Post-Traumatic Stress Disorder and Chronic Fatigue Syndrome-Like Illness Among Gulf War Veterans: A Population-based Survey of 30,000 Veterans

Kang, H. K., Natelson, B. H., Mahan, C. M., Lee, K. Y., & Murphy, F. M. (2003). Post-traumatic stress disorder and chronic fatigue syndrome-like illness among Gulf War veterans: A population-based survey of 30,000 Veterans. *American Journal of Epidemiology*, 157(2), 141-148. doi:10.1093/aje/kwf187

SUMMARY: Gulf War Veterans and non-Gulf War Veterans completed surveys in 1995 about their experiences and health status. This study examined the association between deployment, deployment stress, and symptoms of posttraumatic stress disorder (PTSD) and Chronic Fatigue Syndrome. Those who had deployed were more likely to experience PTSD and Chronic Fatigue Syndrome symptoms, and deployment stress was associated with greater PTSD symptoms.

KEY FINDINGS:

- Veterans who had been deployed during the Gulf War were three times more likely to experience PTSD symptoms and nearly five times more likely to experience Chronic Fatigue Syndrome symptoms than those who had not deployed.
- Among Gulf War Veterans, PTSD prevalence increased as stress intensity increased; this pattern was not evident for Chronic Fatigue Syndrome symptoms.
- Several demographic characteristics were also associated with PTSD symptoms: those with symptoms were more likely to be female, older, non-White, enlisted, and in the Army and National Guard.
- Veterans with Chronic Fatigue Syndrome symptoms were more likely younger, single, enlisted, in the Army or Marines, and in the Reserves.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Incorporate information into curricula about Chronic Fatigue Syndrome symptoms, treatment, and resources; this information could educate Service members and their families about warning signs, risks, and treatment options
- Enhance curriculum to provide information about stress management, healthy coping, and use of support networks as protective factors to minimize risk for PTSD symptoms
- Disseminate information regarding possible symptoms of mental health problems Service members may face after deployment and where individuals and families can find help for those problems

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend adding screening for Chronic Fatigue Syndrome into Service members' post-deployment screening
- Recommend integrating education on physical health conditions associated with deployment into existing service delivery systems for military families
- Recommend education for service providers around the possible effects of deployment on Service members' families

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METHODS

- Participants completed a mail-in or telephone survey in 1995 about their deployment experiences and PTSD and Chronic Fatigue Syndrome symptoms.
- Deployment and demographic data were provided by the Defense Manpower Data Center.
- Participant data were selected based on a random sampling method in order to have a representative sample of Service members regarding gender, service branch, and component.

PARTICIPANTS

- This study used a stratified probability sample comprised of Gulf War Veterans (n = 11,441) and non-Gulf War Veterans (n = 9,476) to represent the population.
- Of those who were Gulf War Veterans, 81% were men, 74% were White, 53% were married, 86% were enlisted, and 63% Army.
- Of those who were not Gulf War Veterans, 78% were men, 75% were White, 56% were married, 81% were enlisted, and 63% Army.

LIMITATIONS

- The scope of this study was limited to only PTSD and Chronic Fatigue Syndrome symptoms. It is unclear what associations may exist for other similar problems.
- Mail-in and phone surveys have inherent limitations which may have affected the validity of the participants' responses.
- This study is cross-sectional and no findings regarding causation can be determined from these data.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Examine PTSD, Chronic Fatigue Syndrome, and stress among Service members who have been deployed in more recent combat deployments (e.g., Iraq, Afghanistan)
- Explore how PTSD and Chronic Fatigue Syndrome symptoms affect other aspects of Service members' lives, such as employment (e.g., being able to gain and maintain civilian work) and relationships (e.g., marital quality, family relationships)
- Conduct a study to examine these variables among Service members who are in treatment compared to those who are not in treatment

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