

Putting Research to Work for Military Families



Focus:
Multiple
Branches

New Onset and Persistent Symptoms of Posttraumatic Stress Disorder Self Reported After Deployment and Combat Exposures: Prospective Population Based U.S. Military Cohort

Smith, T. C., Ryan, M. A. K., Wingard, D. L., Slymen, D. J., Sallis, J. F., & Kritz-Silverstein, D. (2007). New onset and persistent symptoms of post-traumatic stress disorder self-reported after deployment and combat exposures: Prospective population based U.S. Military cohort. *The British Medical Journal*, 336(7640), 366-371. doi:10.1136/bmj.39430.638241.AE.

SUMMARY: Baseline and three-year follow-up data from Service members from all branches of the military were used to describe new onset and persistence of self-reported posttraumatic stress disorder (PTSD) symptoms in a large, population-based military cohort. New onset self-reported PTSD symptoms were identified in 8-9% of Service members who reported combat exposures during their deployment, 1-2% of Service members who deployed but did not experience combat, and 2-3% of those who did not deploy.

KEY FINDINGS:

- Overall, the rate of self-reported new onset symptoms of PTSD in deployed personnel was 4% compared to 2% in non-deployed personnel.
- Participants who were female, divorced, enlisted, smokers, or problem drinkers at baseline experienced an increased risk of self-reported new onset symptoms of PTSD.
- Deployed personnel who reported combat exposure were three times more likely to report new onset PTSD (8-9%) than those who did not deploy (2-3%).
- Forty to fifty percent of participants who had PTSD symptoms at baseline reported PTSD symptoms at follow-up. Service members who were older, had higher levels of education, were officers, or were Marines were more likely to experience persisting symptoms at follow-up.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Develop curricula for Service members to encourage healthy coping with symptoms of PTSD
- Offer classes for military families regarding effective ways to support Service members with PTSD
- 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 military healthcare organizations and community programs partner to offer comprehensive supports for Service members with PTSD
- Recommend education for service providers around the possible effects of deployment on Service members' families
- Encourage the integration of mental health education into existing service delivery systems for military families

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METHODS

- Participants from the Millennium Cohort study who completed a baseline measure from July 2001-June 2003 and a three year follow-up measure between June 2004 and January 2006 were included in this study.
- Demographic and military characteristics were obtained from the DoD Manpower Data Center.
- Surveys asked questions about PTSD symptoms, smoking, drinking, and combat exposure.
- Statistical analyses compared groups (such as those deployed and not deployed) on outcome variables.

PARTICIPANTS

- Service members (N = 50,128) from all branches of the military were included.
- Deployed Service member characteristics (n = 11,952; 24%) were as follows: 81% male, 41% born 1960-1969, 36% born 1970-1979, 65% married, 71% White, 48% bachelor's degree or some college, 46% Army, 36% Air Force, 12% Navy/Coast Guard, 5% Marine Corps, 62% Active Duty, and 74% enlisted.
- Non-deployed Service member characteristics (n = 38,176; 76%) were as follows: 70% male, 40% born 1960-1969, 28% born 1970-1979, 67% married, 71% White, 45% bachelor's degree or some college, 48% Army, 28% Air Force, 20% Navy/Coast Guard, 4% Marine Corps, 53% Active Duty, and 72% enlisted.
- No information on service branch was provided, although it was reported that the sample was representative of the U.S. Military as a whole.

LIMITATIONS

- Researchers deliberately over sampled females, previously deployed personnel, and Reserve/National Guard personnel. Thus, the findings may not be representative of the military population in general.
- Not all individuals who were selected to partake in the study agreed to participate. Hence, it is possible that those who chose to participate are different than those who did not, and findings may be biased.
- All measures were self-report, which may have increased the likelihood of social desirability bias and/or recall bias.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Examine the relationships between resilience, deployment, combat exposure, and PTSD among Service members
- Replicate this study using a validated measure of PTSD (as opposed to self-report)
- Examine the extent to which length of time in military service impacts the relationship between deployment, PTSD, and other health outcomes

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