

# **Research Brief**

# Post-Traumatic Stress Disorder and Depression among U.S. Military Health Care Professionals Deployed in Support of Operations in Iraq and Afghanistan

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### **RESEARCH HIGHLIGHTS:**

- Utilizing data from the longitudinal Millennium Cohort Study,
  this study assesses the impact of military profession and combat
  exposure on the likelihood of developing PTSD or depression.
  To determine the impact of these variables, participants were
  surveyed from a wide range of military occupations and analyses
  were conducted between health care professionals and non-health
  care professionals within the military. Additionally, exposure to
  trauma and combat was evaluated as a contributing variable to
  determine incidence of new-onset of PTSD and depression in all
  military professions.
- Military health care professionals are not at a significantly higher risk than their military non-health care colleagues for developing PTSD or depression. This is a significant finding because it helps to dispel myths about holding certain military occupations as being a determining factor affecting the likelihood of developing newonset PTSD or depression.
- Earlier studies have highlighted exposure to trauma or combat as a
  contributing factor for increased incidence of PTSD or depression.
  This study corroborates earlier findings, determining that military
  health care professionals working in support of operations in
  Afghanistan and Iraq who experienced combat were more likely
  to develop new-onset PTSD or depression than military health care
  professionals who had no combat experience.

**AUTHORS:** Isabel G. Jacobson, M.P.H.; Jaime L. Horton, B.S.; Cynthia A. LeardMann, M.P.H.; Margaret A.K. Ryan, M.D., M.P.H.; Edward J. Boyko, M.D., M.P.H.; Timothy S. Wells, D.V.M., Ph.D.; Besa Smith, Ph.D.; Tyler C. Smith; Ph.D.

## **ABSTRACT**:

"Limited prospective studies exist that evaluate the mental health status of military health care professionals who have deployed. This study used prospective data from the Millennium Cohort Study with longitudinal analysis techniques to examine whether health care professionals deployed in support of the operations in Iraq and Afghanistan were more likely to screen positive for new-onset posttraumatic stress disorder (PTSD) or depression after deployment than individuals from other occupations. Of 65,108 subjects included, 9,371 (14.4%) reported working as health care professionals. The rates of new positive screens for PTSD or depression were similar for those in health care occupations (4.7% and 4.3%) compared with those in other occupations (4.6% and 3.9%) for the first and second follow-up, respectively. Among military personnel deployed with combat experience, health care professionals did not have increased odds for new-onset PTSD or depression over time. Among deployed health care professionals, combat experience significantly increased the odds: adjusted odds ratio = 2.01; 95% confidence interval [1.06, 3.83] for newonset PTSD or depression. These results suggest that combat experience, not features specific to being a health care professional, was the key exposure explaining the development of these outcomes."



# **Implications**

# **FOR PRACTICE**

Hospitals and health care clinics should utilize their access to health care professionals to set up formal and informal networks of support to better coordinate post-combat mental health treatment resources for returning service members across all occupational disciplines. Hospital and clinic administrators should implement trainings to work towards alleviating concerns which staff members might have in regards to caring for health care professionals exposed to combat. Supervising officers might take steps to assess the impact of trauma and combat experience on others in their team and then refer them to mental health services as needed. Families of military health care professionals who have experienced combat or trauma can assist their family members by educating themselves on the signs of PTSD and depression and knowing the mental health resources available through community organizations and the VA. Anyone who has been exposed to trauma, combat experience, or other traumatic experiences while deployed should also seek out the resources available to them if mental health issues become a concern.

# **FOR POLICY**

In light of these findings, the Department of Defense might train health care professionals and non-health care professionals in resiliency techniques to better prepare them for the experiences of combat and to prevent the development of PTSD or depression. The DoD might then conduct surveys similar to this in the future to determine if resiliency trainings have a significant impact on decreasing the incidence of new-onset PTSD and depression in all military professions. The Department of Veterans Affairs (VA) might work with policymakers to allocate funding for additional mental health resources to assist all personnel affected by traumatic combat experiences to ensure that returned service members have access to the appropriate treatment and programs needed. A process to reach this objective might be for the VA to develop new and update current treatment programs that are geared towards health care professionals to mitigate negative effects of combat exposure. Rather than focusing specifically on the role of military health care professions in developing new-onset PTSD or depression, understanding the role of combat exposure, trauma, and dangerous situations in regards to new-onset PTSD or depression might provide valuable information on how to teach resiliency. Not all health care professionals and veterans utilize treatment from VA hospitals and centers, so policymakers might allocate additional mental health resources to civilian hospitals and clinics to ensure all those in need are able to receive necessary mental health care after exposure to trauma and combat within war zones.

# FOR FUTURE RESEARCH

Further research should explore variation regarding the sources and causes of PTSD and depression on military mental health professionals as compared to combat personnel. Since incidence of PTSD and depression tends to rise after exposure to trauma, forthcoming studies should assess the impact of combat experience compared with exposure to casualties on mental health on these two populations. Likewise, future studies should also investigate variations among military

# AUTHOR INFORMATION

Isabel G. Jacobson, M.P.H. Deployment Health Research Department Naval Health Research Center isabel.jacobson@med.navy.mil

Jaime L. Horton, B.S. Naval Health Research Center

Cynthia A. LeardMann, M.P.H. Naval Health Research Center

Margaret A.K. Ryan, M.D., M.P.H. Naval Hospital Camp Pendleton

Edward J. Boyko, M.D., M.P.H. Department of Veterans Affairs Puget Sound Health Care System

Timothy S. Wells, D.V.M., Ph.D. Naval Health Research Center

Besa Smith, Ph.D. Naval Health Research Center

Tyler C. Smith; Ph.D. Naval Health Research Center

occupations with regard to other negative outcomes such as suicide. Future researchers should standardize the definition of combat experience for sake of continuity between studies. The current study may also suffer from sampling bias because many of the associations being analyzed have a small sample population. For the sub-group of populations present, the number of participants available was too small to consider for statistical reasons. Further research should attempt to draw from a larger sample size of health care professionals than the Millennium Cohort Study could provide. Future research should differentiate trends between military officers and enlisted service members, as officers tend to report mental health disorders less frequently. Future studies should attempt to reduce misinformation due to self-reporting by conducting personal assessments rather than drawing from already existing data.