

INTRODUCTION

National Guard members are recognized as a population at an elevated risk for post-deployment post-traumatic stress disorder (PTSD), but critical gaps remain in understanding how the following elements unfold during the deployment cycle:

- Psychiatric symptoms
- Alcohol misuse
- Social support

The current effort was to synthesize findings from longitudinal research on Minnesota National Guard soldiers and their partners across the deployment cycle.

METHODS

Longitudinal studies on the subject were examined, and pre-deployment surveys of soldiers within investigated these elements:

- Psychiatric symptoms
- Alcohol misuse
- Unit support and concerns about family disruptions during deployment.
- Partner depression
- Sleep problems

Surveys and interviews administered to service members examined deployment-related events as well, such as soldiers' exposure to combat and other trauma exposures, and post-deployment outcomes at six to 12 months and one and two years post-deployment.

DISCLAIMERS: The opinions and assertions expressed herein are those of the author(s) and do not reflect the official views, policies, or positions of the Uniformed Services University of the Health Sciences, the Department of War, or The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government. No authors have a financial interest in any commercial product, service, or organization providing financial support for this research. The authors report no conflicts of interest.

STRENGTHS OF STUDY

The research review investigated a wide range of pre-deployment, deployment, and post-deployment risk and protective factors for soldiers and their spouses or partners, providing useful information on mental health and functioning. An example is the association between deployment with new-onset probable PTSD.¹

The investigations of the roles of social erosion and social causation on relationships provided insights into possible relationships between these factors and the trajectories of PTSD symptoms, but also possible interventions to reduce these effects.²

The review has also added new information on various aspects of deployment for soldiers and their families: predictors of sleep complaints among partners of deployed soldiers³; how a highly functioning intimate partner relationship can facilitate mental health care utilization among soldiers with PTSD⁴; and how enhanced skills and feelings of confidence from a parenting program can lead to fewer difficulties in emotion regulation and less distress.⁵

CONCLUSIONS

Among soldiers and partners, the levels of psychiatric symptoms were relatively low both before and after deployment. PTSD, depression, and some somatic symptoms were the most prevalent complaints along with alcohol misuse. Alcohol misuse was associated with younger age, unmarried status, negative emotionality, and disconstraint. Compared to men, women had higher levels of symptoms, lower preparedness for deployment, lower perceived unit support, and greater concerns for family disruptions during deployment.

Several factors were associated with seeking mental health services including having a positive attitude toward mental health treatment. Negative attitudes, like believing that mental health treatment does not work, were associated with lower use of psychotherapy. Approximately half of soldiers who screened positive for PTSD and 40% who screened positive for depression did not seek treatment, suggesting that something other than need played a factor. While concerns about stigma were expressed, those concerns were not associated with reported treatment-seeking behavior.

Various symptom clusters were associated with PTSD at both time periods; however, dysphoria (a nonspecific component of PTSD which can inflate the diagnosis) was the most important factor at six months. Two years after returning from deployment, PTSD symptom severity eroded relationship adjustment due to sensitivity to threat, punishment, partner's anger or criticism, concerns about making mistakes in relationships, and anxiety about what might happen in the relationship. As such, changes in relationship adjustment may not require changes in PTSD symptoms.

DISCUSSION & FUTURE RESEARCH

The deployment cycle takes a physical and mental toll on service members. Understanding the risk and protective factors at each step of the cycle promotes the development of more accurate interventions for managing obstacles and strengthening resiliency.

Some suggestions for future research included examining relationships from both partners' points of view⁶, risk factors for heavy alcohol use⁷, the impact of father parenting on child behavior and on mother's differences between perceived support and actual support received and differences between emotional and instrumental support²; and risk and protective factors on the mental health of soldiers who have served in multiple deployments.⁸

REFERENCES

- ¹Polusny, M. A., Erbes, C. R., Murdoch, M., Arbisi, P. A., Thuras, P., & Rath, M. B. (2011). Prospective risk factors for new-onset post-traumatic stress disorder in National Guard soldiers deployed to Iraq. *Psychol Med*, 41(4), 687-698. doi:10.1017/S0033291710002047
- ²Shallcross, S. L., Arbisi, P. A., Polusny, M. A., Kramer, M. D., & Erbes, C. R. (2016). Social causation versus social erosion: comparisons of causal models for relations between support and PTSD symptoms. *J Trauma Stress*, 29(2), 167-175. doi:10.1002/jts.22086
- ³Miller, K. E., Koffel, E., Kramer, M. D., Erbes, C. R., Arbisi, P. A., & Polusny, M. A. (2018). At-home partner sleep functioning over the course of military deployment. *J Fam Psychol*, 32(1), 114-122. doi:10.1037/fam0000262
- ⁴Meis, L. A., Barry, R. A., Kehle, S. M., Erbes, C. R., & Polusny, M. A. (2010). Relationship adjustment, PTSD symptoms, and treatment utilization among coupled National Guard soldiers deployed to Iraq. *J Fam Psychol*, 24(5), 560-567. doi:10.1037/a0020925
- ⁵Polusny, M. A., Erbes, C. R., Kramer, M. D., Thuras, P., DeGarmo, D., Koffel, E., Arbisi, P. A. (2017). Resilience and posttraumatic stress disorder symptoms in National Guard soldiers deployed to Iraq: A prospective study of latent class trajectories and their predictors. *J Trauma Stress*, 30(4), 351-361. doi:10.1002/jts.22199
- ⁶Erbes, C. R., Meis, L. A., Polusny, M. A., & Compton, J. S. (2011). Couple adjustment and posttraumatic stress disorder symptoms in National Guard veterans of the Iraq war. *J Fam Psychol*, 25(4), 479-487. doi:10.1037/a0024007
- ⁷Ferrier-Auerbach, A. G., Kehle, S. M., Erbes, C. R., Arbisi, P. A., Thuras, P., & Polusny, M. A. (2009). Predictors of alcohol use prior to deployment in National Guard Soldiers. *Addict Behav*, 34(8), 625-631. doi:10.1016/j.addbeh.2009.03.027
- ⁸Polusny, M. A., Erbes, C. R., Arbisi, P. A., Thuras, P., Kehle-Forbes, S. M., Rath, M., . . . Duffy, C. (2009). Impact of prior Operation Enduring Freedom/Operation Iraqi Freedom combat duty on mental health in a predeployment cohort of National Guard soldiers. *Military Medicine*, 174(4), 353-357.