The Center for Research and Outreach

# **Putting Research to Work** for Military Families



### Sleep Disturbance is Common Among Service Members and Veterans of Operations Enduring Freedom and Iraqi Freedom

Plumb, T. R., Peachey, J. T., & Zelman, D. C. (2014). Sleep disturbance is common among servicemembers and veterans of Operations Enduring Freedom and Iraqi Freedom. *Psychological Services*, 11(2), 209-219. doi:10.1937/a0034957

**SUMMARY:** Using an online survey for Service members and Veterans who had experienced deployment to Iraq or Afghanistan, this study examined the association between combat experience, mental health symptoms (i.e., posttraumatic stress disorder [PTSD], depression, and anxiety), and sleep problems. Results indicated that as combat exposure and mental health symptoms increased, sleep problems also increased. When predicting sleep problems, however, only PTSD and depression symptoms were uniquely associated with greater sleep problems.

### **KEY FINDINGS:**

- As combat exposure increased, several healthy sleep indicators decreased; participants reporting greater combat exposure also reported shorter sleep latency, total sleep time, and worsened sleep efficiency.
- Mental health symptoms (i.e., PTSD, depression, anxiety) were all significantly more common among participants who reported poor sleep quality.
- When predicting overall sleep quality, depression and PTSD symptoms were the only significant individual contributors.
- Having a higher education level and a higher rank were both significantly associated with shorter sleep latency. Higher rank was also related to more total sleep time.

### **IMPLICATIONS FOR PROGRAMS:**

Programs could:

- Develop curricula on healthy sleep practices (e.g., minimizing caffeine, consistent time to go to bed, etc.) for Service members and their partners/spouses
- Provide professional development to staff members to increase their ability to identify people at risk and provide appropriate referrals
- Enhance education, activities, and curriculum related to coping behaviors and dealing with anxiety symptoms

### **IMPLICATIONS FOR POLICIES:**

Policies could:

- Recommend that professionals working with Service members attend continuing education about how to improve the quality of one's sleep
- Encourage the addition of sleep screening questions to post-deployment (and follow-up) assessments as a way to better identify Service members in need of behavioral health care
- Encourage collaboration among DoD programs and community-based organizations to support a smooth transition for Service members and their families during each stage fo the deployment cycle

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## **Putting Research to Work**

### for Military Families



#### **METHODS**

- Participants were a convenience sample of Service members and Veterans who had experienced deployment to Iraq or Afghanistan.
- Invitations to participate in an online survey were sent via email from a state Transition Assistance Advisor; in addition, advertisements were posted on websites that focus on Service members and Veterans.
- Surveys included the following measures: the Pittsburgh Sleep Quality Index, the PTSD Checklist-Military, the Combat Exposure Scale, Patient Health Questionnaire-9, and the Generalized Anxiety Disorder-7.

### **PARTICIPANTS**

- Participants included 375 Service members and were, on average, 34 years old, men (87.4%), White (84.0%), and Veterans (55.2%).
- Of the Active Duty Service members, 47% were in the National Guard, 37% were Army, 5% were Marine Corp, 5% were Air Force, 3% were Navy, and 1.0% were Reserves.
- Participants had been deployed an average of 18 months, and had been returned over two years since their last deployment (mean = 25.38, SD = 17.30).

### **LIMITATIONS**

- The cross-sectional nature of this study does not allow the findings to clearly show the direction of associations; for example mental health problems may be causing sleep problems, but sleep problems may also be exacerbating mental health problems.
- This study did not examine the interaction between combat experiences and mental health symptoms, which might contribute together to impact sleep behaviors.
- Given the nature of the data collection, these findings might not be generalizable to the greater military population; the effects may be unique to those Service members and Veterans who volunteer to complete online surveys.

### **AVENUES FOR FUTURE RESEARCH**

Future research could:

- Replicate the study with a larger sample to strengthen the findings
- Explore other potential correlates of sleep problems among Service members and Veterans, such as physical health conditions or combat-related injury
- Examine the types of mental health issues that were explored in this study; for example, research could examine whether other psychological disorders are also associated with sleep problems

### ASSESSING RESEARCH THAT WORKS







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