

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Trends and Factors Associated with Insomnia and Sleep Apnea in All United States Military Service Members from 2005 to 2014.

A. Caldwell, J., Knapik, J., & Lieberman, H. (2017). Trends and factors associated with insomnia and sleep apnea in all United States military service members from 2005 to 2014. *Journal of Sleep Research*, 26(5), 665-670.

SUMMARY: The number of insomnia and obstructive sleep apnea cases is increasing in the U.S. civilian population, and is increasing at an even faster rate among military personnel. Researchers investigated trends and demographics among military personnel from 2005 and 2014 who had medical codes for insomnia or obstructive sleep apnea in their medical charts. Findings showed increased prevalence of insomnia and obstructive sleep apnea among Army personnel, senior enlisted personnel, and officers.

KEY FINDINGS:

- The number of insomnia encounters increased by 372% and the number of obstructive sleep apnea encounters increased by 517% among enlisted military personnel between 2005 and 2014.
- The Army had the highest number of insomnia and obstructive sleep apnea encounters compared to other military branches.
- Senior enlisted personnel and officers and Black Service members had the highest rates of insomnia and obstructive sleep apnea compared to other military positions.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide education to Service members on the importance of sleep and how to cope with sleep disorders
- Engage Service members who suffer from sleep disorders in a support group to help learn strategies to cope and deal with the stress caused by sleep disorders
- Tailor efforts to senior enlisted personnel and officers to reduce risks of sleep disorders

IMPLICATIONS FOR POLICIES:

Policies could:

- Encourage the training of medical professionals to better identify insomnia and obstructive sleep apnea among Service members
- Recommend education for medical service providers about the secondary effects of sleeping disorders
- Continue to support programs that address the challenges of Service members who have sleep disorders

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METHODS

- Collected data from the Defense Medical Epidemiological Database (DMED), which contains information on all in- and out-patient medical occurrences for all Active duty military personnel.
- Researchers documented the number of times medical codes for insomnia and obstructive sleep apnea were present in the database.
- Population data were graphed for each year according to the number of encounters for insomnia and obstructive sleep apnea.

PARTICIPANTS

- All Active duty personnel who had in- and out-patient medical encounters between 2005 and 2014 were included in the sample.
- During the 10 year study period, the military population ranged from 1,338,965 to 1,417,434 military personnel.
- Service members represented the following branches: Army, Navy, Air Force and Marine Corps.

LIMITATIONS

- The database prevented researchers from being able to investigate predictive factors which could lead to sleep disorders.
- Researchers could not account for increasing emphasis on diagnosis and treatment of sleep disorders among Service members, which could have confounded the findings.
- Researchers did not provide information about data quality including reports of the amount of missing data, which could have impacted the results.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Utilize a more comprehensive database that allows for investigation of predictive factors of sleep disorders, such as deployment history, combat exposure, or PTSD
- Investigate the impact of an increase in emphasis of diagnosis and treatment for sleep disorders among health care providers for Service members
- Include information about data quality that includes rates of missing data

ASSESSING RESEARCH THAT WORKS



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