

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Effects of Iraq/Afghanistan Deployments on Major Depression and Substance Use Disorder: Analysis of Active Duty Personnel in the US Military

Shen, Y.-C., Arkes, J., & Williams, T. V. (2012). Effects of Iraq/Afghanistan deployments on major depression and substance use disorder: Analysis of active duty personnel in the US Military. *American Journal of Public Health*, 102(S1), S80-S87. doi:10.2105/AJPH.2011.300425

SUMMARY: Using a large nation-wide sample consisting of Active Duty Service members across branches from 2001 to 2006, this study examined the associations between deployment characteristics (location and length) and diagnostic rates for major depression and substance use disorder. Findings suggest that Service members deployed in Iraq and Afghanistan were at increased risk for a diagnosis of a substance use disorder and/or major depression, compared to Service members who were not deployed.

KEY FINDINGS:

- Service members who were deployed under OIF/OEF were more likely to be diagnosed with a substance use disorder and/or major depression than those who were not deployed.
- Marines deployed to OIF/OEF were approximately 4 times more likely to develop a diagnosis as compared to Marines who were not deployed.
- Deployment length did not appear to be as strongly associated with substance use or major depression diagnoses as deployment location.
- For substance use disorder, individuals who were lower rank or White had higher odds of a diagnosis and for major depression, women and married individuals had increased odds of a diagnosis.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Offer support groups for Service members who have deployed
- Provide post-deployment workshops to Service members focused on healthy coping in an effort to reduce substance use and abuse among those who deployed
- Disseminate information regarding mental health and substance abuse services and programs available to Service members and their families

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend professional development for service providers working with military families regarding common post-deployment issues, including substance use and depression
- Provide support for continued research that explores which factors associated with deployment, specifically deployed locations, lengths of tours, and number of tours, could serve useful in identifying groups at greater risk for post-deployment concerns
- Recommend periodic screening for mental health and substance use issues

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METHODS

- Defense Enrollment Eligibility Reporting System (DEERS) data was utilized to identify Active Duty personnel and obtain demographic data.
- TRICARE health records were used to identify Active Duty Service members across all service branches serving between 2001 and 2006 that had been diagnosed with substance use disorder or major depression.
- A representative sample of Service members within each of the service branches was randomly drawn and utilized for the study.

PARTICIPANTS

- Data for 678,382 Active Duty Service members was examined.
- Forty-nine percent of the sample was Army, 20% Navy, 17% Air Force, and 14% Marine.
- Across branches, average ages ranged from 23 to 31 years; 82% to 97% of participants were male, and 55%-75% were White.

LIMITATIONS

- Other untested variables may be influencing results. For example, the authors used deployment characteristics from the most recent deployment, but it may be that multiple deployments also impact depression and substance use.
- Although the sample was large and diverse in age and military branch characteristics, those suffering from depression or substance use but not seeking treatment were not represented.
- Level of combat exposure was not assessed; therefore, it is uncertain whether adverse effects were the result of deployment to a combat zone itself or direct combat exposure.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Examine which characteristics of combat experiences are associated with mental health and substance use disorder diagnoses to augment existing or newly developed interventions
- Examine the impact of deployment history on risk for mental health and substance use issues
- Explore whether pre-deployment mental health and substance use issues increase the risk of developing later mental health and substance use issue post-deployment

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