

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Prevalence of Painful Musculoskeletal Conditions in Female and Male Veterans in 7 years after Return from Deployment in Operation Enduring Freedom/Operation Iraqi Freedom

Haskell, S. G., Ning, Y., Krebs, E., Goulet, J., Mattocks, K., Kerns, R., & Brandt, C. (2012). Prevalence of painful musculoskeletal conditions in female and male veterans in 7 years after return from deployment in Operation Enduring Freedom/Operation Iraqi Freedom. *Clinical Journal of Pain*, 28(2), 163-167. doi:10.1097/AJP.0b013e318223d951

SUMMARY: Using a sample of 450,329 OEF/OIF Veterans who sought care at Veterans Affairs (VA) hospitals one to seven years after deployment, gender differences in the prevalence of musculoskeletal conditions in male and female OEF/OIF Veterans was explored. Results found that female Veterans had much high odds of several conditions compared to males in this sample, and these odds increased over time.

KEY FINDINGS:

- The prevalence of back pain, musculoskeletal conditions, and joint disorders increased significantly in 1 to 7 years after deployment among both male and female Veterans using VA care (e.g., 4% of females had back problems in year 1 versus 20% in year 7).
- The odds of having back pain, a musculoskeletal condition, or a joint disorder were higher for female compared to male Veterans and increased over time (year 1 odds ratio for back pain = 1.06, year 7 = 1.38).
- Among the participants, compared to male Veterans, female Veterans were younger, had more education, more likely to be Black, less likely to be married and more likely to be officers.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide classes for Service members focused on promoting wellness and healthy manners of coping with back pain, joint disorders, and other musculoskeletal conditions
- Educate community providers that care for Service members and their families about the growing rates of musculoskeletal conditions over time after deployment and the consequent importance of regularly discussing these issues
- Disseminate information regarding possible symptoms of physical health problems Service members may face after deployment and differential prevalence rates by gender

IMPLICATIONS FOR POLICIES:

Policies could:

- Encourage the development and continuation of programs that can promote resilience in Service members, their partners, and children
- Continue to support programs that address the unique challenges faced by deployed female Service members, especially Service members who are also mothers
- Promote reintegration programs that include attention to assisting Service members' family in adjusting to the Service member's return

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METHODS

- OEF/OIF Veterans were identified through the Defense Manpower Data Center. Data on eligible Veterans were linked to VA administrative and clinical databases.
- Medical and mental health conditions were counted if there was at least one inpatient stay and at least two outpatient visits. Diagnostic code grouping for back problems, joint issues and musculoskeletal/connective tissue disorders were evaluated in the years one to seven after deployment.
- Statistical analyses were used to explore relationships between variables and determine prevalence rates by gender.

PARTICIPANTS

- A total of 450,329 OEF/OIF Veterans (88% male) were included in this study.
- Among female Veterans, the average age was 29 years (SD = 8.50). The race/ethnicity of this subgroup was 47% White, 26% Black, and 10% Latina, while 34% were married, 91% were enlisted, and they represented the following branches: 62% Army, 18% Air Force, 16% Navy, and 4% Marines.
- Among male Veterans, the average age was 30 years (SD = 9.40). The race/ethnicity of this subgroup was 60% White, 13% Black, 11% Latino, while 47% were married, 92% were enlisted, and they represented the following branches: 61% Army, 12% Air Force, 13% Navy, and 15% Marines.

LIMITATIONS

- Only Veterans who used VA care were included so these findings cannot be generalized to all Veterans who served in Iraq or Afghanistan.
- Because of the large sample size, statistical significance may not indicate clinical significance.
- Attrition may disproportionately affect those with or without certain conditions and results may be biased, which was not accounted for in the analyses.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Explore the reasons for the gender differences in these disorders
- Replicate the study while also gathering data from additional sources (e.g., family members) to verify the clinical significance of these findings
- Conduct intervention studies to determine which interventions are most effective for Service members with pain disorders and if some interventions are more effective with female patients

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