



Defense Health Agency (DHA) Clinical Communities Speaker Series

SEPT 2023 CCSS: Innovation-Based Updates in Modern Health Care Practice

S04: The Hard “Truth” About Musculoskeletal Pain: Perspectives from Providers vs. Patient

Resource List

The article, [Risk factors for musculoskeletal injuries in the military: A qualitative systematic review of the literature from the past two decades and a new prioritizing injury model \(2021\)](#) noted musculoskeletal injuries (MSKIs) are a leading cause of health care utilization, as well as limited duty and disability in the US military and other armed forces. MSKIs affect members of the military during initial training, operational training, and deployment and have a direct negative impact on overall troop readiness. Currently, a systematic overview of all risk factors for MSKIs in the military is not available. This is the qualitative systematic review of studies on risk factors for MSKIs in the military that has attempted to be all-inclusive. A total of 57 different potential risk factors were identified, and a new, prioritizing injury model was developed. This model may help us to understand risk factors that can be addressed, and in which order they should be prioritized when planning intervention strategies within military groups.

Implementing programs of care to manage musculoskeletal disorders can be challenging in complex health care systems such as in the military. Understanding how programs of care for musculoskeletal disorders have been implemented in the military and how they impact outcomes may help to inform future implementation interventions in this population. The article, [Implementation interventions for musculoskeletal programs of care in the active military and barriers, facilitators, and outcomes of implementation: A scoping review \(2019\)](#) reinforced the need for evidence-based approaches for the management of musculoskeletal disorders to be a priority for active-duty military. The findings can be used by military health services to inform implementation strategies for musculoskeletal programs of care. Further research is needed to better understand (1) the components of implementation interventions, (2) how to overcome barriers to implementation, and (3) how to measure implementation outcomes to improve quality of care and recovery from musculoskeletal disorders.

Musculoskeletal disorders (MSDs) are soft-tissue injuries caused by sudden or sustained exposure to repetitive motion, force, vibration, and awkward positions. These disorders can affect the muscles, nerves, tendons, joints and cartilage in your upper and lower limbs, neck and lower back. MSDs are most often caused by overexertion and can affect a worker’s ability to perform many job-related tasks, such as lifting, pulling, pushing, maintaining a natural posture, withstanding cold temperature, and withstanding torque reactions and vibrations from machinery and tools. The mission of the [Centers for Disease Control and Prevention National Institute for Occupational Safety and Health \(NIOSH\) Musculoskeletal Health Program \(2022\)](#) is to reduce the burden of work-related MSDs through a focused program of research and prevention that protects workers from MSDs, helps management mitigate related risks and liabilities, and helps practitioners improve the efficacy of workplace interventions.



Defense Health Agency (DHA) Clinical Communities Speaker Series

References

Cancelliere, C., Sutton, D., Côté, P., French, S. D., Taylor-Vaisey, A., & Mior, S. A. (2019). Implementation interventions for musculoskeletal programs of care in the active military and barriers, facilitators, and outcomes of implementation: A scoping review. *Implementation Science, 14*(1).

<https://doi.org/10.1186/s13012-019-0931-1>

Centers for Disease Control and Prevention. (2022, March 21). *Musculoskeletal health program*. Centers for Disease Control and Prevention. <https://www.cdc.gov/niosh/programs/msd/default.html>

Sammito, S., Hadzic, V., Karakolis, T., Kelly, K. R., Proctor, S. P., Stepens, A., White, G., & Zimmermann, W. O. (2021). Risk factors for musculoskeletal injuries in the military: A qualitative systematic review of the literature from the past two decades and a new prioritizing injury model. *Military Medical Research, 8*(1). <https://doi.org/10.1186/s40779-021-00357-w>