Assessing the validity of self-reported injury history among U.S. military personnel

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Purpose: The aim of this analysis was to determine the validity of self-report as a source of injury history information among a sample of U.S. military personnel, and assess if certain types of injuries are more represented in self-reports.

Methods: The retrospective self-reported injury history information of 45 military personnel was compared to prospectively collected information in their medical record. Injuries were identified and matched by anatomic location, type, cause and activity when injury occurred.

Results: A total of 116 injuries were self-reported (mean per person \pm SD = 2.6 \pm 3.0); of these 64 (55.2 %) were recorded in the medical record. Twenty-three (51.1 %) of the military personnel did not report any injuries in the self-report. The most common injury types in the self-report were strain (26/116, 22.4 % of total self-reported injuries), fracture (22/116, 19.0 %), sprain (14/116, 12.1 %) and back pain (14/116, 12.1 %). A comparison between injuries in the self-report and those in the medical record showed that agreement was highest for overuse injuries (15/19, 79.0 %), followed by back pain (8/14,

57.1 %), sprain (8/14, 57.1 %), fractures (11/22, 50.0 %) and strain (12/26, 46.2 %). Eighty-nine injuries were recorded only in the medical record (mean per person \pm SD = 2.0 \pm 2.2).

Conclusions: The validity of self-report was generally low, and varied with the type and cause of injury. This underscores the importance of using multiple sources of injury reporting to get an accurate estimate of injury occurrence in military personnel.