



Letter to the Editor

Response to letter to the Editor: Measuring true accuracy of self-reported injuries



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Dear Editor,

We would like to thank the authors of the Letter to the Editor for carefully reading and considering our article, “Accuracy of Self-reported Injuries Compared to Medical Record Data” (Schuh-Renner et al., 2019b).

The Letter notes two important components for evaluating the reliability of injury self-reporting: 1) the likelihood that someone who was injured will report the injury on the survey, and 2) the likelihood that someone who was injured will report that injury accurately. We agree with this synopsis, and the Letter correctly surmises that the focus of our article is on the second stated element of accurate reporting. Our results show that a majority of self-reported injuries (75%) were accurate with respect to injury date and injured body region when compared to medical record diagnoses, which is a more relevant metric to our stated objective than the 42% consistency emphasized in the Letter. Respondents' accuracy with respect to basic injury information increases confidence in the accuracy of additional reported details about the activities and mechanisms associated with their injuries. Contextual information is essential for injury prevention planning, and cannot typically be obtained from medical records alone (Canham-Chervak et al., 2018).

While it wasn't included in the scope of the present work, we agree that increasing overall injury self-reporting is also important. As we note, 40% of the medical record injuries that were not self-reported occurred in the latter half of the 6-month retrospective period of interest (4–6 months after survey administration); in contrast, only 27% of the matched injuries occurred that far in the past. As recommended in the Discussion section, systematic enhancements like reducing the recall timeframe (Jenkins et al., 2002; Landen and Hendricks, 1995; Warner et al., 2005) and using electronic surveys (Kongsved et al., 2007; Reitz and Anderson, 2013) could minimize underreporting in future studies.

Furthermore, 35% of the respondents who did not report their injuries had diagnoses for pain-related conditions like joint pain, lumbago, and other back pain - the severity of which may not be memorable. These are common diagnoses for athletic populations due to overuse and overtraining activities, but they may not always be recognized as injuries. Therefore, it's important for questionnaires to

include a clear injury definition along with examples of injuries that should be reported (Cryer and Langley, 2008; Schuh-Renner et al., 2019a; U.S. Army Public Health Center, 2017). If injuries are not defined as part of the survey, these nuances could also lead to unintentional under-reporting on surveys when matched to medical records.

We agree with the authors that a combination of medical record and survey data is ideal, since medical records will not capture injuries if care is not sought (Carey et al., 1996; Cohen et al., 2019; Sauers et al., 2016; Smith et al., 2016). Therefore, when detailed survey information is required to expand upon medical record data for epidemiologic investigations and prevention planning, it is a significant and promising finding that self-reported injury responses are predominantly accurate when compared to clinical diagnoses.

Conflicts of interest

The views expressed in this document are those of the authors and do not necessarily reflect the official policy of the Department of Defense, Department of the Army, US Army Medical Department or the US Government. The authors have no conflicts of interest to note.

Ethical approval

This work was approved by the Army Public Health Center Public Health Review Board as public health practice.

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