



## Letter to the Editor

## Letter to the Editor: Measuring true accuracy of self-reported injuries



Dear Editor,

The recently published article “Accuracy of Self-reported Injuries Compared to Medical Record Data” (Schuh-Renner et al., 2018) examined the validity of self-reported injury data, an important topic in injury epidemiology and injury prevention research. The authors concluded that survey data can be used to assess injury outcomes because self-reported injury details are often accurate (Schuh-Renner et al., 2018). This conclusion is based on their finding that among individuals who had a medically documented injury and reported it, 75% reported details of that injury accurately. We commend the authors on this work, but believe their conclusion is misleading since their finding of 75% accuracy does not incorporate the likelihood of self-reporting an injury. We would like to take this opportunity to discuss the true accuracy of self-reported injuries, including the likelihood of self-reporting an injury.

Accuracy of injury reporting is a function of two components: 1) Likelihood that a previously injured individual will report that injury; and 2) Likelihood that the individual will report the details of that injury accurately. The first component is vital since not all previously injured individuals will report that injury (Braun et al., 1994; Jenkins et al., 2002), a point the authors acknowledge themselves. In fact, 36% (861/2374) of individuals in the Schuh-Renner et al. article did not disclose their injury (Schuh-Renner et al., 2018). Using this same data, if individuals with a documented injury were asked if they suffered an injury previously, and if so to provide the details of that injury, resulting information would be accurate only 42% of the time (996/2374). Whether or not the authors intended to, their conclusion implies that self-report may be a viable alternative to medical record data, but 42% true accuracy indicates otherwise.

Importantly, we are not purporting that self-reported injury information is meaningless; to the contrary, it may help overcome limitations of using medical records. True injury rates may be underestimated from medical record system data since not all individuals who have an injury seek care (Carey et al., 1996). There are various reasons why individuals don't seek care—early results from our own work indicate that approximately 50% of individuals who report having suffered an injury or experienced pain during U.S. Military entry-level

training don't seek care because they don't think the injury or pain is serious enough. Also, the completeness of medical records can vary and administering questionnaires to individuals already known to have suffered an injury may help fill gaps in the records. These issues highlight the need for methodologies that draw data from multiple sources to better estimate injury rates.

We commend Schuh-Renner et al. on their work; however, since only 42% of individuals with a medically documented injury reported that injury and described the details of it accurately, we believe the authors' statement that survey data can be used to evaluate injury outcomes is may be misleading. Survey data clearly provide additional useful information but we recommend it be used in combination with, not in lieu of, medical records.

#### Conflicts of interest

The information presented in this paper represents the opinions of the authors and not those of the Department of Defense or the Uniformed Services University. The authors have no disclosures or conflicts of interest to report.

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