



Letter to the Editor regarding “incidence of traumatic spinal cord injury worldwide: A systematic review, data integration, and update”



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Commentary

With interest we read the article by Jazayeri et al on a review aiming at calculating the world-wide incidence of traumatic spinal cord injury (TSCI)¹ Strategic searching, reference checking, grey literature searching, contacting of registries, authors, and organizations requesting unpublished data, browsing related websites, and hand searching key journals were applied to collect the intended data¹ TSCI incidence of 49 countries was collected. The TSCI incidence ranged from 3.3 to 195.4 cases per million (cpm) based on subnational studies and from 5.1 to 150.48 cpm based on national studies. The review is excellent, but has limitations that are cause for concerns and should be discussed.

We disagree with the claim of the study that the worldwide incidence of TSCI has been calculated¹ It is currently impossible to calculate the world's incidence of TSCI for several reasons. First, there are more than 200 countries in this world, and several of them do not cooperate with international health organisations, particularly the WHO, which collects, analyses, and publishes incidence data. Second, several countries do not have registries, which collect national data about the frequencies of disease in this particular country. Third, the definition of TSCI may not be the same world-wide, why different countries may produce different figures simply because they understand something different compared to other countries. Fourth, the authors searched the literature only until May 2020, which is why almost three years of published data have not been included. Fifth, there is no standard from of reporting data about TSCI as admitted by the author.

Another limitation of the study is that no difference was made between pediatric and adult patients. Separating these two cohorts is crucial as treatment and outcome may vary significantly between the two. We should know why pediatric patient were excluded and why an age of >16 years was chosen to define the pediatric population.

Another limitation of the study is that the quality of most studies was poor, as mentioned by the authors. Therefore, the provided results cannot be regarded as reliable and should be interpreted with caution. The poor quality resulted from unclear definition of TSCI and unclear ascertainment methods¹

Overall, the interesting study has limitations that call the results and their interpretation into question. Addressing these issues would strengthen the conclusions and could improve the status of the study. Comprehensive and reliable data should be collected before claiming to collect the global incidence of TSCI.

Statement of ethics

a) The study was approved by the institutional review board (responsible: Finsterer J.) at the 4th November 2022. b) Written informed consent was obtained from the patient for publication of the details of their medical case and any accompanying images.

Data availability statement

Data that support the findings of the study are available from the corresponding author.

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Author contribution

JF: design, literature search, discussion, first draft, critical comments, final approval.

Compliance with ethics guidelines

This article is based on previously conducted studies and does not contain any new studies with human participants or animals performed by any of the authors.

Declaration of competing interest

The author declares that the research was conducted in the absence of

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Reference

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1. Jazayeri SB, Maroufi SF, Mohammadi E, et al. Incidence of traumatic spinal cord injury worldwide: a systematic review, data integration, and update. *World Neurosurg* X. 2023;18, 100171. <https://doi.org/10.1016/j.wnsx.2023.100171>.