

# Comment on the paper “Epidemiology of worldwide spinal cord injury: a literature review”

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## Dear editor

I read with interest the article by Kang et al,<sup>1</sup> in which they reviewed the literature to summarize current evidence about spinal cord injury worldwide. Although the topic is interesting and important, some considerations of their review design are discussed.

First, the authors have searched Embase, PubMed, Medline, and Web of Science. Although these databases index many of the published research, there are also other databases that should be considered. For example, Index Medicus for the Eastern Mediterranean Region (IMEMR) and African Index Medicus contain articles published in journals that are not indexed in some of these main databases. This affects the review's ability to screen all available evidence in order to end up with a more accurate and sound summary of the literature. Also, this may lead to some limitations (database bias).<sup>2</sup>

Second, the review restricted its search process to articles published in English. Since the review addresses the topic from a worldwide point of view, it should have considered articles published in other languages. This may lead to language bias.<sup>2</sup>

Third, the quality of the included studies has not been assessed. Since studies use different methods, their methods may affect the reporting of their results. Thus, it is important to consider the quality of the included studies in order to investigate the effect of it on the reported results. Ignoring this may lead to quality bias.<sup>2</sup>

Fourth, the databases were searched using a limited “pool” of keywords. Since the review is addressing the epidemiology of spinal cord injury (either traumatic or non-traumatic), some more keywords should have been used to increase the access of the search query to as many relevant articles as possible. For example, the following keywords could be used: incidence, frequency, prevalence, traumatic myelopath\*, spinal cord contusion, post-traumatic myelopath\*, spinal cord transection, spinal cord laceration.

For example, I have searched PubMed, Web of Science, Embase, Scopus, IMEMR, and African Index Medicus using the previously mentioned keywords. I limited the search for Iran, as an example. After title and abstract screening, five papers pertaining to the review topic have not been included in it.<sup>3-7</sup> Two of them were published in Persian.

## Disclosure

The author reports no conflicts of interest in this communication.

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## Authors' reply

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## Dear editor

First, I would like to thank Mohamed H Elshahidi for his excellent suggestions for the article. After careful consideration, we decided to respond to these comments.

As for language bias, English is the most widely used language. Most spinal cord injury articles are published in English. On the one hand, articles published in other languages are difficult to search; on the other hand, it is difficult to understand the content, even details. Some other language articles were indeed neglected; we will do our best to overcome this problem and try to conduct more comprehensive work in the future.

The comments regarding database bias, article quality bias, and keywords are relevant, which may have resulted in incomplete retrieval of articles. These issues were neglected in our previous work. In future work, we will pay attention to these details and improve them.

Thanks again to Mohamed H Elshahidi for his careful reading of our article and constructive suggestions. We will try our best to improve these issues and perfect our work in future research.

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The authors report no conflicts of interest in this communication.

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