

Scoping Review of Injuries in Amateur and Professional Men's Ice Hockey: Response

Authors' Response:

We appreciate the interest in our study and the opportunity to respond to the issues raised. The insight from these authors is highly valued, as their previous work has also provided data in the field of orthopaedic injuries in men's ice hockey players. We agree that this scoping review should capture and report on all possible published orthopaedic studies regarding this patient population, and precision in the methodology of how these reviews are performed is of the utmost importance in interpreting and applying these findings for future studies, as well as future clinical decision making.

We do apologize for the omission of the articles by Brunner et al¹ and Nordström et al,⁵ both of whom were authors of the letter to the editor. We can confidently assure the authors, as well as the readers of the *Orthopaedic Journal of Sports Medicine*, that we were diligently rigorous and transparent in the methods of our study to ensure that our results were trustworthy, as mentioned in the letter to the editor. After identifying our research question, we made every attempt to identify all relevant studies at that time and developed a decision plan for where to search, which search terms to use, which sources to search, how long to search, and what language to use, as detailed in our article.⁷ We made every attempt to ensure our search strategy was explicit, transparent, and as comprehensive as possible.^{2,4} We believe that the issue causing frustration as described in the letter to the editor—the omission of the authors' articles^{1,5} from our scoping review—is a result that can occur during any scoping review. Unfortunately, the two studies^{1,5} were inadvertently and inexplicably not captured by our initial literature search, for which we apologize.

Any scoping review performed has the potential to succumb to random error, even when appropriate previously published precautions are followed.^{3,6} This is especially true when conducting such a large scoping review, in which the initial study screening included over 4,000 articles, as seen in Figure 1 of our article.⁷ We did follow a previously published and accepted methodology for conducting scoping reviews, which involved initially screening titles and abstracts by two separate authors, followed by conducting a second-stage full-text article review, and finally ending with a discussion with the senior author to resolve any conflicts when a consensus could not be

achieved.^{3,6} We agree that the two articles^{1,5} mentioned in the letter to the editor are relevant to our scoping review and should have been included in our publication, and we encourage readers to read their referenced studies as well to function as a supplement to our article to fully understand the most up-to-date information regarding the epidemiology of men's ice hockey injuries from the junior level up through the professional level.⁷

Despite this issue, we are confident that the information we presented and the conclusions we drew from it do represent the most up-to-date results regarding the epidemiology of men's ice hockey injuries from the junior level up through the professional level at that time and therefore do not undermine the rigor or quality of our publication or the *Orthopaedic Journal of Sports Medicine*. Again, we thank the authors of the letter to the editor for critically reading our article and taking the time to participate in the peer review process to ensure that the highest quality of evidence is presented to the orthopaedic community.

Patrick Szukics, DO
Philadelphia, Pennsylvania
Peters T. Otlans, MD, MPH
Alfonso Arevalo, DO
Matthew Meade, DO
Peter DeLuca, MD
John P. Salvo, MD
Philadelphia, Pennsylvania

Address correspondence to Patrick Szukics, DO (email: patrick.szukics@rothmanortho.com).

One or more of the authors has declared the following potential conflict of interest or source of funding: P.T.O. has received education payments from Liberty Surgical, Summit Surgical, and Smith & Nephew. P.D. has received education payments from Liberty Surgical. J.P.S. has received education payments from Liberty Surgical. AOSSM checks author disclosures against the Open Payments Database (OPD). AOSSM has not conducted an independent investigation on the OPD and disclaims any liability or responsibility relating thereto.

REFERENCES

1. Brunner R, Bizzini M, Niedermann K, Maffiuletti NA. Epidemiology of traumatic and overuse injuries in Swiss professional male ice hockey players. *Orthop J Sports Med*. 2020;8(10):2325967120964720.
2. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci*. 2010;5:69.
3. McDonagh M, Peterson K, Raina P, Chang S, Shekelle P. Avoiding bias in selecting studies. *Methods Guide for Effectiveness and Comparative Effectiveness Reviews*. Agency for Healthcare Research and Quality (US); 2008. Published February 20, 2013. Accessed July 10, 2022. <http://www.ncbi.nlm.nih.gov/books/NBK126701/>
4. Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A, Aromataris E. Systematic review or scoping review? Guidance for authors when

The Orthopaedic Journal of Sports Medicine, 10(9), 23259671221124960
DOI: 10.1177/23259671221124960
© The Author(s) 2022

This open-access article is published and distributed under the Creative Commons Attribution - NonCommercial - No Derivatives License (<https://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits the noncommercial use, distribution, and reproduction of the article in any medium, provided the original author and source are credited. You may not alter, transform, or build upon this article without the permission of the Author(s). For article reuse guidelines, please visit SAGE's website at <http://www.sagepub.com/journals-permissions>.

- choosing between a systematic or scoping review approach. *BMC Med Res Methodol.* 2018;18(1):143.
5. Nordstrøm A, Bahr R, Talsnes O, Clarsen B. Prevalence and burden of health problems in male elite ice hockey players: a prospective study in the Norwegian professional league. *Orthop J Sports Med.* 2020;8(2):2325967120902407.
 6. Sox H, McNeil B, Wheatley B, Eden J, ed. *Knowing What Works in Health Care: A Roadmap for the Nation.* National Academies Press; 2008.
 7. Szukics PF, Otlans PT, Arevalo A, Meade M, DeLuca P, Salvo JP. A scoping review of injuries in amateur and professional men's ice hockey. *Orthop J Sports Med.* 2022;10(4):23259671221085968.