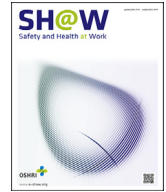




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# Safety and Health at Work

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Letter to the Editor

## Letter to “Work-Related Musculoskeletal Disorders in Iranian Dentists: A Systematic Review and Meta-analysis”



To Editor

We read with interest the article that was published in the *Safety and Health at Work* by ZakerJafari and YektaKooshali in March 2018 [1]. The aim of this study was to determine the prevalence of musculoskeletal disorders in various parts of the body in Iranian dentists using a systematic review and meta-analysis. Although these results are interesting, there are some flaws in the method and interpretation of the results. Given that the meta-analysis studies have the highest level of evidence and an essential role in evidence-based decision-making [2], it is necessary to give some points about the mentioned study to make the results clearer.

- According to the definition of the National Institute for Occupational Safety and Health, work-related musculoskeletal disorders are a disease or injury that affects the musculoskeletal system, peripheral nervous system, or musculoskeletal system, and occupational exposure to ergonomic risks can cause or worsen the disease. Thus, the National Institute for Occupational Safety and Health defines the term “disorder” as chronic physical disease or abnormal conditions [3]. Of the 22 articles reviewed in this meta-analysis, 17 articles have been used by the standardized Nordic questionnaire. This questionnaire has a general section that only refers to musculoskeletal disorders and the second part that deals more closely with the presence or absence of musculoskeletal disorders. According to Fig. 3, the tool for collecting data in the reviewed articles is the Nordic general questionnaire. Therefore, the questionnaire cannot be considered as the tool to determine the prevalence of musculoskeletal disorders, and the only thing that it reports is the prevalence of symptoms of musculoskeletal disorders [4,5]. In six articles, a self-made questionnaire has been used which is unclear because it has not been explained in more detail how these articles have the ability to determine the prevalence of musculoskeletal disorders among dentists.
- Although the authors have stated they were used Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, there is little concordance among reported items with these guidelines. In search of electronic databases Cumulative Index to Nursing and Allied Health Literature (CINAHL) is included in the text, but it is not mentioned in the abstract. Why the word “incidence” was included in the keywords if the purpose of the study was to investigate the “prevalence”?
- Based on PRISMA statement, it is recommended to include the search strategy for at least one database. Also, according to the

PRISMA guidelines, the location of the flowchart is the results section, not the materials and methods. In the search strategy and study selection section, you refer to the site reference and a thesis. What do you mean about these two words?

- In Fig. 1, you mentioned that the number of duplicate studies was 53 due to the large number of databases and the percentage of overlap between them; this number does not seem rational. Moreover, it is better to mention the status of the articles based on the quality assessment score in the results section.
- It is recommended that to better understand the results, the number of articles in each subgroup under review is referred. It is better not to use the Funnel plot for presenting the publication bias in the prevalence studies [6] because Funnel plot usually tries to discover unpublished negative studies in clinical trials [7].

Despite the good results of the study, it seems the method of reporting is not appropriate and does not have the transparency. The existence of such clear mistakes will also affect the credibility of the authors, journals, and publishers.

### Conflict of interest

All contributing authors declare no conflicts of interest.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.shaw.2019.03.002>.

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