Author’s response to reviews

Title: Risk for cervical herniated intervertebral disc in dentists: a nationwide population-based study

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Version: 2 Date: 10 Mar 2019

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Samannaaz Khoja, PT, PhD (Reviewer 1):

1. As per the STROBE checklist, please also indicate that the study design is retrospective in the abstract methods.

Response: We have revised the sentence as “We conducted a retrospective nationwide population-based study…” in the Abstract according to the Reviewer’s suggestion.

2. Introduction, P5, lines 54-57 "Dentists are at the higher end of health care professionals in terms of musculoskeletal injury [9]." The message of this sentence is unclear- please elaborate and provide some quantitative data to support what you mean by "higher end."

Response: In response to the Reviewer’s comment, we revised the sentence as “Dentists suffer a high prevalence of musculoskeletal injury [9].” in the Introduction of the revised manuscript.

3. The discussion has been expanded to include future directions and suggestions for preventing C-HIVD in dentists and authors have mainly used material from Reference 4, which is a very
nice comprehensive review on preventing musculoskeletal injuries in dentist. However, some of the sentences need to be carefully restated. On Pg-11, lines 12-24- "Most dentists lack the skills and knowledge for practicing in a manner that is ergonomically correct [4]. The insufficiency of training may be due to lack of better teachers and teaching tools [4]." From reading these sentences it seems that the studies in Ref 4 have surveyed dentists on their exercise habits or surveyed dental curriculum and teachers to reach this conclusion. However, ongoing back to Ref 4, I find that this is not the case and these sentences are merely the opinion of the authors who wrote that review. I strongly suggest that the authors reword these statements to indicate that lack of knowledge, teaching tools etc are merely opinions or hypotheses from prior research to explain why dentists are predisposed to higher rates of neck pain and C-HIVD. Alternatively, if there are prior studies that actually surveyed dentists on their posture habits or lack of exercise, or lack of training on PSPs and how to avoid injury, please include those references in the discussion as well.

Response: We agree with the Reviewer’s suggestion and revised the sentences as “In a review article, the authors suggested that most dentists lack the skills and knowledge for practicing in a manner that is ergonomically correct and the insufficiency of training may be due to lack of better teachers and teaching tools [4].” in the Discussion of the revised manuscript.

Reviewer 2:

Overall, the authors have addressed my concerns. I would encourage them to consider adding to their list of suggestions regarding implementing ergonomics training and education in the dental program. Another solution could be to consult with occupational therapists to ensure appropriate body mechanics and a focus on injury prevention.

Response: We appreciate the Reviewer’s suggestion and will add the list of suggestions regarding implementing ergonomics training and education in the dental program and consult with occupational therapists to ensure appropriate body mechanics and a focus on injury prevention.