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LETTER TO THE EDITOR

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Comment on: Objective and subjective evaluation of tear film in machine carpet weavers

Dear Editor

We read with interest the recent article by Estarki et al that evaluated tear film status in machine carpet weavers.[1] In the literature, there is another study by Wani et al[2] that showed a high rate of eye irritation among carpet weavers; however, Estarki et al[1] presented quality research that quantitatively documented parameters of dry eye in carpet weavers. Here, we would like to draw the kind attention of the authors and the readership toward our methodological remarks on this work.

Literally, they evaluated blink rate, tear deformation time, ocular staining, and ocular surface disease index (OSDI) in carpet wearers and compared it with nonweavers as the control group. Although no history of contact lens use, ocular surgery, systemic diseases, or medications causing dry eye as well as the status of anterior segment was noted precisely in the inclusion criteria; there is no mention of history of cigarette smoking, water pipe, and second-hand smoking that could have been better to be acknowledged in exclusion criteria as they are shown to alter tear film stability, tear film breakup, tear osmolarity, cornea staining, cornea parameters as well as score.[3-5]

Furthermore, OSDI score of participants was assessed using an English questionnaire. As is clear, any translated questionnaire should be used only after validation, reliability, psychometric, and cultural adaptation. We wonder why the validated Persian version of OSDI questionnaire by Pakdel et al[6] is not used here.

In addition, nonwearer workers of carpet factory have been recruited as a control group. Allocating participants into case or control arms according to weaving status may not be accurate as they are all in the same conditions as regards humidity, temperature, and light intensity.[2]

Taken together, it seems that this study could be more accurate if the researchers excluded smokers, used validated Persian OSDI questionnaire, and recruited nonworker individuals as their control group.

KEYWORDS

carpet weaver, dry eye, occupational exposure, ocular surface disease index, tear film

CONFLICT OF INTEREST

There is no conflict of interest to declare.

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REFERENCES

1. Estarki F, Asharlous A, Mirzajani A, Abolghasemi J. Objective and subjective evaluation of tear film in machine carpet weavers. *J Occup Health*. 2021;63(1):e12237. https://doi.org/10.1002/1348-9585.12237
2. Wani KA, Khan R, Mamta. Evaluation of occupational exposure of carpet weavers in northern province of Madhya Pradesh (India) during different seasons. *Indian J Occupat EnvironMed*. 2015;19(2):110-118. https://doi.org/10.4103/0019-5278.165331
3. Mohidin N, Jaafar AB. Effect of smoking on tear stability and corneal surface. *J Curr Ophthalmol*. 2020;32(3):232-237. https://doi.org/10.4103/joco.joco_70_20

4. Aktaş S, Tetikoğlu M, Koçak A, et al. Impact of smoking on the ocular surface, tear function, and tear osmolarity. *Curr Eye Res*. 2017;42(12):1585-1589. https://doi.org/10.1080/02713683.2017.1362005
5. Golabchi K, Abtahi MA, Salehi A, Jahanbani-Ardakani H, Ghaffari S, Farajzadegan Z. The effects of smoking on corneal endothelial cells:cross-sectional study on a population from Isfahan, Iran. *Cutan Ocul Toxicol*. 2018;37(1):9–14.
6. Pakdel F, Gohari MR, Jazayeri AS, Amani A, Pirmarzdashti N, Aghaee H. Validation of Farsi translation of the ocular surface disease index. *J Ophthalm Vis Res*. 2017;12(3):301.