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Editorial

Hearing Sensitivity of Iranians at A-weighted Sound Pressure Level

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Noise is one of the most common physical harmful factors in the work environment. On March 2, 2021, the World Health Organization (WHO) predicted that by 2050, approximately 2.5 billion people (or one in every four) will have some degree of hearing loss. [1] According to the WHO, hearing loss affects many facets of a person's life, including communication, cognition, education, depression, *etc.* [2] Noise is responsible for one-third of hearing loss and has an important contribution to occupational diseases. [3] At present, to measure the noise exposure of workers, the frequency weighting of the sound level meter (SLM) is set to [A], simulated to the sensitivity of the human ear (as the human ear is less sensitive to the lower frequencies). It is also common to assess possible hearing damage using A-weighting. A-weighting is valid for showing the sensitivity of the human ear as a function of the frequency of pure tones but only for relatively quiet levels of sound. The International Organization for Standardization (ISO) modified its standard curves defined in ISO 226:2003 by the Research Institute of Electrical Communication, Tohoku University, Japan. [4, 5] The ISO 226:2003 has proposed new curves by combining the results of several studies from Japan (most involved), Germany, Denmark, and the United States. [4] The question that arises is the validity of the proposed curve of Iranians ?

This question provides a basis for future national research to examine the degree of ear sensitivity in different regions of Iran, taking into account age and gender. It would shed light on the hearing sensitivity of Iranians according to the A-weighting. Finally, as the Executive Director of the AOH, I would ask the authors to submit their research papers in this field for publication in the AOH.

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