

Noise-Induced Hearing Loss (NIHL) in Teenagers and Young Adults

Jorge Humberto Martins**Centro Hospitalar Universitário de Coimbra, Portugal****Corresponding Author:** Jorge Humberto Martins, Centro Hospitalar Universitário de Coimbra, Portugal.**DOI:** 10.31080/ASOL.2023.05.0525**Received:** December 30, 2022;**Published:** January 01, 2023© All rights are reserved by **Jorge Humberto Martins.**

Noise-Induced Hearing Loss (NIHL) is understood as a serious and serious problem in the occupational and recreational world [1], and there is already a lot of legislation and prevention measures in its scope.

However, the same is not true of recreational NIHL, especially in the younger population, even though it is becoming more and more frequent, having suffered a large increase in recent decades. This increase can be justified by the fact that it is a relatively recent problem and a result of the enormous technological advances in recent years, namely in sound amplification and in individual music devices, making activities such as attending nightclubs or music festivals more and more banal. These activities expose the population to sound levels likely to damage hearing. Noise-Induced Hearing Loss is irreversible, making prevention the only available solution to this public health problem. However, it was found that Noise-Induced Hearing Loss associated with leisure time is not seen as a problem by the younger population, and that very little is done at a preventive level, showing a great lack of awareness of this problem. condition.

According to WHO (2015) about 50% of adolescents are subjected to harmful noise levels using personal audio devices, such as MP3 players and smart phones, while about 40% are exposed to noise in clubs, discos and bars [2].

In order to fill this large gap associated with the NIHL's notion of danger related to leisure, efforts must be made to inform and raise awareness through legislation, social norms and hearing conservation programs. These measures aim to change the individual's culture and social base, rather than directly affecting their individual attitudes and behaviors.

Tinnitus often appears in association with NIHL. is associated with hearing loss [3,4].

A sound starts to be annoying to the auditory system when the level of that sound exceeds 75-85 dB [5]. A sound can cause permanent hearing loss when it reaches intensities of 130-140 dB in a short period of time or when there is chronic sound exposure of an average of 85 dB for a period of 8 hours or more [6].

OSHA (Occupational Safety and Health Administration) has a guideline that is known as the 5 dB rule. That is, for every 5 dB increase in sound intensity, the exposure time must be reduced by half. The NIOSH (National Institute of Occupational Safety and Health) remains faithful to 3 dB, establishing that, for a sound exposure of 85 dB, the maximum exposure period is 8 hours [7]. As seen, for each injury risk criterion, the allowed sound exposure level depending on the exposure time varies (80, 85 or even 90 dB depending on the entity) [8].

Based on the above, we consider it important to carry out a preventive assessment and to work on the implementation of educational programs to raise awareness among young people about the risk agents for hearing loss induced by recreational noise, implementing mechanisms that allow monitoring of the hearing of young people, in order to value hearing impairment caused by exposure to high intensity noise in recreational situations, in order to prevent and early detection of hearing loss.

Bibliography

1. OMS. "Sordera y pérdida de la audición" (2017).
2. Organización Mundial de la Salud. "Escuchar sin Riesgos" (2015).

3. Rémy Pujol Jean-Luc Puel Frédéric Venail. Tinnitus. Cochlea.org (2016).
4. RA D. "Noise induced hearing loss". Bailey BJ, Ed. Head neck Surg. cd-rom. 2nd Ed. New York, Lippincott-Raven (1998).
5. Kumar P, *et al.* "Effect of Short Duration Noise Exposure on Behavioural Threshold and Transient Evoked Otoacoustic Emission Amplitude". *Indian Journal of Otolaryngology and Head and Neck Surgery* 19 (2013): 9-12.
6. Concha-Barrientos Marisol, *et al.* "Occupational noise". Assess. (2004).
7. Rosen Elizabeth J., *et al.* "Noise induced hearing loss". Gd. Rounds Present. UTMB, Dept. Otolaryngol. (2001).
8. Portnuff CDF, *et al.* "Teenage use of portable listening devices: a hazard to hearing?" *Journal of the American Academy of Audiology* 22 (2011): 663-677.