



Audiological and labor characterization of construction workers

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INTRODUCTION

Construction workers are exposed to high levels of noise in the work environment, due to machines used in their profession⁽¹⁾. The impact of noise and other valuable information about risk factors, and the audiological and general history of a patient's health can be obtained in the anamnesis, making this step extremely important in the hearing assessment of construction workers.

OBJECTIVE

To describe the audiological characteristics and the main hearing complaints of civil construction workers exposed to noise in a public education institution.

METHODS



This is a descriptive cross-sectional study approved by the Research Ethics Committee under number 30695014.1.0000.5149.

Participants were civil workers from a federal educational institution submitted to an anamnesis to characterize the audiological history and work situation.



Audiological evaluation was also carried out through otoscopy and audiometry exams.



Air (250 to 8000 Hz) and bone (500 to 4000 Hz) hearing thresholds were obtained.

The results were analyzed using the Biap (1997) classification⁽²⁾.

RESULTS

- 95 male workers were interviewed, aged between 18 and 60 years.
- The average working time in civil construction was 14.18 years.
- 29,47% reported working exposed to noise, 12.63% complained of sporadic tinnitus and 11.57% complained it occurs daily.
- 49.47% of the workers used headphones or MP3 regularly, 49.47% were exposed to chemical agents, 15.7% worked double shifts, and 58.94% used hearing protection equipment during work.
- The otoscopy was altered in 6.31% of the sample and 21 participants (22.10%) had hearing loss (11 unilateral and 10 bilateral).
- Of the 31 ears with hearing loss, 9 had sensorineural loss, 7 had mixed hearing loss and 15 had conductive loss.
- Among the 9 ears with sensorineural loss, 8 had mild and one had moderate hearing loss.

CONCLUSION

Construction workers presented hearing loss. Therefore, hearing health programs are important for this population in order to provide information about correct hearing habits and mandatory use of ear protectors during work in order to prevent the installation and aggravation of hearing loss.

References:

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- 2) INTERNATIONAL BUREAU FOR AUDIOPHONOLOGY. 1996. BIAP Recommendation 02/1: Audiometric Classification of Hearing Impairments. Available from: <https://www.biap.org/en/recommendations/recommendations/tc-02-classification/213-rec-02-1-en-audiometric-classification-of-hearing-impairments/file>.