

University of Mosul
College of Nursing



**Risk Factors of Occupational Noise –
Induced Hearing Loss**

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Abstract

Background : Noise influences human physiologically and socially. It can impair hearing, intrude on communication, be disturbing, lead to fatigue and reduce effectiveness and productivity. Exposure to intense noise or long term exposure to noisy environments can lead to permanent impairment of a person's auditory cells and consequent diminished hearing ability.

Objectives : This study aims to determine the risk factor of potential hearing loss in workers and to describe the extrinsic and intrinsic risk factors associated with hearing loss.

Method : A cross-sectional design has been conducted in Mosul City for the period between 1st -January-2022 to 24th July -2022 . utilized and data have been collected from 160 respondents. A questionnaire and records review a checklist for audiometric of respondents' medical records are utilized to determine the risk factors.. Chi-square measurements, where necessary, as well as Odds Ratios are used for the analysis of data. In general a significance level of 5% is applied for all analyses.

Results: Results indicated the prevalence of potential hearing loss in the employees to be 27% and that both extrinsic and intrinsic risk factors are associated with hearing loss.

The extrinsic factors(the number of years employed in whole life >10 years, the number of years employed in current job < 10 years, formal training in prevention of hearing loss) significantly associated with potential hearing loss were both occupational and medical. Diabetes was the sole significant intrinsic medical factor .The only intrinsic factor which was found to be significantly associated with hearing loss was age.

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