

The prevalence of hearing loss in adults presenting with cardiovascular disease

Abstract

The relationship between cardiovascular disease and hearing loss has already been proven. However literature does not provide information on the prevalence of hearing loss in adults with cardiovascular disease. Previous studies provide contradictory information regarding the audiological characteristics in this population. Data relating to the South African context is minimal. The objectives of this descriptive survey research study were to describe the prevalence of hearing loss in adults with this cardiovascular disease and determine the variables which may influence hearing thresholds in this population. Ninety two individuals diagnosed with coronary artery disease or cardiomyopathy were recruited using a non-probability, purposive sampling strategy. This sample, with an average age of 48 years and five months, consisted of more males than females and more participants with coronary artery disease than cardiomyopathy. Participants underwent a comprehensive audiological evaluation including an otoscopic examination, immittance audiometry, pure-tone audiometry, speech audiometry, as well as distortion product otoacoustic emissions. Content analysis, descriptive statistics, *t*-tests and an analysis of covariance revealed a hearing loss prevalence of 5%. These participants presented with a low frequency sensorineural hearing loss with the right ear being more affected. It was found that duration of cardiovascular disease influenced hearing thresholds. Implications of this study include the importance of prevention and early identification of hearing loss. This highlights the need to establish the role of audiologists within a multi-disciplinary team and the management of individuals with this disease.

Key words: audiological evaluation, cardiomyopathy, cardiovascular disease, coronary artery disease, hearing loss