Knowledge, practices, hearing-related symptoms among students exposed to leisure noise of a Sri Lankan University.

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Background and rationale: Exposure to excessive noise is a major cause of hearing disorders (Crandell et al., 2004). Leisure time noise can be one of the most important reasons for the development of noise induced hearing loss in the young population (Landälv, Malmström & Widén, 2013). Recent studies have revealed that the risk of experiencing hearing loss due to discotheque music, rock concerts, and music from personal music players in teenagers and young adults has increased (Sliwinska-kowalska, 2012). In the Sri Lankan context ,there is a dearth of literature regarding knowledge practices and hearing related symptoms among university students exposed to leisure noise. Therefore, this study focused to describe university students' level of knowledge on leisure noise exposure, hearing protection methods, activities and situations in which university students being exposed to, can cause damage to their hearing and to determines the association between tinnitus and other hearing related symptoms and leisure noise exposure among university students.

Methodology: This descriptive cross-sectional study included 131 2nd year students representing faculties of Medicine, Science, Commerce and Management Studies, Humanities and Social Sciences of the University of Kelaniya, Sri Lanka. Simple random sampling was used to select the total study sample. Probability proportional to size sampling technique was used to decide the number of participants from each faculty. Quantitative data collection was carried out using a self-administered questionnaire. Appropriate statistical tests were performed using SPSS 22 software.

Results: 13 (10%) students from medical faculty, 24 (18%) from science faculty, 26 (20%) from commerce and management studies faculty, 27 (21%) from humanities faculty and 41 (31%) from social science faculty participated in this study. The results showed that although majority (88.55%) of students considered excessive leisure noise exposure can damage their hearing, a minority (22.90%) of the students considered that hearing loss caused by excessive noise exposure cannot be cured. A substantial number (46.56%) of students had heard about hearing protective devices, while a very low number of students (02.00%) had used them when they were exposing

themselves to loud noise. The most frequently exposed situations were listening to music using MP3 players (90.08%), watching movies at film theatres (73.28%) and attending musical shows and concerts (46.56%). Majority (54.24%) of students use middle 1/3 (33.33% to 66.67% of the loudness) of the rating scale to listen to music using MP3 Player and the level can be consider as somewhat loud or loud. Discomfort in the ear(s), blocking sensation or fullness in ear(s), tinnitus and reduction of hearing were the most prominent hearing-related symptoms after being exposed to leisure noise. A significant relationship could be found between blocking sensation and listening to music using MP3 Player; and discomfort in ears and attending musical shows and concerts.

Conclusions: Even though majority of students considered excessive leisure noise exposure can damage their hearing, their motivation on the usage of most effective hearing protection methods was considerably low. Therefore, hearing conservation programs for younger students should be developed to address the effects of leisure noise exposure on hearing and hearing protection.

References:

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