Prevalence of External and Middle Ear Pathologies among Students with Hearing Impairment in School Settings

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Hearing impairment is a major health problem in children. The incidence of external and middle ear diseases is greater for children with severe to profound hearing impairment. This study was aimed at determining the prevalence of external and middle ear pathologies among students with hearing impairment in school settings. A descriptive cross sectional study was carried out in two selected schools for children with hearing impairment (6-9, 10-13 and 14-16 years). A total of 195 participants were selected using two stage stratified sampling method. Otoscopy and Tympanometry were performed. Intact tympanic membranes were found in 316 ears (81 %), which was high in the age group of 14-16 years. 74 (19 %) reported non occluded ear cerumen, occluded ear cerumen, tympanic membrane perforation, bulging tympanic membrane, external ear infection, foreign bodies and discharge. Most common pathology was non occluded ear cerumen in 49 (12.6 %), and high in 10-13 age group. Only 383 ears were examined by Tympanometry due to occluded ear cerumen, presence of foreign bodies and external ear infection in 7 ears. Type “A” tympanograms were found in 282 ears (74%) and those were normal middle ears. Remaining 101 ears (26%) were pathological middle ears. Type “As” (47 ears; 12%) and type “Ad” (23 ears; 12%) were the most frequent pathological tympanograms, which was high in the 14-16 group. There is a noticeable prevalence of external and middle ear pathologies among students with hearing impairment. The study findings highlight importance of regular ear examinations and promoting hearing hygiene in children with hearing impairment.