

PREVALENCE OF DEAFNESS IN SCHOOL GOING CHILDREN OF RAJBIRAJ

Dr. Anil Kumar Jha
Assistant Professor
ORL & HNS Department
Nepal Medical College

ABSTRACT:

Deafness is a condition where multiple aspects of the development of the children are affected including linguistic, cultural and academic achievement. This study was carried out in a school located in the rural area of Rajbiraj where 1500 school going children were screened for the prevalence of deafness¹ and its interrelationship with different preventable ear diseases like CSOM, OME, AOM and Wax. Study revealed 10% of the children suffering from hearing impairment due to the preventable cause.² Highest prevalent rate within the age group of 5-11 years and the most common causes were found out to be due to OME. Study sends clear cut message to the community health workers to increase awareness program to help decrease in deafness due to different middle ear diseases.

OBJECTIVE:

To find out the preventable cause of hearing impairment among school going children of Rajbiraj.

METHOD:

1500 school going children of both sexes were assessed for hearing impairment to those having audiogram result 28-38 db deficit and Rinne test negative were included in the study. Detailed otological examination was carried out to appropriate diagnosis. Children below five years and above sixteen years were excluded from the study. Also those having Rinne test positive or having congenital deafness were excluded from the study.

RESULTS AND OBSERVATIONS:

Age	OME	CSOM, TT	CSOM, AA	WAX	Total
5-7 yrs	32 (50%)	11 (30.6%)	0 (0%)	15 (33.4%)	58 (38.7%)
7-11 yrs	21 (32.8%)	16 (44.4%)	1 (20%)	20 (44.4%)	58 (38.7%)
11-15 yrs	11 (17.2%)	9 (25%)	4 (80%)	10 (22.2%)	34 (22.6%)
Total	64 (42.7%)	36 (24%)	5 (3.3%)	45 (30%)	150

Above table shows the distribution of age and its relationship with different preventable diseases. Table shows children between the age of 5-11 yrs have highest number of children suffering from OME the highest percentage (77.3%) of prevalence of ear disease.

Table also shows that the highest number of children suffering from OME (42.7%) had hearing impairment where WAX is the second cause accountable and CSOM, TT and CSOM, AA as the third and fourth respectively.

DISCUSSION:

According to WHO criteria³ any population having more than four percent ear drum perforation are considered high-risk population. Our study reveals that the on-study populations fall into that criteria line than in other

studies done elsewhere. This study also reveals OME⁴ as the major cause of the hearing impairment in school going children in Rajbiraj. Which is easily preventable and even curable if treated appropriately, and due to lack of awareness and proper health facilities, their children are entitled to lead handicapped life. We can see from the study the WAX having second major cause, which is not only easy but also having no financial involvement. We can also observe from the study that the children within the age of 5-7 years have the highest number of OME following 7-11 years is a normal trend.

CONCLUSION:

Following conclusions can be made from our study:

1. 10% of the school going children in the rural area are having preventable hearing impairment,⁵ which is constant with previous studies.
2. Otitis media with effusion is the highest number of children suffering from hearing impairment followed by WAX, CSOM, TT and CSOM, AA
3. Need for implementation of effective ear health program in school so as to prevent hearing impairment in children having above mentioned ear diseases.

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