

ASSESSMENT OF EPIDEMIOLOGICAL PROFILE OF VARIOUS ENT DISEASES IN SCHOOL GOING CHILDREN AND THE TRENDS OF SEEKING HEALTHCARE IN SHANGLA VALLEY

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ABSTRACT

Objective: To evaluate the epidemiological profile of various ENT diseases in school going children and trends of seeking healthcare i.e consulting ENT specialist, general physicians and quacks in Shangla valley.

Methodology: This was a cross-sectional descriptive study. The study was carried out in district Shangla, Khyber Pakhtunkhwa in May-July 2014. The author visited eight schools in the district Shangla and carried out thorough ENT examination of the students and took relevant history to find out the prevalence of various oto-rhino-laryngological diseases in the school going children. Students of the eight schools of Shangla valley with age between 5 to 16 years were included in the study. The students, who were found to be suffering from ENT diseases, were also asked whether they have consulted any physician, oto-rhino-laryngologist (ENT specialist) or any quack for the subject purpose. Simple descriptive statistics were used to describe frequencies and percentages.

Results: Total 2882 students were examined in the eight schools. Ear wax was found in 769 (26.7%) cases. 11 (1.4%) of ear wax cases had consulted an ENT specialist, 37(4.8%) had consulted general physician and 71 (9.2%) went to see quacks. Second common ENT condition encountered was rhinosinusitis, which was seen in 11.6% of school children. 4 (1.2%) of rhinosinusitis patients had consulted ENT specialist, 35(10.4%) had seen general physicians and 69(20.5%) had gone to quacks for treatment.

Conclusion: Oto-rhino-laryngological (ENT) diseases are considerable burden and important health problem in school going children of Shangla Valley. Currently trend of consulting quacks is highest, followed by physicians and ENT specialists.

Key Words: Chronic suppurative otitis media, impacted ear wax, Deviated nasal septum, Allergic rhinitis, Health care seeking pattern

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INTRODUCTION

ENT diseases are an important health problem¹ and a common cause for seeking health care. They are also a common cause of absenteeism from schools. The common ENT diseases in school going children include CSOM, ear wax, rhinitis, otitis media, acute & chronic tonsillitis and pharyngitis etc. Morbidity associated with ENT diseases affects the performance of children at school and thus their future, an important example of which is hearing impairment². This problem is compounded by the fact that children are economically dependent on their parents, and it causes delay in early presentation of children to the available health facilities

especially in poor and underdeveloped areas. Thus early detection and intervention of such diseases can reduce burden of associated morbidities in children³. WHO also has recommended that children should undergo ear examination and inspection when entering into school and their hearing should be assessed⁴.

In our rural areas, literacy rate is very low, most of the population is very poor and people have a trend of consulting quacks for their ailments instead of visiting medical health facilities. Many individuals in community even manage these problems without seeking help⁵. Consequent to the lack of efficient primary health care, lack of awareness, poverty and various community trends, there is tremendous increase in morbidities as-

sociated with various preventable diseases.

The aim of the study was to evaluate the epidemiological profile of various oto-rhino-laryngological diseases and the trends of consulting ENT specialist, general physicians and quacks so that primary health care providers can focus on them.

METHODOLOGY

The study was carried out in district Shangla, Khyber Pakhtunkhwa in May to July 2014. Shangla district is one of the poor and most underdeveloped/deprived areas of our country. The author visited eight different schools in the districts Shangla and carried out the thorough ENT examination of the students to find out the prevalence of various oto-rhino-laryngological diseases in the school going children. Students of these schools of Shangla valley with age between 5 to 16 years were included in the study. The students who were absent from school due to any reason, were excluded. The students who were found to be suffering from ENT diseases, were also asked whether they have consulted any physician, oto-rhino-laryngologist (ENT specialist) or any quack for the subject purpose and whether they are under treatment for that disease or not. The patients, who needed treatment and further investigations, were given prescription chits and were advised to get the investigations done to prevent any future morbidity. Various schools visited included following;

1. Government High School Skakowlai, Shangla
2. Government High School Kuzpao, Shangla
3. Government Primary School Shakowlai, Shangla
4. Government Primary School Kuzpao, Shangla
5. Paragon Primary School Kuzpao, Shangla
6. Makhozae Public Primary School Kuzpao, Shangla
7. Makhozae Public High School Kuzpao, Shangla
8. Modern Public School Logar, Shangla

Total 2882 students were examined in these schools. Permission was taken from administration for subject purpose and consent was taken from all the students. Information gathered included frequency of various ENT diseases found, history of consulting physicians and oto-rhino-laryngologists for the particular ENT diseases and also history of getting treatment or any therapy from quacks. Simple descriptive statistics were used to describe frequencies and percentages.

RESULTS

Total 2882 students were examined. Most common ENT disease was ear wax found in 26.7% cases, followed by acute rhinitis 11.6%, allergic rhinitis 10.9%,

DNS (deviated nasal septum) 8.1%, CSOM 3.2%. Frequencies of other ENT diseases and trends of seeking treatment are shown in table 1.

DISCUSSION

ENT diseases are a considerable burden and their management constitutes an important part of health care system. Lack of efficient primary health care increases the morbidities associated with many preventable diseases. Various ENT diseases which are common in school going children include ear wax, CSOM, DNS, allergic rhinitis, rhino-sinusitis, pharyngitis, tonsillitis, otitis media, otitis media with effusion, and otitis externa.

Ear wax was the most common ENT disorder encountered. As in majority of cases it is asymptomatic so they don't seek medical attention. Hatcher et al⁶, Elango et al⁷ and Minza et al⁸ reported the prevalence rates of impacted wax ranging from 8.6% to 28.2% but in our study it came out to be 26.7%. Out of these cases nearly one third were symptomatic. Only 11 (1.4%) cases had consulted ENT specialist, 37 (4.8%) consulted general physician and 71(9.2%) had seen quacks for this problem. Rest of 650 did not have consultation for this problem; it is because a large number of children were asymptomatic. Impacted ear wax is a silent condition and causes mild degree of hearing impairment.

Second most common ENT condition encountered among children was rhino-sinusitis, which was found affecting 11.6% of school children. Only 4 (1.2%) of them had consulted ENT specialist, 35(10.4%) had seen general physicians and 69(20.5%) had gone to quacks for treatment. Rest of them did not seek any sort of treatment. Allergic rhinitis is a common disease affecting up to 10% to 20% of population. In US the prevalence of allergic rhinitis is reported to be 20%⁹ and the Scandinavian studies report a cumulative prevalence rate of 15%¹⁰. Allergic rhinitis has been associated with significant change in quality of life and work performances¹¹. In the present study 10.9% of school going children had allergic rhinitis. Only 5(1.6%) of the children had consulted an ENT specialist, 29(9.1%) had seen general physician for this disease and 64(20.1%) patients had treatment from quacks for allergic rhinitis.

Deviated nasal septum (DNS) is a very common condition. Different studies have shown wide range of prevalence¹²⁻¹⁷. In 1978 Gray reported a prevalence of 48% to 60% among neonates¹². In older children, studies have shown prevalence of 12.4% among children of 2.5 to 6 years age group¹⁶ and 13.6% among children of 6-9 years age group¹⁷. Significant DNS causes nasal obstruction, headache, epistaxis, sleep disturbance etc. In the present study 8.1% of school going children had significant DNS causing obstructive symptoms, but only

Table 1: Frequency of various ENT diseases in school children and trend of consulting ENT specialist, physician or quacks

S/No	Disease	Frequency	%age	Total number of patients who consulted			
				ENT Specialist	General Physician	Quacks	Consulted none
1	Ear wax (Impacted)	769	26.7%	11(1.4%)	37(4.8%)	71(9.2%)	650(84.5%)
2	Rhinosinusitis	336	11.6%	4(1.2%)	35(10.4%)	69(20.5%)	228(67.8%)
3	Allergic Rhinitis	317	10.9%	5(1.6%)	29(9.1%)	64(20.1%)	219(69.1%)
4	DNS	234	8.1%	9(3.8%)	20(8.5%)	47(20.1%)	158(67.5%)
5	CSOM	93	3.2%	7(7.5%)	19(20.4%)	34(36.5%)	33(35.5%)
6	Pharyngitis	65	2.2%	1(1.5%)	5(15.6%)	29(44.6%)	30(46.1%)
7	Otitis Media with Effusion	54	1.9%	7(12.9%)	13(24%)	18(33.3%)	16(29.6%)
8	Otitis Externa	41	1.4%	3(7.3%)	7(17%)	21(51.2%)	10(24.4%)
9	Otitis Media	39	1.3%	1(2.6%)	10(25.6%)	14(35.9%)	14(35.9%)
10	Tonsillitis	36	1.3%	3(8.3%)	11(30.5%)	19(52.8%)	3(8.3%)
11	External Nasal Deformity	35	1.2%	5(14.2%)	2(5.7%)	0	28(80%)
12	Nasal Polyps	13	0.4%	3(23%)	3(23%)	4(30.7%)	3(23.1%)
13	Congenital Ear Deformity	9	0.3%	7(77.8%)	0	0	2(22.2%)s
14	Foreign Body Ear	7	0.2%	0	0	0	7(100%)

9(3.8%) had consulted an ENT specialist, 20(8.5%) had seen general physician for it, 47(20.1%) children got some sort of therapy from quacks and rest did not ever seek medical care.

Chronic suppurative otitis media (CSOM) is a major health problem in developing countries. It is the most common cause of mild to moderate hearing loss in children¹⁸. Biswas et al and Morris et al found the prevalence of CSOM to be 12.4% and 15 % respectively^{18, 19}. In our study prevalence of CSOM came out to be 3.2%. Only 7 (7.5%) of the children had consulted ENT specialist, 19(20.4%) had seen general physician for this disease and 34(36.5%) cases had treatment from quacks.

CONCLUSION

Oto-rhino-laryngological (ENT) diseases are considerable burden and important health problem in school going children of Shangla Valley. Currently trend of consulting quacks is highest, followed by physicians and ENT specialists. Health education, health facilities and improvement of socioeconomic conditions will be helpful in overcoming this burden of oto-rhino-laryngological diseases and also in changing orthodox trends of community of preferring quacks over present day health care system.

RECOMMENDATIONS

In the present study it is evident that very few of school going children present to the concerned specialists for their ailments. Major community trend is to consult a quack rather than physician. The key reasons for these trends are social customs, lack of awareness, lack of efficient health care system and poor health education. Therefore it is recommended to provide efficient health care and the awareness level of individuals should also be enhanced through education and campaigns. Needless to say, health resources and education are the cornerstones to improve the epidemiological profile of various prevalent diseases and to change the old community trends.

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CONTRIBUTORS

MAK conceived the idea, planned the study, and drafted the manuscript. SA helped acquisition of data and in manuscript writing. HBU and AK did statistical analysis and references citation. All authors contrib-uted significantly to the submitted manuscript.