

Pattern of Ear, Nose and Throat Diseases among Subjects below 18 years attending at ENT OPD in a Tertiary Hospital

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ABSTRACT

Introduction: Children having Ear, Nose and Throat (ENT) problem are often unrecognized and neglected by parents and the society. Early detection and proper management can help to minimize serious complication and adverse effects on both patients and their parents. **Methods:** This cross-sectional study was conducted among patients less than 18 years who attended the ENT out patient's department (OPD) of North Bengal Medical College Hospital (NBMCCH) for a period of 6 months (01.07.2016 to 31.12.2016). A total 1045 cases were enrolled irrespective of sex. Data were collected on a check list which comprised of age, sex, duration of diseases, examination findings and diagnosis. **Results:** A total 3225 patients with ENT diseases attending the ENT OPD of NBMCCH during 6 months period, out of which 1045 were less than 18 years. Among them males were 498 (47.65%) and females were 547 (52.34%). Most of the patients came to the hospital with Chronic Suppurative Otitis Media (CSOM) 290 (27.75%), followed by tonsillitis 180 (17.22%), otitis media with effusion 107 (10.27%), impacted wax 98 (9.37%), adenoids 70 (6.69%), foreign body 57 (5.45%), parotitis 52 (4.97%), furunculosis 47 (4.49%), preauricular sinus 44 (4.21%), otitis externa 41 (3.92%), traumatic rupture of tympanic membrane 38 (3.6%) and others 21 (2.01%). **Conclusion:** This study suggests that the subjects under 18 years mostly suffer from chronic suppurative otitis media, tonsillitis, otitis media with effusion and impacted wax. So, primary ENT health care services should be promoted among children and adolescent.

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INTRODUCTION

Ear, nose and throat problems are more common in children than adult, especially diseases such as acute suppurative otitis media, acute tonsillitis, acute epiglottitis, laryngotracheobronchitis and rhinitis etc. This trend could be due to various factors such as wide and horizontal Eustachian tube, under developed immunity, malnourishment, poor hygiene and sanitary conditions, overcrowding, lower socioeconomic status etc.¹ Prevalence of ENT diseases among children is not well documented in Bangladesh. A very few studies have been conducted regarding the ENT problems in paediatric group. The most common type of ENT problem of children is not known.

A healthy population is likely to be a productive population that will lead to a growing economy. The purpose of this study was to investigate the pattern of common ENT diseases in children in the northern part of our country and its relation to economy, life style and culture.

METHODS

This was a cross-sectional study carried out in the out patient's department of ENT in North Bengal medical college hospital (NBMCCH), during the period of 01.07.2016 to 31.12.2016. All subjects 18 years and below were included and those above 18 years were excluded from the study.

Sociodemographic data from the study subjects were recorded in a semi-structured questionnaire. The otolaryngological examinations including otoscopy, anterior rhinoscopy, posterior rhinoscopy, oropharyngoscopy, indirect laryngoscopy and tuning fork tests were done for diagnosis of diseases.

RESULTS

Majority of the cases (441, 42.2%) were between 11-18 years of age group, mostly girls (233, 52.83%), unmarried, completed primary level (27.75%), Muslims (79.52%) and rural areas (63.92%).

Table I (a): Sociodemographic profile of children attended into ENT OPD of North Bengal Medical College Hospital

Profile of children	Number (%) of children		
	Girls	Boys	Total
0-5	166 (54.1%)	141 (45.9%)	307 (29.4%)
6-10	154 (51.85%)	143 (48.14%)	297 (28.42%)
11-18	233 (52.83%)	208 (47.2%)	441 (42.2%)
Total	553 (52.9%)	492 (47.1%)	1045 (100%)
Gender			
Male	492 (47.1%)	-	-
Female	553 (52.9%)	-	-
Total	1045 (100%)	-	-
Marital status			
Married	103 (9.9%)	-	-
Unmarried	942 (90.1%)	-	-
Total	1045 (100%)	-	-

Table I (b): Sociodemographic profile of children attended into ENT OPD of North Bengal Medical College Hospital

Profile of children	Number (%) of children		
	Girls	Boys	Total
Religion			
Muslim	831 (79.52%)	-	-
Hindu	207 (19.8%)	-	-
Others	07 (0.66%)	-	-
Total	1045 (100%)	-	-
Educational level			
Illiterate	143 (64.7%)	78 (35.29%)	221 (21.14%)
Not started school yet	100 (47.62%)	110 (52.38%)	210 (20.09%)
Primary	170 (58.62%)	120 (41.37%)	290 (27.75%)
Secondary	66 (45.2%)	80 (54.79%)	146 (13.97%)
SSC	44 (44%)	56 (56%)	100 (9.56%)
HSC	30 (38.46%)	48 (61.54%)	78 (7.46%)
Total	553 (52.92%)	492 (47.1%)	1045 (100%)
Habitation			
Rural	304 (45.51%)	364 (54.5%)	668 (63.92%)
Urban	179 (47.48%)	198 (52.52%)	377 (36.07%)
Total	483 (46.22%)	562 (53.78%)	1045 (100%)

Among 1045 patients, majority were diagnosed as CSOM (27.75%) followed by tonsillitis (17.22%), otitis media with effusion (10.23%), impacted wax (9.37%), enlarged adenoid (6.69%), foreign body (5.45%) and parotitis (4.97%),

furunculosis (4.49%), preauricular sinus (4.21%), otitis externa (3.92%), traumatic rupture of tympanic membrane (3.6%) and others (2.01%) which are shown in Table II.

Table II: Diagnosis of disease among children attended in ENT out patients department

Diseases	Number (%) of children		
	Girls	Boys	Total
CSOM	154 (53.1%)	136 (46.89%)	290 (27.75%)
Tonsillitis	97 (53.88%)	83 (46.11%)	180 (17.22%)
Otitis media with effusion	55 (51.4%)	52 (48.59%)	107 (10.27%)
Impacted wax	52 (53.1%)	46 (46.94%)	98 (9.37%)
Enlarged adenoid	31 (44.28%)	39 (55.71%)	70 (6.69%)
Foreign body	30 (52.63%)	27 (47.36%)	57 (5.45%)
Parotitis	27 (51.92%)	25 (48.1%)	52 (4.97%)
Furunculosis	25 (53.19%)	22 (46.81%)	47 (4.49%)
Preauricular sinus	23 (52.27%)	21 (47.73%)	44 (4.21%)
Otitis externa	22 (53.66%)	19 (46.34%)	41 (3.92%)
Traumatic rupture of tympanic membrane	17 (44.74%)	21 (55.26%)	38 (3.6%)
Others	10 (47.61%)	11 (52.38%)	21 (2.01%)

DISCUSSION

In this study, we evaluated at first time in the northern part of our country to observe the intensity of Ear Nose and Throat diseases with its relation to the relevant factors for diseases process in our community. Among the study subjects most common type of ENT problem was CSOM. It is typically a persistent or intermittent disease, insidious onset, often capable of causing severe tissue destruction and irreversible sequel and clinically manifests with deafness and discharge.⁷ This is one of the most common community health disorders of childhood in many developing countries including Bangladesh.³ The World Health Organization (WHO) suggests that children should be screened at school entry in all developing countries.⁴ It was also found that complications of CSOM were commonest in the first two decades of life.³ In our study the prevalence of CSOM is 27.43%, which is consistent with other study done in several hospitals and rural areas in which the prevalence of CSOM varies between 7.39 to 39.50%.⁵⁻⁹ In present study, majority were adolescent (between 11 to 18 years) and regarding sex, girls were slightly higher than boys. This could be the result of more girls' school situated nearby to study place.

Regarding attendance of the higher incidence of children were reported from rural area. This occurrence was reported in the previous study.¹⁰ We may hypothesize that our hospital was located in the city area, which may provoke people to attend for seeking ear care facilities. However, this present study does not reflect the overview of ENT health problems of our country due to limitations, scarcity of data with single study center. We will have future plan to study in the multicentre, randomly selected large scale long duration of cases to evaluate epidemiology which is necessary to find out the diseases and risk factors.

CONCLUSION

The children need ear care services for developing their healthy future. Special ear care facilities are indispensable for prevention of otitis

media at home, school and society to ensure their better quality of life.

Conflict of interest: None

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