



## Original Article

# Evaluation of Common Clinical Presentation and Socio-demographic Characteristics in ENT Outdoor Patients in A Tertiary Care Centre

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### Abstract

**Background:** Otolaryngological diseases are serious public health problems affecting all age groups. This includes problem of hearing, speech, phonation, breathing, swallowing, smell, taste and protection of lower respiratory passage. **Objective:** The aim of this study was to determine the common clinical presentation and socio-demographic characteristics of the patients attending in ENT outdoor. **Method:** This cross-sectional study was conducted among 300 patients attending in ENT outdoor of Eastern Medical College Hospital using a self-administered semi-structured questionnaire from July, 2020 to September, 2020. **Result:** Out of 300 outdoor patients 159 (53%) were female and 141 (47%) were male. Eighty-nine (29.66%) patients were 21-30 years age group. Eighty-one percent of the patients were Muslim, 13% were Hindu and 6% had other religions. The average number of patients with ear, nose and throat diseases managed per month was five hundred. Patients with ear problems were 140 (46.66%), throat problems were 89 (29.66%) and nose problems were 71 (23.66%). **Conclusion:** This study showed that pain in ear, fullness of ear, sore throat, difficulty in swallowing, nasal obstruction and excessive sneezing were the common ear, nose, throat disorders seen in patients. Although these disorders are not yet considered to be of public health importance, they contribute significantly to the existing burden of health problems in our environment. Therefore, there is a need for improvement of public awareness on ear, nose and throat diseases.

**Key words:** Socio-demographic characteristics, Otolaryngological diseases

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### Introduction

The most common problems warranting a visit to a doctor or a health care provider in developing countries are related to otorhinolaryngological diseases that is ear, nose and throat (ENT) diseases<sup>1</sup>. Diseases of ENT commonly affect the general population. These diseases may vary from a trivial common cold to more complicated chronic suppurative otitis media and its complications. ENT diseases affect all the age groups ranging from children to adults with significant disability-adjusted life-year (DALY) of patient<sup>2</sup>.

Early detection of ENT problem and their accurate management may be beneficial in preventing some life threatening complications<sup>3</sup>. It is of important to note that ear, nose and throat diseases are serious public health problems with universal distribution. These diseases are classified into two main categories. These are congenital and acquired diseases based on the time of presentation. Based on etiological causes, they are further divided into inflammatory (infective or reactive) diseases, neurologic diseases, toxicity, metabolic disorders,

vascular diseases, trauma, neoplasm (benign and malignant tumors) and so on<sup>4</sup>. According to World Health Organization 42 million people (age >3 years) have hearing loss. The major cause for hearing loss is otitis media, which is secondly to common cold as a cause of infection in childhood. Otitis media is also the commonest cause of persistent mild to moderate hearing impairment in children and young adults in developing countries<sup>5</sup>.

Diseases of the ear, nose and throat can be caused by a variety of microorganisms. For examples Rhinoviruses are the leading cause for common cold in all age groups, while enteroviruses are frequently associated. Acute pharyngitis or tonsillitis is mainly associated with respiratory viruses, although bacteria, especially *Streptococcus* spp. are found in some patients. Although acute otitis-media is caused by bacteria the leading one being *Streptococcus pneumoniae*, viral infection are a predisposing factor for its development<sup>6</sup>. ENT problems are one of the most common causes of illness in children. Seasonal cough, allergy, earache and sore throat are very

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common in children probably due to wider and horizontal Eustachian tube, under developed immunity, malnourishment, poor hygiene, etc. Foreign body insertion and inhalation are important medical problems in children visiting ENT OPD or emergency. Other important problems in children are otitis media, hearing and speech disorder.

In Bangladesh, we have a very good primary and secondary health care setup. But we are lacking of the referral systems. Any patient from any part of the country even with minor complaints can attend in a tertiary level hospital like medical college hospital or medical university OPD. Problem is that every referral center is overcrowded with patients even with very simple complaints. For those reasons complicated patients are not getting proper attention and time allocation for the management<sup>7</sup>.

The objectives of this study to find out the common clinical presentation and socio-demographic characteristics of ENT outdoor patients attended at the ENT outpatient department of a tertiary level hospital to aware the people about the consequences of ENT diseases and to inform the health care planner about the necessity of development of referral system for the proper management of the diseases and health care providers.

**Materials and Methods**

This cross-sectional study was conducted among 300 out-patients in the department of ENT (otolaryngology) in Eastern Medical College Hospital, Kabila, Cumilla. The ENT department has almost all standard diagnostic facilities to deal with diseases of ear, nose and throat. The department has both out-patient (ENT-OPD) and in-patient (hospital) wings and delivers services to all patients. This center registers five to six thousand patients per year. All patients registered in the ENT-OPD from July 2020 to September 2020 were included in this study for analysis. Each patient underwent otolaryngological examinations. In relevant cases, throat, nasal or ear swabs were collected to identify the causative microorganisms in the microbiological laboratory. Histopathological examinations were undertaken in the department of pathology. The department of radiology and imaging helped in diagnosing sinusitis and CSOM.

After introductory conversation and obtaining consent from the respondent the relevant data were collected by face-to-face interview using a self-administered semi-structured questionnaire. Data were recorded in the questionnaires. All filled up data were verified for its consistency. The data were then compiled and tabulated manually according to key variable in master sheet. Then finally data were analyzed in computer using Microsoft Excel and IBM SPSS 21.

**Results**

Distribution of the respondents according to their complaints related to Ear, Nose and Throat are expressed in frequency and percentages in the Table I, II & III.

**Table-I: Distribution of respondents according to their complaints related to Ear (n= 140)**

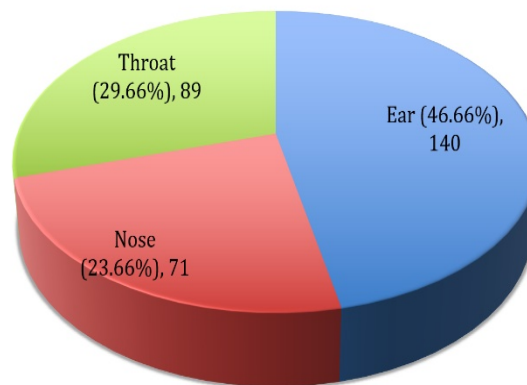
Complaints related to ear	Frequency	Percentage (%)
Pain in ear	110	25.82
Pus in ear	71	16.66
Fullness of ear	89	20.89
Itching in ear	73	17.13
Hearing problem	83	19.48
<b>Total</b>	<b>426</b>	<b>100</b>

**Table-II: Distribution of respondents according to their complaints related to Nose (n= 71)**

Complaints related to nose	Frequency	Percentage (%)
Nasal obstruction	54	25.71
Nasal bleeding	33	15.71
Absence of smell (Anosmia)	48	22.85
Excessive sneezing	47	22.38
Foul smelling nose	28	13.33
<b>Total</b>	<b>210</b>	<b>100</b>

**Table-III: Distribution of respondents according to their complaints related to Throat (n= 89)**

Complaints related to throat	Frequency	Percentage (%)
Sore throat	66	26.4
Cough	51	20.4
Difficulty in swallowing	53	21.2
Swelling of throat	44	17.6
Sore throat, earache	36	14.4
<b>Total</b>	<b>250</b>	<b>100</b>



**Figure-1: Distribution of respondents according to their complaints in respect of organ involvement. (n=300)**

**Table-IV: Socio-demographic Characteristics of respondents with Ear, Nose & Throat disease (n=300)**

Characteristics	Group	Frequency	Percentage (%)
Age (Years)	< 10	58	19.33
	11-20	51	17
	21- 30	89	29.66
	31-40	49	16.33
	41-50	23	7.66
	51-60	14	4.66
	> 60	21	7
Sex	Male	141	47
	Female	159	53
Religion	Muslim	243	81
	Hindu	39	13
	Christian	10	3.33
	Buddhist	8	2.66
Family type	Nuclear	195	65
	Joint	105	35
Educational Qualifications	Illiterate	51	17
	Up to class V	114	38
	Class X	62	20.66
	Class XII	53	17.66
	Others	20	6.66
Occupation	House wife	84	28
	Farmer	41	13.66
	Service	63	21
	Living abroad	4	8
	Business	52	17.33
	Others	36	12
Monthly income	Less than 25000	96	32
	25000-50000	105	35
	More than 50000	99	33
Type of residence	Pacca house	112	37.33
	Semi pacca house	89	28.66
	Kaccha house	99	33
Type of Latrine	Water seal latrine	195	65
	Sanitary latrine but not water seal	77	25.66
	Others	28	9.33

### Discussion

This study was attempted to find out the socio-demographic characteristics of the patients attending the ENT outdoor of Eastern Medical College Hospital. The current study showed female (53%) is more than that of male (47%) and most of them were Muslim (81%). Here we observed that young adults 21-30 years were more than other age groups. Less than 10-year age group was second highest. Age group 11-20 years 17%, 31-40 years 16.33%, 41-50 years 7.66%, 51-60 years 4.66%, which are almost similar to another study<sup>7,8</sup>. Elderly patients are less, may be due to lack of attention towards them or relatively healthy than others.

Most of the study population lives in nuclear family (65%). Regarding education level, about forty

percent (38%) of the respondents were class-V level passed. Concerning the occupation of respondents, 28% were housewife. On the other way regarding respondent's estimated monthly family income majority of them (35%) earned 25,000-50,000 taka per month. According to the type of residence most of them lived in pacca house (112, 37.33%), followed by kaccha house (99, 33.33%). About the type of latrine most of the respondents used water seal latrine (195, 65%).

In the current study almost half of the study populations (140, 46.66%) complained ear problems, followed by 89 (29.66%) throat problems and 71 (23.66%) nose problems. Similar findings are found by Zeeshan et al.<sup>8</sup> at Abbottabad in 2016 and by Dey et al.<sup>9</sup> in 2017 at BIRDEM. But quiet

different finding was found by Yeli<sup>10</sup> at UAE in 2013 (ear 50.24%, nasal 27.2%, oropharyngo-oesophageal 22.56%), Fasanla et al.<sup>11</sup>

Nigeria in 2010 (ear 62.7%, nose 23.0%, head-neck 4.7%), Griffiths<sup>12</sup> at Cwmaman in 1976 (ear, nose or throat complaints was 104, 41 and 206 respectively), Mahmood Dahir Al-Mendalawi and Hussein Jassim Mohsen<sup>13</sup> in Baghdad in 2007, that was pharynx and tonsils (41.7%), nose (18.6%), ear (16.3%).

Among the ear conditions pain in ear is 25.82%, fullness of ear 20.89%, hearing problem 19.48%, itching in ear 17.13%, pus in ear 16.66%. The frequency of hearing loss is quite high in patients presenting with tinnitus. Among 110 patients with tinnitus 76 had hearing loss in right ear (69%) and 81 (73.6%) had hearing loss in left ear. A large majority of the cases with hearing loss was found by Afridi et al.<sup>14</sup> Lahore in 2018.

Concerning the complaints related to nose most of them complained about nasal obstruction (54, 25.71%) followed by absence of smell (Anosmia) 22.85% (48), excessive sneezing 22.38% (47), bleeding from nose 15.71% (33) and foul smelling from nose 13.33% (28). In a study by Alotaibi AD et al.<sup>15</sup> in 2017 showed that Nasal obstruction is prevalent in Northern Saudi Arabia. In another study epistaxis was found in 4.98% patients by Girija Shankar Mohanta<sup>16</sup> in India in 2016.

In case of throat problem most of them complained about sore throat (66, 26.4%) followed by difficulty in swallowing 21.2% (53), cough 20.4% (51), swelling of throat 17.6% (44) and sore throat associated with ear pain 14.4% (36). Among the throat disorders, pharyngitis was found as most common by Surapaneni<sup>17</sup> and Tall et al.<sup>18</sup> whereas the prevalence of tonsillitis was more in a study by Ukaegbe et al. and Yeli<sup>10,19</sup>.

### Conclusion

Among ENT diseases, ear diseases are most common followed by nose and then throat diseases. Most of these diseases are of acute onset with less than a year of disease duration. These ENT diseases contribute significantly to the existing burden of health problems in Bangladesh. Therefore, there is a need for improvement of public awareness on ear, nose and throat diseases and Government should consider these as important public health problems.

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