



**A STUDY ON EAR, NOSE AND THROAT (ENT) AND EYE HEALTH PROBLEMS
AMONG COLLEGE STUDENTS OF ELURU.**

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ABSTRACT

Background: Prevalence of ENT problems such as cough, sore throat, sinus and earache are also frequent in children, adolescent age group and young people including college students. Upper respiratory tract infections predispose a child to complications such as otitis media, tonsillitis, and sinusitis. Tonsillitis most often occurs in children and also in college students due to their life style modifications adopted during that age, a condition rarely appreciated in those younger than 2 years. These ENT problems and eye problems exhibiting silent epidemic among those people and hampers their education concentration and also alters their physical and psychological dimensions. **Objectives:** 1. To identify the ear, nose and throat and eye health problems among college students and imparting health education to the same individuals. **Materials & Methods:** A cross sectional study was conducted from June 2015 to August 2015 among Undergraduate and Postgraduate College students of Ch.S.D.St. Theresa's Autonomous College for Women between the age group of 19-23 years. A total of 278 students were participated and all the explained about the importance of the study and informed consent was taken from the participants. Data entered into MS Excel sheet and analyzed and simple proportions and chi square test were applied. **Results:** In the study population, 92.8% were degree studying individuals and only 7.2% were studying post graduation. Out of 278 students, about 30.2% students were having different nose problems including different sinus problems. There was statistically significant association was found between level of the study and sinus problems ($P < 0.05$). About 29.4% students were having throat problems like throat pain and tonsillitis. About 36.6% (102/278) were having vision problems including all refractive errors. **Conclusions:** Based on the above study results, prevalence of eye problems is relatively high as it is comparatively individual ENT problems. On the whole ENT and Eye problems are exhibiting silent form and undiagnosed form as they are young ignore their problem due to ignorance and low economic status background of parents.

KEYWORDS: Age, College students, ENT problems, Eye problem.

INTRODUCTION

The incidence of ear, nose and throat disorders in children is increasing in gulf countries may be due to environmental factors involved in it. Lack of data makes it even more difficult to assess the situation. ENT diseases can be accurately diagnosed by taking good clinical history from children or from their parents. According to WHO 42 million children is suffering from hearing disability, most commonest is otitis media.^[1]

Youth - the critical phase of life, is a period of major physical, physiological, psychological and behavioural changes with changing patterns of social interactions and relationships. Youth is the window of opportunity that sets the stage for a healthy and productive adulthood and

to reduce the likelihood of health problems in later years. A myriad of biological changes occur during puberty including increase in height and weight, completion of skeletal growth accompanied by an increase in skeletal mass, sexual maturation and changes in body composition.^[2]

Young people are prone to a number of health impacting conditions due to personal choices, environmental influences and lifestyle changes including both communicable and non-communicable disorders and injuries. Others include substance use disorders (tobacco, alcohol and others), road traffic injuries (RTIs), suicides, sexually transmitted infections. In addition to that silent iceberg of eye, ear, nose and throat problems also

steadily increasing on the other hand and these diseases indirectly affecting their education, carrier, physical and psychological development.

At the same time, even mild degrees of hearing impairment can affect proper learning in noisy class rooms where speech is produced at a distance.^[3] This in turn can have significant impact on the scholastic performance and overall development. Hence it is prudent to estimate the magnitude and distribution of ENT diseases in our community for proper planning and implementation of health care facilities and for enabling our children for a better future.^[4] It was with this background that the present study on the spectrum of ENT diseases was formulated, with special reference to preventable hearing impairment among school children. This study was also intended to highlight the importance of detailed ENT examination as a part of school screening programme. The Present study is an attempt to assess the prevalence of ENT health problems and eye problems among College students in order to sensitize the masses about its impacts to become a routine periodical screening programme.

OBJECTIVES

1. To identify the ear, nose and throat and eye health problems among college students and imparting health education to the same individuals.

MATERIALS AND METHODS

The present institutional based cross sectional study was conducted at Ch.S.D.St. Theresa's Autonomous College

RESULTS

Table – 1: Education status of study population

Education	Number of the persons	Percentage
Degree pursuing	258	92.8%
Post graduation pursuing	20	7.2%
Total	278	100%

In the study population, 92.8% were degree studying individuals and only 7.2% were studying post graduation.

Table - 2: Vision Problems (Refractive errors) in relation to study participants

Students	Vision problems	No Vision Problems	Total
Degree pursuing	97 (37.5%)	161 (62.5%)	258 (100%)
Post graduation pursuing	5 (25%)	15 (75%)	20 (100%)
Total	102 (36.6%)	176 (63.4%)	278 (100%)

χ^2 - 1.27, 1df, P =0.2

Out of 278 students, 36.6% (102/278) were having vision problems including refractive errors. Among them 37.5% were studying degree level and remaining 25% were studying Post graduation studies. There was no statistically significant association was found between different levels of education and vision problems.

Table – 3: Ear problems in the study population

Students	Ear problems	No Ear Problems	Total
Degree pursuing	54 (20.9%)	204 (79.1%)	258 (100%)
Post graduation pursuing	2 (10%)	18 (90%)	20 (100%)
Total	56 (20.1%)	222 (79.9%)	278 (100%)

χ^2 - 1.38, 1df, P =0.2

for Women, Eluru, Andhra Pradesh, during the period from April 2015 to August 2015. Before conducting the study in this college, all the degree students are briefed about the importance of the study, purpose of the study explained in the class before collection of the data. After successful orientation of the programme, instructed them to undergo the anthropometry and other clinical examination by the concerned Medical specialists including Ophthalmologist, ENT specialists and other specialists also included to screen the students as a routine community screening programme of the institute. Student name and her data kept Confidential till the completion of the study as this college is exclusively women's college. At the time of the study, there were 20 batches available in the college, randomly selected 7 graduate batches and one post graduation batch by lottery method. From those batches, a total of 278 individuals were selected from the different classes of degree and post graduate students for this study. All the individuals were undergone specialist clinical examination thoroughly with proper informed consent was taken from the participants as they were completed their 18 yrs of age. After completion of the clinical examination and after getting results of the individual, appropriate health education is given to individual and group level education. Results were analyzed and necessary statistical tests like proportions and chi square tests were applied.

Out of 278 study population, 20.1% were having ear problems including otitis externa, ear discharge and hearing problems. Of which, only 10% were from post graduation students.

Table - 4: Sinus problems in study population

Students	Sinus problems	No Sinus problems	Total
Degree pursuing	81 (28.2%)	177 (68.6%)	258 (100%)
Post graduation pursuing	2 (10%)	18 (90%)	20 (100%)
Total	84 (30.2%)	194 (69.8%)	278 (100%)

X^2 - 4.06, 1df, $P < 0.05$

Out of 278 students, about 30.2% students were having different nose problems including different sinus problems. of which only 10% of the students were having sinus problems among the post graduation students. There was statistically significant association was found between level of the study and sinus problems ($P < 0.05$).

Table - 5: Throat pain problems in study population

Students	Throat pain problems	No Throat pain problems	Total
Degree pursuing	78 (30.3%)	180 (69.7%)	258 (100%)
Post graduation pursuing	4 (20%)	16 (80%)	20 (100%)
Total	82 (29.4%)	196 (70.6%)	278 (100%)

X^2 - 0.93, 1df, $P = 0.3$

About 29.4% students were having throat problems like throat pain and tonsillitis. Of which 20% were suffering from post graduation students and 30.3% were suffering from degree level students. There was no statistically significant association was found between level of education and throat pain problems.

DISCUSSION

The present institutional based cross sectional study was conducted during the period of April 2015 to August 2015 and found that in the study population, 92.8% were degree studying individuals and only 7.2% were studying post graduation. In our study, Out of 278 study population, 20.1% were having ear problems including otitis externa, ear discharge and hearing problems. Of which, only 10% were from post graduation students. similar result was noticed a study, the present study was conducted in Al sharq medical centre, a tertiary health care unit in Fujairah in UAE. Children aged from 0-14years attending ENT outpatient clinic from Jan 2013-Dec 2013 were included for the study. Diseases of the ear were the common group of ENT problems among 314 children (50.24%).^[6] The prevalence of hearing impairment in two different studies among rural children in South India by Rao *et al*^[12] and Jacob *et al*^[13], was 11.9% whereas the prevalence in other developing countries like Nepal, Tanzania, Myanmar and Malaysia was between 5.5 to 21.63%.^[8,9,10,11] The prevalence obtained in our study was considerably lower i.e. 2.2%, of which the major portion (72%) was secondary to impacted wax. Other aetiological factors included chronic suppurative otitis media (contributing to 7.02% of cases of hearing impairment), These proportions of aetiological factors were comparable with another study in a nearby state and prevalence varies from place to place.

Out of 278 students, about 30.2% students were having different nose problems including different sinus problems. of which only 10% of the students were having sinus problems among the post graduation students. There was statistically significant association

was found between level of the study and sinus problems ($P < 0.05$). Study conducted at Prevalence of ENT disorders among children in UAE: A tertiary medical care study 314 children (50.24% ear problems) followed by 170 nasal cases (27.2%).^[6] Of all the ENT problems, Sinus problems were reported more in my study due to the geographical and demographic circumstances in our area.

In the present study, 29.4% students were having throat problems like throat pain and tonsillitis. Of which 20% were suffering from post graduation students and 30.3% were suffering from degree level students. Suman yeli reported in his study that throat disorders- Tonsillitis was troubling in 51 cases (36.1%). Similar results were also observed with study conducted in Nepal by R Nepali, B Sigdel *et al*.^[7] In the present study, 36.6% (102/278) were having vision problems including refractive errors. Among them 37.5% were studying degree level and remaining 25% were studying Post graduation studies. Kathmandu valley researchers reported that among the students aged 5 to 16 years, 34.2% had some form of ocular disorders.^[14]

CONCLUSIONS

In the present study, high prevalence of Eye problems and also increased prevalence of ENT problems also increased. The study also highlights the importance of performing detailed ENT examination in addition to mere hearing assessment as a part of College screening programme, for early detection and management of ENT diseases and eye problems detection and early prevention of their complications. Taking all this into consideration, young adult female students should be made aware about their vitamin A rich foods for preventable blindness and

periodical examination and early detection of ENT problems and to prevent complication periodical college screening programmes to be conducted and to be ensured among them.

Recommendations

- Periodical and routine health check-up screening programmes.
- Sensitization about balanced diet and Vitamin A rich foods.
- Proper maintenance of Medical Records.

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