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## OTORHINOLARYNGOLOGICAL PROBLEM IN GERIATRIC POPULATION

### Objective:

The main objective of the study was to identify various geriatric otolaryngological problems in mid western part of Nepal.

### Materials and methods:

A cross-sectional descriptive hospital based study was done from 1st January 2014 to 1st September 2014 among the all patients 60 years or above visiting the outpatient department of ENT/Emergency department of Nepalgunj Medical College. Data collection was done via interviewing with semi structured Performa with questionnaire. Data was entered in SPSS 17<sup>th</sup> version and exercised the analysis.

### Results:

Among the total 866 geriatric population, female were 450 while 416 were male. Age ranged from 60 to 96 with average age of 70.3 years. Maximum numbers of elderly were of 60-70 years. Farming was the most common occupation in past. Sixty one percent (289) were smokers or tobacco chewer and 23% (106) consumed alcohol regularly. Majority of elderly had Hypertension as main co morbid condition. Decreased hearing was major complaint (82.6%) which was present for on an average 10.5years. Second leading ear problem was tinnitus (47.7%). Regarding nasal problems, bleeding nose was commonest (21.5%) followed by equal proportion of decreased smelling and nasal blockage (16%, 16.2%). Snoring was the frequent throat problem (58.4%) with average duration of approximately 6 years, followed by day time somnolence (16.6%).

### Conclusion:

Among the ENT problems, hearing problem was the most common problem of these elderly. Nasal bleeding was common nasal problem presented among approximately one fourth of elderly. Among the throat problem snoring was the most prevailing with more than fifty percent occurrence. Occasional aesthetical complaint is very common. Head and neck malignancy was least common in these aged populations.

**Key words:** Geriatric, Ear, Nose, Throat

## INTRODUCTION:

Biological ageing differs for each individual so a common definition for old age is not expected, but generally we are agreed on "people of 60 or above as an elderly person" and are eligible to get statutory and occupational retirement pension.<sup>1</sup> Geriatrics is specialty that focuses on various type of health care for aged population. Need of health care varies according to the level of remaining healthy system of their body. Health condition in old age depends on preceding lifestyle, health problems and its accretion. Functional abilities, independence and quality of life issues are of great concern for geriatricians and their patients. Common geriatrics issues include psychological issues, degenerative bony diseases and cardiovascular disease; ranging from quality-of-life-impairing communication disorders to life-threatening diseases of the head and neck.<sup>2</sup> As per American Geriatrics society hearing impairment is one of common five problems in this age group. It is important that the otolaryngologist professional becomes familiar with aging aspect of population in order to be prepared for their main complaints, thus improving their quality of life. Geriatric patients present 3.5 times more health problems when compared to patients who are younger than 60 years. Four out of five patients with more than 65 years of age refer at least one chronic condition; many of whom present with more than one associated condition. Such patients frequently use multiple medications and are more susceptible to their adverse effects.<sup>3,4</sup> Otorhinolaryngological problems can secondarily lead to other problems. Health problems of elderly patients cause dependency and depression if added to Otorhinolaryngological problems and makes the social interaction worse.<sup>3,4</sup> Dizziness can increase the risk of injury and fall.<sup>4</sup> Various morbidity may cause

dizziness, including low blood pressure, vision problems, inner ear problems, anxiety, and medication side effects. Auditory loss, dysphagia, balance disorders, nasal complaints, voice disorders, head and neck cancer and aesthetical complaints are the most frequent complaints among elderly individuals.<sup>4</sup>

The main objective of the study was to identify various geriatric otolaryngological problems in mid western part of Nepal.

## MATERIALS AND METHODS:

A cross-sectional descriptive hospital based study was done among the geriatric population visiting the outpatient department of ENT/Emergency department of Nepalgunj Medical College. Study was executed from 1st January 2014 to 1st September 2014. Total 866 participants were enrolled after a couple of exclusions for unfitted elderly. Inclusion criteria included the age above 60, all sex presented to OPD/Emergency of ENT. Sample was purposively selected. Data collection was done via interviewing with semi structured performa with questionnaire. Informed written consent was taken from the respondents or care taker prior to interview. Data was entered in SPSS 17<sup>th</sup> version and was analysed.

## RESULTS:

Among the total 866 geriatric population, 450 were female while 416 were male. Age ranged from 60 to 96 with average age of 70.3 years. Maximum numbers of elderly were of 60-70 years (62%) and lowest 3% of above 90 years of age as given in fig no.1. Patient and spouse were the common informers in an interview. Most of them were from mid western part of Nepal comprising 582 from terai and 76 from hill while 160 were from terai and 48 were from hilly region of far western region.

Fig.1: Age distribution of geriatric population attending OPD/ Emergency of ENT department of Nepalgunj Medical College

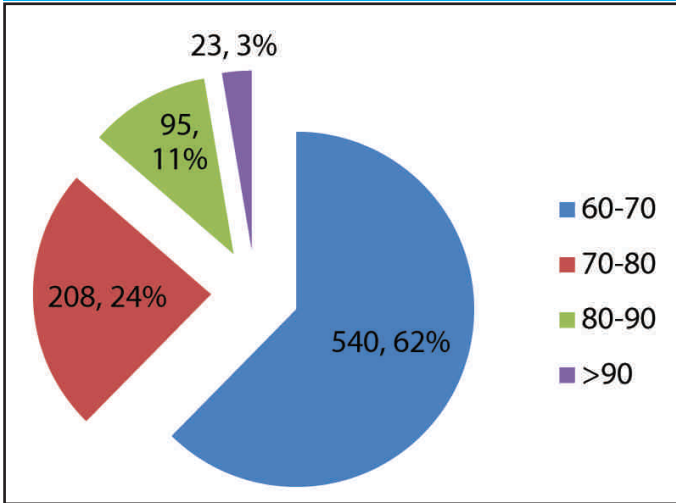
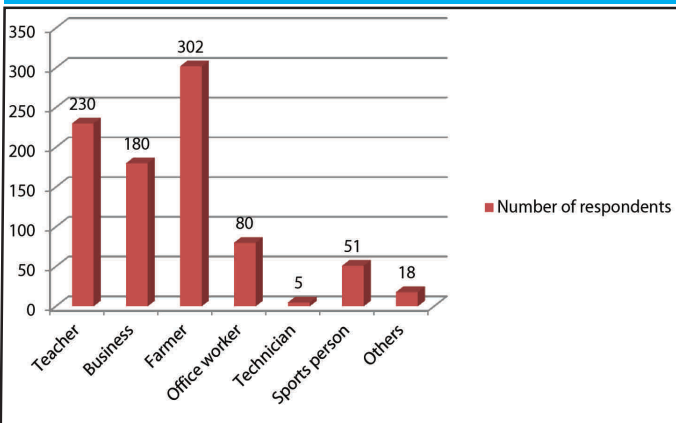
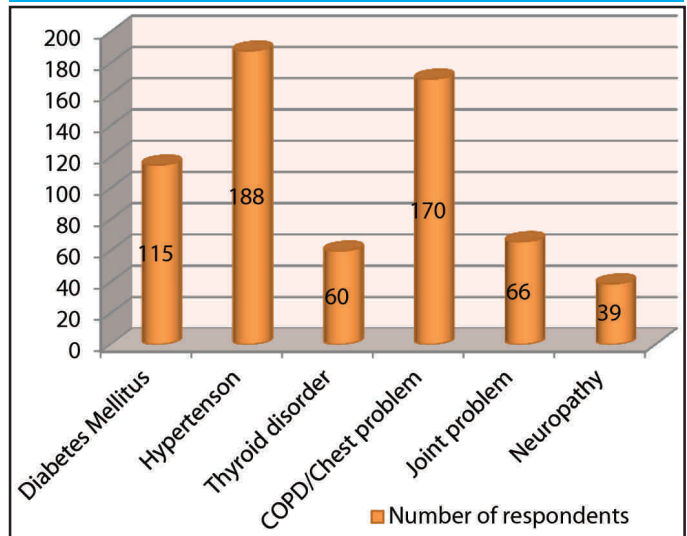


Fig.2 : Preceding occupation of geriatric population attending OPD/ Emergency of ENT department of Nepalgunj Medical College.



Farming was the most common previous occupation followed by teaching and business as shown in fig.2. Sixty one percent (289) were smokers or tobacco chewer and 23% (106) consumed alcohol regularly. Both habits were present in 16 % ( 75). Majority of elderly had hypertension with successors: Chronic Obstructive Pulmonary Disease (COPD) and Diabetes Mellitus (DM), as demonstrated in fig.3. Total 346 old patients were taking allopathic medicine. Among them the number of medicine varied. Ayurvedic medicine users were 380. Total 62 needed a care taker all the time. Maximum elderly used one allopathic medicine per day. Only eleven elderly were using five or more medicines. As shown in table 1, decreased hearing was major complaint (82.6%) among the ear problems which was present for on an average 10.5years. Second leading ear problem was tinnitus (47.7%). Least common problem was aural fullness (17.8%). Between three nasal problems, bleeding nose was commonest (21.5%) followed by equal proportion of decreased smelling and nasal blockage (16%, 16.2%). Decreased smell was present for about eight and half years in an average. Snoring was the frequent throat problem (58.4%) with average duration of approximately 6 years, followed by day time somnolence (16.6%). Other throat problems were very few in proportion. Notably

Fig.3: Morbidity status of geriatric population attending OPD/ Emergency of ENT department of Nepalgunj Medical College.



3% of the participants had head and neck malignancy. Sixty seven percent had complaint about the aesthetics; they were using at the moment.

### DISCUSSION:

This study is first of its kind in Nepal. Almost equal proportion of male and female patient shows gender indiscrimination at this age group. Slight female predominance may be reflecting the result of Census of Nepal 2068 BS.<sup>5</sup> Most of the patients were at 7<sup>th</sup> decade which is near to life expectancy of Nepal<sup>5</sup>. Our study was carried out in a tertiary referral center in Midwestern region of Nepal; hence most of the patients were from same region. This may be due to difficulty in mobilization of elderly to distant place. As Nepal is agricultural country, it was not surprising to have farming as main occupation in our study. Almost two third of old people being indulged in smoking and COPD being eminent co morbid condition reflects need of a smoking cessation campaign. Although being allopathic followers we used to believe that more patients are compliant with allopathic medications but our study depicted the other way. There were more patients taking ayurvedic medications. The need of caretaker in about 7 % patients shows high visible dependency rate in elderly. In the present study, ear problems were the commonest problem followed by nasal and throat problems, this was similar to result from Nigerian study with 55.2% of otological problems.<sup>6</sup> Decreased hearing was the highest prevailing symptom present among 82.7% which is higher as compared to study from Brazil with 36% prevalence. Although cause of hearing loss has not been discriminated, most of them must be as a result of presbycusis.<sup>7</sup> Approximately 48% had tinnitus which is higher than Brazilian old population with 14% occurrences. This may again as a result of more presbycusis patients. Thirty-nine percent had dizziness, which is alarming. Although otological cause of dizziness has not been determined, the increased number may be owned due to coexisting morbidity causing dizziness. People in this age group might have tendency for

**Tab.1: Geriatric ENT, Head & Neck problems of geriatric population attending OPD/Emergency of ENT department of Nepalgunj Medical College**

	Total	Occasional problem	Problematic	Mean duration (years)
<b>Ear</b>				
Decreased hearing	716(82.6%)	321(44.8%)	395(55.2%)	10.5
Tinnitus	413(47.7%)	170(41.2%)	243(58.8%)	5.8
Aural fullness	154(17.8%)	80(51.9%)	74(48.05%)	0.5
Ear itching	356(41.1%)	267(75%)	89(25%)	3.2
Dizziness	340(39.3%)	112(33%)	228(67.1%)	2.6
<b>Nose</b>				
Decreased smell	138(16%)	84(60.9%)	54(39.1%)	8.5
Bleeding nose	186(21.5%)	79(42.5%)	107(57.5%)	0.1
Nasal blockage	140(16.2%)	111(79.3%)	29(20.7%)	1.2
<b>Throat</b>				
Glossodynia	56(6.5%)	12(21.4%)	44(78.6%)	5.4
Halitosis	36(4.2%)	26(72.2%)	10(27.8%)	0.3
Dysphagia	37(4.3%)	34(91.9%)	3(8.1%)	0.1
Snoring	506(58.4%)	360(71.1%)	146(28.9%)	5.8
Day time somnolence	144(16.6%)	88(61.1%)	56(38.9%)	1.8
Change in voice	40(4.6%)	28(70%)	12(30%)	0.5
<b>Head and neck</b>				
Malignancy	26(3%)	10(38.5%)	16(61.5%)	0.8
Aesthetical complaints	586(67.7%)	543(92.7%)	43(7.3%)	10.2

exaggeration of symptom to acquire secondary attention, resulting additional dizzy elderly.

Around 16 to 21 % had complaints of nasal problems including blockage nose, decreased smelling and bleeding nose which is similar with other study<sup>2</sup>. Among the cases of nasal bleeding 57.5% were having regular problematic condition, which is considered as true emergency condition of nose. Sixty five percent geriatric population of study from Israel shows true emergency for epistaxis management.<sup>9</sup> Most of the cases of nasal bleeding requires common treatments as cauterization, nasal packing and medical treatment.<sup>10</sup> Although these results are correlating but unanticipated high epistaxis cases signifies towards some kind of bleeding disorder in elderly. It may be due to some age induced vascular changes in nasal cavity or high prevalence of hypertension and atherosclerosis. This preliminary evidence warrants need for a well designed study. Snoring was the most common throat problem with 58.4%, followed by day somnolence. High rate of snoring may be due to life style and general body habitus of central obesity. Other throat symptoms were very less ranging from 4 to 7%. Dysphagia was present in 4.3%, most of them complaint of occasional problem to solid food dysphagia which is much lower than American study, where 52.3% of the patients complained of solid food dysphagia.<sup>11</sup> Change in voice was complained by 4.6% in our study which was significantly lower than American study with 58% of vocal complaints.<sup>12</sup> Head and neck malignancy was found in 3% of the study population, which is proved to be common in geriatric population. It guides to reduced quality of life and the life span too. It also poses cosmetic problem in aged population.<sup>13</sup> Amongst the co morbid conditions, hypertension was dominating disease affirmed by study from Pakistan<sup>14</sup> which is followed by chronic obstructive pulmonary disease and diabetes mellitus

type II. Most of the aesthetical complaints were periodic and only 7% found it problematic all the time. Aesthetical issue was hindering factor for reluctance on using hearing aid. Use of hearing aid however is associated with decreased emotional vitality.<sup>15</sup> Although many aged people avoid using hearing aid despite of hearing impairment; use of hearing aid increases the communication skills.<sup>16</sup>

## CONCLUSION:

Among the ENT problems, hearing problem was the most common problem of these elderly. Nasal bleeding was common nasal problem presented among approximately one fourth of elderly. Among the throat problem snoring was the most prevailing with more than fifty percent occurrence. Head and neck malignancy was least common in these aged populations.

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