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Research Article

A Study of Morbidity Profile among Geriatric Population in an Urban Area

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Abstract: India has acquired the label of an ageing nation. The elderly suffer from mainly two types of health problems i.e. medical and psychosocial. Common medical problems include cardiovascular, visual, musculoskeletal and gastrointestinal diseases, while common psychosocial problems include impaired memory and intelligence, anxiety, depression, rigidity of outlook, dependency and dissatisfaction with family members, occupation and earning. The objective of the study was to assess the morbidity profile among geriatric population in Urban Health Centre, Turbhe, of Navi Mumbai. A community based Cross sectional study was performed. The study included all geriatric population which was defined as 60 years and above in the study area, who have resided in the study area for at least one year. 93.12% elderly were morbid in the study area. With increasing age the number of morbidities was found to be increasing. The most common morbidity among geriatrics found was psychosocial problems i.e. stress in 95(59.4%) followed by musculoskeletal system problems in 89 (55.6%), eye problem like diminished vision mostly due to cataract 74 (46.3%). Problems of cardiovascular system like hypertension, dental system, respiratory system, ENT (hearing impairment) and endocrine like diabetes accounted for 45 (28.1 %), 35(21.9 %), 19(11.9 %),17 (10.6 %)and 16 (10.0 %) respectively.
Keywords: Geriatrics, Morbidity profile, Urban

INTRODUCTION

Aging is a universal process. In the words of Seneca "old age is an incurable disease". Sir James Sterling Ross commented on aging as "you do not heal old age, you protect it, you promote it and you extend it" [1]. For any country the elderly people are a precious asset. They contribute their might for sustenance and progress of the nation with their rich experiences and wisdom. The special health and economic issues of the elderly differ from those of the general population [2].

In Indian society the increasing number of older people has been well perceived. Though increase in ageing population represents the success of socioeconomic development and good public health practice, it has also lead to economic and social crisis due to increased demand for health and welfare services [3].

The Sample Registration System (SRS) in 2003 estimated that 7.2% of total population were above 60 in India [4]. India has thus acquired the label of an ageing nation. Later on, according to the reported study, I has been stated to increase by 7.7% [5]. Recently it has been reported that elderly population in India is approximately hundred million forming 10% of the total population [6].

Since the expectation of life is also increasing steadily and quality of life is being emphasized more in our country. The senior citizens are getting importance day by day. World Health Organization is also concerned about the health of this group and is promoting the concept of healthy aging [7].

The elderly people mainly suffer from two types of health issues i.e. medical and psychosocial. Common medical problems include cardiovascular, musculoskeletal, visual, and gastrointestinal diseases etc., while common psychosocial problems include impaired memory and intelligence, anxiety, depression, rigidity of outlook, dependency & dissatisfaction with family members, earning and occupation [8].

In light of above facts, the present study was conducted with the objective to assess the morbidity pattern of elderly in the urban area of Turbhe.

MATERIALS AND METHODS

A community based Cross sectional study was carried out at the field practice area of Urban Health

Centre, located at Turbhe of Navi Mumbai, which comes under the department of community medicine, Terna medical college, Nerul, which covers a population of 27869. The study population comprises of all geriatric population which was defined as 60 years and above in the study area, who have resided in the study area for at least one year [9].

Sample size calculation was done by using formula ($n= 4pq/L^2$, P = Prevalence of reference study i.e., 89% and allowable error = L = 6% of P , q=1-P), so that required sample size = 137 [10], so around we had included 160 sample size .

There were 160 persons in the age group of 60 and above of which 160 (50 males and 110 females) could be contacted in the study.

The survey was done by house to house visit. Data collection was done from May 2013 to December 2013. The study protocol was approved by the institutional ethical committee. The study subjects were subjected for personal interview using a pre-tested and semi-structured interview schedule and clinical examinations and checking of individual records were also used as study tools.

Contents of interview schedule were as following; socio-demographic details (age, sex, marital status, occupation, education, religion, type of family, duration of stay at the present address , and family composition), medical information (chief complaint, past history, personal history and family history), general physical examination (built, nutrition and rest, general mental status, height, weight, pulse rate, respiratory rate, blood pressure, pallor, and pedal oedema), systemic examination [Respiratory System (RS), Cardio Vascular System (CVS), Central Nervous System (CNS), Gastro-Intestinal Tract (GIT), Musculoskeletal, renal, skin, oral and special senses, functional status, social problems and environmental data. Informed consent was taken from the study subjects. The study subjects were divided into categories as shown in table-1. Socio- Economic status of the family was assessed using Modified Kuppuswamy's method of socioeconomic scale (Table 2). To estimate the prevalence of various health conditions of geriatric population, appropriate proportion (%) is worked out. Statistical analysis is carried out using SPSS Version 20.

RESULTS

There were more number of females 110 (68.8%) over the males 50 (31.3%) as shown in Table 1. Majority of the elderly (70%) were in the age group of 60-69 years, i.e. in the category of "young-old". The mean age was 66.61 years with SD 6.54.

97.5% elderly were from lower and upper lower class while there was no one in upper class (Fig. 2). It was observed that 93.12% elderly were morbid in the study area. The load of single morbidity was more in 60-64 years age group and multiple morbidities were among > 75 years population. With increasing age the number of morbidities were found to be increasing but this association with age group was not found to be statistically significant at 5% level (p>0.05) (Table 2).

Highest load of morbidity was found in >75 years population (100 %). Table 3 shows system wise classification of the morbidities in the study population and the most common morbidity among geriatrics found was psychosocial problems i.e. stress in 95 (59.4%) followed by musculoskeletal system problems in 89 (55.6%), eye problem like diminished vision mostly due to cataract 74 (46.3%). Problems of cardiovascular system like hypertension, dental system, respiratory system, ENT (hearing impairment) and endocrine like diabetes accounted for 45 (28.1 %), 35(21.9 %), 19 (11.9 %), 17 (10.6 %) and 16 (10.0 %) respectively.

Table 1: Distribution of study population as per age and sex

Age group	Female	Male	Total
60 – 64	47	17	64
65 – 69	30	18	48
70 – 74	16	8	24
75+	17	7	24
Total	110	50	160

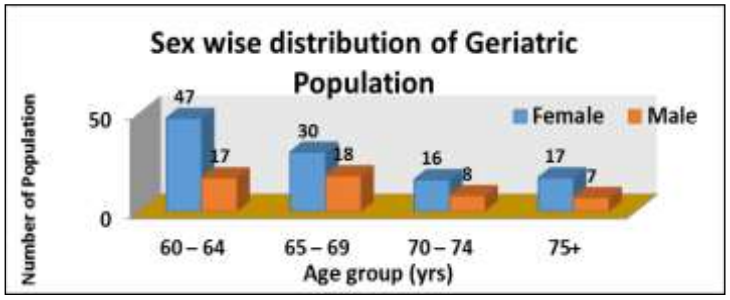

Fig. 1: Sex wise distribution of geriatric population

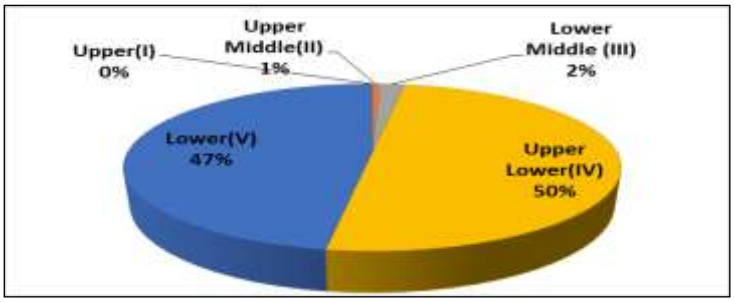

Fig. 2: Distribution of study population as per Modified Kuppuswamy SE scale

Table 2: Distribution of study population as per number of morbidities

Age group	No morbidity (%)	Single morbidity (%)	Multiple morbidities (%)	Total
60 – 64	4 (6.3)	23 (35.9)	37 (57.8)	64
65 – 69	4 (8.3)	14 (29.2)	30 (62.5)	48
70 – 74	3 (12.5)	6 (25.0)	15 (62.5)	24
75+	0 (0.0)	5 (20.8)	19 (79.2)	21
Total	11(6.9)	48 (30.0)	101 (63.1)	160

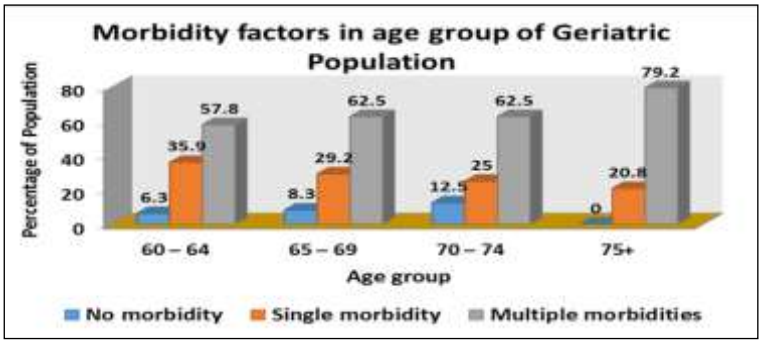

Fig. 3: Morbidity factors in age group of geriatric population

Table 3: System wise classification of the morbidities in study population

Morbidity Pattern	No. of people	Percentage
Respiratory System	19	11.9
Eye	74	46.3
Dental	35	21.9
Diabetes	16	10.0
Gastrointestinal	5	3.1
Ear	17	10.6
Hypertension	45	28.1
Musculoskeletal System	89	55.6
Central nervous System	2	1.3
Injure(fall)	3	1.9
Stress	95	59.4

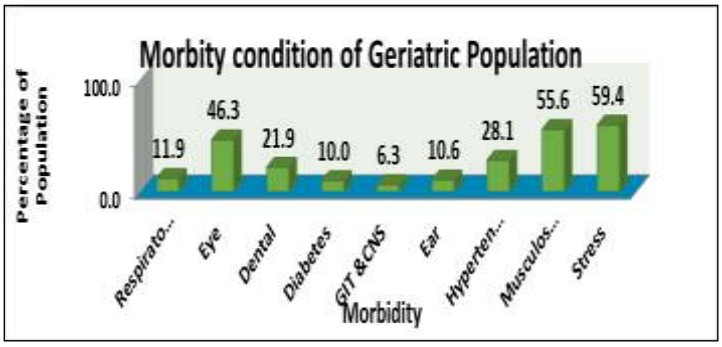

Fig. 4: Morbidity condition of geriatric population

DISCUSSION

It was observed in our study that health problems have significant relationship with age. As age increases, number of health problems also increases. The highest morbidity was seen among study population was stress (59.4%).

In the present study, there was more number of elderly females 110(68.8%) over the elderly males 50 (31.2%). Kishore and Garg [9] had reported 55% of females and 45% of males in a study conducted in the village Anji (Mothi) of Wardha district. Gurav *et al*. [11] found 48.02% males and 51.98% females in slum area near Kalwa of Thane district. In the study done by Batia *et al*. [12] out of the total 361 aged persons, 152 were males and 209 were females. Bawalkar *et al*. [13] found 55.3% females over 44.7% of males, with sex ratio of 1362.75/1000 males.

In the present study 38 (76 %) males and 55(50 %) of females were married while 11(22 %) males and 54 (49 %) females were widoes/ widowers while 1 (2%) male and 1(1%) female were unmarried. Venkatroa *et al*. [14] found that 75% males and 32% females were married, 23% males and 67% females were widows and 1% was unmarried, divorced/ separated. Batia *et al*. [12] in a study of elderly found that 59% were married, 39.3% were widows/ widowers and 0.6% were separated/ divorced and only 1% was unmarried.

Arthritis was the major musculoskeletal problem contributing to 55.6% in the present study. Similar results were reported by K. Srivastava *et al*. [8] (22.2%) and Prakash R *et al*. [1] (14.8%).Females were affected more than males.

The most common cause of diminished vision in India, cataract, contributed to 46.3 % the present study, which was similar as found by Gaurav *et al*. [11] as 32.8% and Parry S.H. *et al*. [10] as 39%.

Hypertension 28.1% was the main culprit for cardiovascular problems. Different studies reported its prevalence as 11.25% [15] and 33% [16].

Among the dental problems, dental caries was the sole problem found in the study population (21.9%). Tobacco addiction (63.75%) and poor oral hygiene (23.96%) may be responsible for the same. Thakur R *et al*. [17] seen dental problems in 32.6% while Khokhar *et al*. [18] seen 90.62% suffered from dental problems.

11.9% elderly suffered from respiratory system problems in the present study. K. Srivastava *et al*. [8] reported respiratory system problems in 13.8% urban aged.

Major ENT problem was hearing impairment in 10.6%. The prevalence of diabetes was reported in the present study as 10.0 %. Other system problems were 6.3% like gastrointestinal and nervous system.

CONCLUSION

We have seen that aged suffered from various health problems as mentioned above, so there is an urgent need to implement various strategies to improve their quality of life like behavior change communication for lifestyle factors like tobacco use at an earlier stage (childhood). The need for the hour is to set up special health services for geriatric population in accordance with the common existing problems. Providing screening services as well as curative and rehabilitative services and convalescent homes to provide long term care is also a priority.

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