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A community based cross sectional study on morbidities and social problems among geriatric population

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ABSTRACT

Background: In India, in the last one and half decades longevity of the people has increased due to decline in mortality rate, better medical and health care facilities and improvements in overall quality of life of people. Presently India has the second largest geriatric population in the globe. In 2001, geriatric population was 77 million in India and it is estimated that in India total number of elderly will rise to 150 million by 2025 and by the year 2050 the number would rise to about 324 million.⁴

Methods: A community based cross sectional study was conducted in an urban slum located in Secunderabad. Almost 225 subjects more than 60 years were included in study after giving oral consent. People with severe morbidity and unable to give consent were excluded from study.

Results: Majority (70%) of the resident experienced verbal abuse followed by physical abuse (13%) at least one time. About 11% felt they were being neglected by their family members. Daughter-in-law was the major person involved in the elder abuse accounting for 45.9%, followed by son 24.3%. Abuse from relatives accounted for 21.6%. Spouse and daughter were involved in elder abuse in about 5.4% and 2.7% cases respectively.

Conclusions: As recently said by Financial Minister in Parliament of India, old age population growing drastically in India, especially in south India. Increasing geriatric population leading to increase in need of health care and psychological assistance.

Keywords: Geriatric health, Status, Social health morbidity

INTRODUCTION

In India, in the last one and half decades longevity of the people has increased due to decline in mortality rate, better medical and health care facilities and improvements in overall quality of life of people. Due to the increase in longevity of the people, geriatric population is on the rise. Presently India has the second largest geriatric population in the globe. In 2001, geriatric population was 77 million in India and it is estimated that in India total number of elderly will rise to 150 million by 2025 and by the year 2050 the number would rise to about 324 million. This changing scenario

has given rise to three major needs: social, health & financial security to elderly.

India has thus acquired the label of an "Ageing Nation".⁴ Along with this; life expectancy has steadily gone up from 32 years at the time of independence to over 63 years in 2001. The geriatric population is regarded as precious asset for any country. With rich experience and wisdom, they contribute their might for sustenance and progress of the nation.⁵

But due to advents of urbanization, industrialization, education & exposure to western life styles the social

values towards elderly are changing leading to a rapid breakdown from joint family support system to nuclear family system which further leads to problems like economic insecurity, loneliness, lack of emotional support, lack of protection for their lives and property and dependency.⁶

Objectives:

- To observe morbidity pattern among geriatric population.
- To describe social problems among study population.

METHODS

A community based cross sectional study was conducted in an urban slum located in Secunderabad. Almost 225 subjects more than 60 years were included in study after giving oral consent. Pre-designed and pre-tested questionnaire was administered in randomly selected subjects. Study was conducted from November 2017 to December 2017 for 2 months. Questions were explained in local language and filled. People with severe morbidity and unable to give consent were excluded from study. Data was entered in Microsoft excel and analyzed by using Epi Info7. Categorical variables were summarized with n (%), while quantitative variables were summarized by mean±S.D. Difference in the two groups were tested for Statistical Significance using parametric tests such as t-test categorical variables tested by chi square test. Pvalue less than 0.05 considered be statistically significant.

RESULTS

The mean age of the study population was 70.05 years with SD of 7.93 years. The age groups were categorized as young old (60-69 years), old (70-79 years) and oldest old (80 years and above). Majority were young old accounting for 48%, followed by 34% were old and 18% were in the age group of 80 years and above. Females were 65% and males were 35%.

Majority (61%) were widowed/widower, 3% living separate from spouse because of familial reasons. Female widowers were 73%. Almost all (96%) residents were belonging to Hindu religion. Majority (46%) were illiterates and 29% stopped the schooling once they reached primary schooling. About 5% of the elderly had done their graduation. Among illiterates females formed the major group with 81% and among graduates males formed the major group with 80%.

Majority (45%) were not engaged in any work. 22% were housewives, followed by semi-skilled workers (13%). Professional and business people accounted for 8% and 10% respectively. Only 2% of the residents were skilled workers.

In our study for majority of the residents (43%), social security in the form of old age pension/widow pension was the current source of income, for 21% of the elderly money was given by family members and 6% were dependent on property and only 2% were gainfully employed to meet their expenses.

Majority (70%) of the resident experienced verbal abuse followed by physical abuse (13%) at least one time. About 11% felt they were being neglected by their family members.

Daughter-in-law was the major person involved in the elder abuse accounting for 45.9%, followed by son 24.3%. Abuse from relatives accounted for 21.6%. Spouse and daughter were involved in elder abuse in about 5.4% and 2.7% cases respectively. (Some social problems described in Table 1).

Table 1: Some social problems (multiple answers).

Social problem	Percentage (%)
Feeling loneliness	78
Inability to manage daily activities independently	64
Frustration about health issues	85
Feeling boredom	92
Financial issues	99
Unable to coping up with aging	59

In our study, with respect to previously diagnosed chronic morbidities, 10.5% had diabetes mellitus, 36.2% had hypertension and 12.4% had osteoarthritis. Other chronic morbidities found were asthma, neurofibromatosis, hydrocele, kyphosis, fracture femur, back pain and COPD (Table 2).

Table 2: Morbidities found in geriatric population.

Morbidity	Percentage (%)
Asthma	2
fractures	6
Hydrocele	5.5
Arthritis	76
Urinary incontinence	13
COPD	34
Cataract	25

About 43% of the residents were within the normal range of BMI whereas 12% and 21% were belonging to the category of overweight and obese respectively. About 22% were in the category of under nutrition. In 2 individuals we couldn't measure the BMI as they were unable to stand. 66.7% of the residents were found to have pallor and 11.4% had clubbing and 3.8% had bilateral pedal edema. The prevalence of depression in our study was found to be 47.6%. Visual impairment was found in 30.5% of the residents and hearing was impaired

in 20% of the residents. Mobility was affected in 39% of the residents.

DISCUSSION

Majority in our study belong to young old group i.e 60-69 years. This finding were similar with Ramadurg et al, Ray et al similar mean age group were found in Shashikanth et al. 7-9 These studies were also conducted in urban localities where similar kind of population distribution present. Similar pattern saw in 2011 census also.

The mean age of male and female respondents were 75.3 (± 8.6) and 76.8 (± 7.7) respectively. Similar results were found in a study by Mundada et al. Similar results were found in a study by Bhatia et al which also showed female predominance. We can see similar trends in NFHS 4 and 2011 Census. Because of high life expectancy among females showed this kind of results.

Most of study population in our study were widowed. It is similar with the study done by Singh et al reports that 64.3% of elderly women were widows and most of them were dependent. ¹² Contradict to that, elderly were found living with their spouse and other members found in study of Srivastava et al. ¹³

A study from New Delhi, conducted by All India Institute of Medical Sciences, New Delhi found Hindus (73%) as the predominant group, followed by Christians (21%) and Sikh (6%). In a study conducted by Rani et al, in Chennai showed that around 71% belonged to Hindu religion 28% were Christians and Muslims 1%. Our study area predominately have Hindus so results came accordingly. Is

Our study showed that almost half of our respondents were illiterate and around 29% had education up to the primary level. Padda et al reported 38.6% illiteracy at Amritsar, while it was 78% in a study conducted in Tamil Nadu by Elango and Singh et al reported 80.2%. ^{12,16,17} A similar study of Kishore and Garg found 59% of males and 9.9% of females had a primary and secondary education. ¹⁸

In our study, approximately 13% were still working as unskilled workers against those who were at home (45%). Similar results were seen in a study by Elango, while Singh et al in his study, reported that 55.8% were occupied in productive work, 28% in agriculture, 15.1% in labor, and 44.2% were dependent on others. ^{12,17} Another study done Bhat et al in Ahmedabad suggested that 52.3% elderly were not indulged in any occupation and 39% were working but in sedentary way. ¹⁹

A need assessment study from Bhopal showed that remittances from children are the major source of income for the elderly (57%). Pension as their source of income was told by 29% of the residents and 30% had house rent

as a source of income.²⁰ A project report prepared by Das et al, from Gujarat revealed that only about (43%) of the elderly have an independent source of income either in the form of pension or savings interest which means that more than half of them are without any financial security who have their financial assistance from relatives (27%) and assistance from children (17%).¹

In a study done by Rufus et al, of Tirunelveli district, Tamil Nadu revealed they faced mixed abuse (47%) followed by emotional abuse 16.3%, financial abuse (14.3%), neglect (8.3%) and sexual abuse (2.3%). A study conducted by Sebastian et al carried out in the community setting in Kerala reported nearly half (49%) experienced some form of abuse or neglect from their family, among them most common forms stated by the residents were verbal abuse (39%) and neglect (39%) followed by physical abuse (13%) and financial abuse (10%). 22

A study conducted by Singh et al, in an urban slum of Delhi reported the prevalence of diabetes in elderly persons to be 18.8%. ²³ A study conducted by Sharifi et al, in Iran reported, overall prevalence of diabetes mellitus was 18.5%. ²⁴

A study done by hypertension study group in Bangladesh and India reported that the overall prevalence of hypertension among elderly was 65%.²⁵ A study from Kalavathy et al, done in Kerala found the overall prevalence of hypertension to be 51.8%.²⁶ A study from Sharifi F et al in Iran reported, the overall prevalence of hypertension was 61%.²⁴ In a study conducted by Katta et al, from rural Tamil Nadu found that under nutrition was about 34.6% and obesity was found in about 17.4% of the study subjects.²⁷ A study done by Swami et al in Chandigarh found 14.36% elderly to be under nourished and obesity was found in 7.54% of the elderly. Overweight was found in 33.15% of the elderly.²⁸

A study conducted by a team from All India Institute of Medical Sciences (AIIMS) in the OAHs of New Delhi reported 38% prevalence of anaemia based on clinical diagnosis.¹⁴

The findings of our study are comparable to a study done by Vedantam et al in rural south India, in which the MNA scale classified 14% as malnourished and 49% at risk of malnourishment.²⁹

Our study findings are similar to a study from Jain RK et al, done in the urban slums of Mumbai which found the prevalence of depression to be around 45.9%.³⁰ In a study from Sandhya et al in a rural community of South Kerala, the prevalence of depression among people of 60 years and above was found to be 25.4%.³¹

A study conducted by Sharma et al in Chandigarh reported that about 21.8% residents had visual impairment.³² In another study by Majra et al done in old

age homes of Southern India, visual impairment was found in about 28% of the residents and hearing deficit was found in about 42% of the residents.³³ A study conducted by Dey et al among older Indians reported that hearing deficit was noted in about 31.6% of the elderly.³⁴

CONCLUSION

As recently said by Financial Minister in Parliament of India, old age population growing drastically in India, especially in south India. Increasing geriatric population leading to increase in need of health care and psychological assistance. Social assistance schemes are helping to certain levels but to address social problems and psychological problems schemes supposed to enhance to such level to cover all aspects of geriatric health.

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Institutional Ethics Committee

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