Original Research Article

A cross-sectional study of morbidity and social profile of geriatric population in Singanodi sub centre, Raichur, Karnataka, India

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ABSTRACT

Background: India has around 100 million elderly populations which constitute about 8% of country’s population. They form a vulnerable group not only from the point of view of health problems but also from other aspects namely economic, social, nutritional and others. Hence a study was conducted to know the socio-demographic profile, morbidity pattern and social problems faced by elderly.

Methods: A community based cross-sectional study was carried out in six villages of Singanodi sub centre in Raichur Karnataka, India. All elderly population above 60 years were interviewed by house to house visit and clinical examination done.

Results: Out of total 513 elderly population, majority were in 60-69 years age group, 94.5% were illiterates and large number of subjects belonged to class IV and V of modified BG Prasad socio-economic classification. Most common morbidity was musculoskeletal disorders and 23.8% of study subjects felt neglected by family.

Conclusions: The existing health care services are not sufficient to meet the needs of the geriatric population hence scaling up of existing services is needed as in future more people will be added to geriatric pool.

Keywords: Geriatric population, Morbidity pattern, Rural, Social problems

INTRODUCTION

India is in a phase of demographic transition where decreased fertility and mortality has resulted in expansion of geriatric age group population. The geriatric population is defined as population aged 60 years and above.¹ It is common to define the “young old” as aged 60-69 years, the “old old” as aged 70-79 years and the “oldest old” as 80 years and over.² The ageing of the world’s population is a global phenomenon with extensive economic and social consequences. The ratio of the elderly population (60 years and older) is now 1 in 10. By the year 2050, the ratio would have increased up to 1 in 5.³

In India, it is estimated that the elderly in the age group 60 and above is expected to increase from 71 million in 2001 to 179 million in 2031 and in the case of those 70 year and older, the projected increase is from 27 million in 2001 to 132 million in 2051.⁴ The proportion of elderly is much higher in the rural areas than in the urban areas and the increase is greater among women.⁵

The elderly are at great disadvantage by all accounts especially with accelerating socio-cultural changes. They form a vulnerable group not only from the point of view of health problems but also from other aspects namely economic, social, nutritional and others. Although it is true that India’s philosophy and culture prescribe
reverence and respect for the aged and recommend the care of the aged parents as a form of worship, these values are facing erosions at present. This has been the result of breakup of joint family system of living, migration of younger members to the urban area for employment and the competitive nature of modern living. Although 20% of aged are known to enjoy a fairly good level of health and contentment others present with various problems.6

The aged, living in retirement, not only suffer from chronic diseases but also from the unhappiness caused by their feeling of uselessness, loneliness & despair. This makes it necessary to look into the various aspects of their problems like social, economic, and psychological and other related aspects.7

Aim

- To study the socio-demographic profile of the geriatric population.
- To study morbidity pattern and social problems faced by the geriatric population.

METHODS

A community based cross-sectional study was carried out from February to July 2016 in Singanodi sub-centre of Chandrabanda Primary Health Centre of Raichur, which is a rural field practice area of Navodaya Medical College Hospital & Research Centre. Singanodi sub-centre consists of 6 villages with a total population of 8035. All the elderly people with age 60 years and above in these 6 villages were taken as study subjects. Total of 513 participants were first interviewed with pretested and semi-structured proforma in their local language by house to house visit. Questionnaire consisted of socio-demographic profile, social problems and morbidity pattern. After completion of the questionnaire clinical examination was carried out. Blood pressure was measured and classified according to 7th JNC classification.5 Data was entered and analysed using MS Excel spread sheet 2013. Results were expressed in percentages and proportions.

RESULTS

Out of the total 513 study subjects, major portion (70.8%) of population were in 60-69 years age group. Large part (62.2%) of study subjects were females and males constituted 37.8%. Most of study subjects (90.3%) belonged to Hindu religion, 94.5% were illiterates, 67.8% were currently employed and 80.1% were from joint family. 63.2% were married and widows constituted 35.3%. Majority of study subjects (41.5%) belonged Class V of modified BG Prasad socio-economic classification followed by class IV (36.8%) and least were in class I (1.6%).

23.8% of study subjects felt neglected by family, almost 12% feel they are burden to their family. 84% of study subjects were satisfied with life. About 32.9% of elderly were seeking government assistance in form of either widow scheme, pension scheme or disability scheme. Almost 21% of study subjects were dependent on some or other assistive devices like walking stick, spectacles, dentures and hearing aids. Higher percentage of females had more social problems as compared to males.

Most common (63.4.3%) morbidity was found to be musculoskeletal disorders followed by special sense disorders (48.9%), gastrointestinal disorders (19.7%) and respiratory disorders (16.2%). Cardiovascular disorders, nervous system disorders and genitourinary disorders constituted 14.8%, 9.6% and 6.2% respectively. Skin diseases affected least with 3.5% of total study subjects.

Most commonly reported disorder among elderly was low back ache with 52.4%, followed by Joint pain (44.4%), cataract (24.8%), hypertension (14.8%), epigastric discomfort (11.9%), breathlessness (11.5%), constipation (10.9%), hearing impairment (10.7%), neuritis (9.6%), and chronic cough (7.4%). Urinary problems was reported by 6.2% of study subjects while skin infection constituted least with 3.5% of total geriatric population.

| Table 1: Socio-demographic profile. |
|-------------------------------------|
| **Age** | **Number** | **%** |
| 60-69 | 363 | 70.8 |
| 70-79 | 119 | 23.2 |
| 80-89 | 31 | 6.0 |
| **Sex** | | |
| Male | 194 | 37.8 |
| Female | 319 | 62.2 |
| **Religion** | | |
| Hindu | 463 | 90.3 |
| Muslim | 36 | 7.0 |
| Christian | 14 | 2.7 |
| **Literacy** | | |
| Illiterate | 485 | 94.5 |
| Literate | 28 | 5.5 |
| **Employed** | | |
| Yes | 348 | 67.8 |
| No | 165 | 32.2 |
| **Type of family** | | |
| Joint | 411 | 80.1 |
| Nuclear | 102 | 19.9 |
| **Marital status** | | |
| Married | 324 | 63.2 |
| Widow | 181 | 35.3 |
| Separated | 8 | 1.6 |
| Class I | 8 | 1.6 |
| **Socio-economic status** | | |
| Class II | 14 | 2.7 |
| Class III | 89 | 17.3 |
| Class IV | 189 | 36.8 |
| Class V | 213 | 41.5 |
| **Total** | 513 | 100.0 |
Table 2: Social problems among elderly.

|                                      | Males (194) | %   | Females (319) | %   | Total % |
|--------------------------------------|-------------|-----|---------------|-----|---------|
| Feels neglected by family            |             |     |               |     |         |
| Always                               | 6           | 3.1 | 34            | 10.7| 40      | 7.8    |
| Sometimes                            | 30          | 15.5| 52            | 16.3| 82      | 16.0   |
| Never                                | 158         | 81.4| 233           | 73.0| 391     | 76.2   |
| Feels burden to family               | 24          | 12.4| 38            | 11.9| 62      | 12.1   |
| Satisfied in life                    | 183         | 94.3| 248           | 77.7| 431     | 84.0   |
| Government assistance                | 61          | 31.4| 108           | 33.9| 169     | 32.9   |
| Uses assistive devices               | 42          | 21.6| 65            | 20.4| 107     | 20.9   |

Table 3: Morbidity pattern among elderly.

| Disorders                      | Male (194) | %   | Female (319) | %   | Total (513) | %   |
|--------------------------------|-------------|-----|---------------|-----|-------------|-----|
| Musculoskeletal                | 117         | 60.3| 208           | 65.2| 325         | 63.4|
| Low Back Ache                  | 97          | 50.0| 172           | 53.9| 269         | 52.4|
| Joint Pain                     | 85          | 43.8| 143           | 44.8| 228         | 44.4|
| Special Sensory                | 87          | 44.8| 164           | 51.4| 251         | 48.9|
| Cataract                       | 48          | 24.7| 79            | 24.8| 127         | 24.8|
| Hearing Impairment             | 23          | 11.9| 32            | 10.0| 55          | 10.7|
| Gastrointestinal               | 39          | 20.1| 63            | 19.7| 101         | 19.7|
| Constipation                   | 19          | 9.8 | 37            | 11.6| 56          | 10.9|
| Epigastric discomfort          | 22          | 11.3| 39            | 12.2| 61          | 11.9|
| Respiratory                    | 46          | 23.7| 37            | 11.6| 83          | 16.2|
| Breathlessness                 | 42          | 21.6| 33            | 10.3| 59          | 11.5|
| Cough                          | 21          | 10.8| 17            | 5.3 | 38          | 7.4 |
| Cardiovascular                 | 43          | 22.2| 33            | 10.3| 76          | 14.8|
| Hypertension                   | 43          | 22.2| 33            | 10.3| 76          | 14.8|
| Nervous System                 | 19          | 9.8 | 30            | 9.4 | 49          | 9.6 |
| Neuritis                       | 19          | 9.8 | 30            | 9.4 | 49          | 9.6 |
| Genitourinary                  | 12          | 6.2 | 20            | 6.3 | 32          | 6.2 |
| Urinary problems               | 12          | 6.2 | 20            | 6.3 | 32          | 6.2 |
| Skin                           | 8           | 4.1 | 10            | 3.1 | 18          | 3.5 |
| Infection                      | 8           | 4.1 | 10            | 3.1 | 18          | 3.5 |

DISCUSSION

Socio-demographic profile

The present study was conducted rural area, in which majority (70.8%) were in the age group of 60-69 years and females constituted large part of study subjects (62.2%). Similar observations were noted in various studies done by Sushma Tiwari et al, Lina et al and Anita Rani et al. Most of study subjects were illiterates (94.5%) and were currently employed (67.8%). However study by Srinivasan et al & Lena et al reported illiteracy to be 4.8% & 45.1% respectively. Most of the study subjects were married (63.2%) and belonged to joint family (80.1%). Srinivasan et al reported similar finding were married elderly constituted 71.1% and 63.2% were belonging to joint family. As this study was conducted in rural setting low socio-economic status, illiteracy and joint family system are expected to be high.

Social profile

In this study lesser number of elderly reported negative attitude towards life as compared studies by Lena et al were almost 62% felt neglected and 36.2% felt burden to family. 84% were satisfied with present living conditions in our study, similar finding of 98.4% was seen by Srinivasan et al in study conducted in suburban area of Bangalore. Almost 21% of study subjects in this were dependent on some or other assistive devices like spectacles, walking sticks etc. unlike in the study conducted by Srinivasan et al which reported that 88.5% were dependent on assistive devices.
In this study, the prevalence of various disorders was musculoskeletal 63.4%, special sense 48.9%, gastrointestinal 19.7%, respiratory 16.2%, cardiovascular 14.8%, nervous system 9.6%, genitourinary 6.2% and skin 3.5%. Similar observation was noted by Shankar R et al, except for last four disorders where prevalence of genitourinary, ENT, skin and nervous disorders was 5%, 4.58% 1.69% and 1.25% respectively. Medhi GK et al in study among tea garden workers revealed higher prevalence with hypertension 81.4%, musculoskeletal 67.5%, respiratory 32.2%, cataract 33% and gastrointestinal 6.5%.

In this study, low back ache and joint pains were highest reported symptoms among geriatric age group. Banker K et al, Lena et al and Shankar R et al reported joint pains to be 60.2%, 41.3% & 57.8% respectively. Cataract and hearing impairment constituted 24.8% and 10.7% respectively, similar finding was reported by Purthy AJ where prevalence of cataract was 24.6% and hearing impairment was 14.3%. Higher prevalence was noted by Shankar R et al cataract 48.33% and deafness to be 3.75%. Breathlessness and chronic cough was more common among men (23.7%) as compared to women (11.6%) and similar pattern was observed by Banker K et al. In this study pre-hypertensives and hypertensives constituted 14.6% and 14.8% of elderly respectively. Purthy AJ et al, Mannapur et al and Shankar R et al reported hypertension to be 25.9%, 46.3% and 11.25% respectively. Prevalence of urinary problems was 6.2% in geriatric study population whereas Medhi et al, and Purthy et al reported it to be 4.4% and 5.6% respectively.

CONCLUSION

This study reflects the conditions of geriatric population in one of the backward and rural areas of the state. Most of the elderly belonged to low socioeconomic status and were employed to earn their living. Almost one fourth of geriatric population felt neglected and were dependent on government support for their economic needs. A major portion of the health problems of the geriatric population can be met by a trained medical doctor through sympathetic approach. The existing health care services are not sufficient to meet the needs of the geriatric population hence scaling up of existing services is needed as in future more people will be added to geriatric pool.

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