Study on problems among the male geriatric population of a rural area, Kbnims, Kalaburagi

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Abstract

Background: Ageing is a natural inevitable biological process. Various studies are done on the problems of old age. Only few studies have focused on the problems of only male geriatric population. This study highlights more male dominant health problems and attempts to identify the perceived morbidity pattern among the elderly male population.

Materials and Methods: This Cross-sectional study was done from April 2018 to July 2018. The sample size was calculated by using the prevalence based formulae \( n = Z^2 p (1-p)/d^2 \) with elderly male prevalence in rural areas of India (\( p = 8.4\% \)) and the sample size was calculated (\( n = 120 \)). The collected data was tabulated and analyzed by using the SPSS software version 20.

Conclusions: This study showed high prevalence of acute and chronic morbidities, highest (100%) for 80 years and above age group followed by 70-79 years (89.7%) and 60-69 years (80%) age group. The most common morbidities were Eye diseases (81.6) and Musculoskeletal disorders (74.1). The study provided valuable insights into the health and social issues of elderly male in rural areas and the desperate need for efficient health care services at the primary level.

Keywords: Male geriatric, morbidities, health care, rural area

Introduction

Ageing is a physiological process that starts from birth and continues throughout life and ends with death. Due to demographic transition there has been a rapid, large and ubiquitous growth in the number and proportion of older persons \(^1\). Both the share and size of elderly population is increasing, share of elderly in total population in rural areas is 8.8%, and 8.4% for males and 9.2% for females. The gap between female and male old-age dependency ratio also has an increasing trend, 14.9 and 13.6 respectively \(^2\).

According to the United Nations Population Division, the population of India, ages 60 and older is projected to climb from 8 percent in 2010 to 19 percent in 2050\(^3\). The speed at which the population is aging is causing serious concern in all countries of the world. The three areas where the impact is being felt the most are health, economy, and social areas. Elderly people suffer from both communicable as well as non-communicable diseases.

Rural men experience more health risk factors, poorer health, and higher death rates than rural women. Issues identified by rural men as being of particular concern include isolation, stigma, lack of employment opportunities, lack of confidence in the future, few leisure activities, boredom, and limited transportation options \(^4\).

In elderly population not only health problems are immense but also their financial rights and interests are often jeopardized by their family members and others, particularly in rural areas. Research on male geriatric morbidity and other problems are required to improve the delivery of health care to the elderly in rural areas. This study was an attempt to study the morbidity status of male geriatric population which can serve as a baseline data and also help in planning the health services at the grass root level in rural areas.

Materials and Methods

A community based Cross-Sectional study design was used to identify the morbidity patterns of male geriatric population. The study was conducted in village Aurad (B), under Rural Health Training Centre (RHTC),
attached to the Department of Community Medicine, KBN Medical College, Kalaburagi, Karnataka state, India. The study was done for a period of 4 months from April 2018 to July 2018. The Institutional Ethical Committee approval and the written informed consent of the participants were obtained before the start of the study.

The sample size was calculated by using the prevalence based formulae n = Z² p(1-p)/d² Ref: (Daniel, 1999) with elderly male prevalence in rural areas of India (p = 8.4%) 2 and the sample size was calculated (n = 120). The total 120 male elderly patients were considered in our study. A preliminary house to house survey was done to know the number of persons aged 60 years and above. After enumerating them by using systematic random sampling technique every alternate person aged 60 years male elderly were included in the study till the required sample is met (n = 120). Those elderly patients who were seriously ill and not willing to participate in study were excluded. Informed verbal consent was taken from each patient before the interview. A pre-designed pre-tested semi-structured questionnaire was used which contained questions relating to the information about patient, socio-demographic profile and morbidity pattern. Physical examination and anthropometrics measurement was done. Blood pressure and BMI were measured by standard methods. The collected data was tabulated and analyzed by using the SPSS software version 20. The test of significance was tested by using a non-parametric chi-square test at (p< 0.05) at 95% confidence interval.

Results

The present revealed among 120 elderly men selected for the study, majority of them 70 (58.4%) were in the age group of old (60-69 years) age group, followed by 39 (32.5%) in old old (70-79 years) age group and 11 (9.1%) were in oldest old (80 years and above) age group. With regard to economic dependency of elderly males, 56 (46.6%) were employed and totally independent whereas 64 (53.4%) were totally unemployed and were financially dependent on family for their living. Among the employed 56 (46.6%), 35.8% were dependent on agriculture as a source of income and 10.8% were working as labourers. Majority 57.5% of study participants were illiterate while 42.5% were literate. 40.8% participants had a habit of tobacco smoking/chewing while 27.5% had no bad habits.

Out of the total study participants 102 (85%) had morbidities and only 18 (15%) were found not suffering from any kind of ill health condition. In relation to morbidity patterns among elderly men the most common morbidities were eye diseases 98 (81.6%) and musculoskeletal disorders 89 (74.1%) and 45 (37.5%) hypertension. Other morbid conditions among the study participants showed 23 (19.1%) had respiratory problems, 25 (20.8%) had diabetes mellitus, ear problems were found in 18 (15%), 13 (10.83%) had skin diseases, 9 (7.5%) were suffering from central nervous system problems, 8 (6.6) had genitourinary diseases and mental disorders were found in 4 (3.3%) and only 1 (%) was suffering from cardiovascular disease. 100% of 80 and above age groups were having one or more morbidity followed by 89.7% of 70-79 age group and 80% of 60-69 age group study participants were suffering from various morbidities.

Discussion

The Present study (Table 1) indicates 58.4% were in the 60-69 years age group followed 32.5% were in the age group of 70-79 years and least 9.1% in 80 and above age group and also the present study revealed maximum 69 (57.5%) of the elderly male were illiterate. Sushma Tiwari et al., [8] also reported the maximum number of individuals 69.8% belonged to the age group 60-69 years and the number went on decreasing as the age advances and 80.7% of elderly male were illiterate. Vidyavati S et al., [7] reported that the age group 60-69 years constituted the major fraction (68.88%) of population followed by 70-79 years (37.55%) and 80 and above were 1.23%.

Table 1: Distribution of study participants according to their characteristics (N = 120)

| Characteristics   | Frequency (%) |
|-------------------|---------------|
| Age (Years)       |               |
| 60-69             | 70 (58.4%)    |
| 70-79             | 39 (32.5%)    |
| 80 and above      | 11 (9.1%)     |
| Education         |               |
| Illiterate        | 69 (57.5%)    |
| Literate          | 51 (42.5%)    |
| Source of income  |               |
| Unemployed        | 64 (53.4%)    |
| Agriculture       | 43 (35.8%)    |
| Labours           | 13 (10.8%)    |
| Habits            |               |
| Tobacco smoking/chewing | 49 (40.8%) |
| Alcohol consumption | 23 (19.2%) |
| Pan/Betel nut chewing | 15 (12.5%) |
| No habits         | 33 (27.5%)    |

In the present study, maximum 64 (53.4%) were unemployed and financially poor and the details of habits revealed 40.8% and 19.2% were addicted to tobacco products and alcohol consumption respectively. Dr. A Kusuma [8] also reported similar results that majority of the respondents were economically poor and 53% and 34% are addicted to tobacco products and alcohol. Praveen V et al., [9] reported 35% of the elderly males were illiterate and major (90%) occupation of the working group elderly was agriculture and labour which is similar to our study, where agriculture and labour work is the major occupation of rural elderly.

In the present study (figure -1) high prevalence of morbidity (85%) was recorded and 15% of the participants were not suffering from any form of illness. Majority of the participants were suffering from more than one morbidity.

Fig 1: Distribution of morbidity among study participants (N = 120)
Major morbidities (table-2) of the study participants were eye diseases 98 (81.6%), musculoskeletal disorders 89 (74.1%) and hypertension 45 (37.5%). Shahul Hameed et al., [10] also reported high prevalence of morbidity (96.3%) among elderly and major morbidities in the study population were impaired vision, followed by hypertension and joint problems. Similarly Arun Ghosh et al., [11] also reported that the most common problems of the elderly are visual impairments (73.33%).

Table 2: Distribution of morbidities of the study participants (N = 120).

| Morbidities                  | No (%) | %     |
|------------------------------|--------|-------|
| Eye diseases                 | 98     | 81.6  |
| Musculoskeletal disorders    | 89     | 74.1  |
| Hypertension                 | 45     | 37.5  |
| Respiratory problems         | 23     | 19.1  |
| Diabetes mellitus            | 25     | 20.8  |
| GI system problems           | 22     | 18.3  |
| Ear problems                 | 18     | 15    |
| Skin diseases                | 13     | 10.8  |
| CNS                          | 9      | 7.5   |
| Genitourinary diseases       | 8      | 6.6   |
| Mental disorders             | 4      | 3.3   |
| CVS                          | 1      | 0.8   |

The present study also revealed that the majority of the elderly males in rural areas are not only facing high health problems (85%) but also economic problems. U. Hemavathi et al., [12] also revealed that the majority (66.6%) of elderly men were facing high physical or health problems and half (50%) of the men were facing economic problems. Table 3 clearly shows differences in the prevalence of morbidities between age groups, it was observed that as age advances, the morbidity too increased. Morbidities were most common in the 80 and above (100%) age group followed by 89.7% in 70-79 age group and least 80% in 60-69 age group. Similar findings were found in a study conducted by Leyanna Susan George et al., [13], where it was observed that as age increases, the morbidities also increased, with maximum number of morbidities (95.7%) in 71 and above age group. In our study impairment and Diseases were more among the old (>70 yrs) compared to young old (60-69 years). Shридha et al., [14] also reported significant (P value-0.015) differences in the prevalence of diseases among young old and old.

Table 3: Distribution of number of morbidities according to age group of the study participants

| Age group | No morbidity | Morbidity |
|-----------|--------------|-----------|
| 60-69     | 54 (44%)     | 46 (56%)  |
| 70-79     | 4 (10.3%)    | 35 (89.7%)|
| 80 and above | 0 (0%) | 11 (100%)|

Conclusion

Ageing, although a normal natural process of mankind but still considered as an incurable disease. But the best part of ageing is though we cannot heal old age, we can protect, promote and extend it in the best possible way. The social, biological and physical changes that occur in the last stages of life are immense. These life changes are studied in our study particularly elderly men in rural areas. The magnitude of social, economic and health problems are studied in particular and it points towards the necessity of adequate status, financial and social support to live an active and socially productive life. Attention should also be given to increase awareness among the elderly regarding the utilization of various health care services at the primary level.

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