Research Article

A study on morbidity status of geriatric population in the field practice area of Karpaga Vinayaga Institute of Medical Sciences, Tamil Nadu, India

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ABSTRACT

Background: Aging is a process of deterioration in the individual's functional capacity that results from structural changes as age advances. India has acquired the label of "an aging nation" with 7.7% of its population being more than 60 years old. Research on geriatric morbidity and related risk factors are required to improve the delivery of health care to the elderly. This study was an attempt to study the morbidity status of geriatric people that may serve as a baseline data and also help in planning the health services. The aim of the study was to find the morbidity pattern among geriatric population in field practice area of Karpaga Vinayaga Institute of Medical Sciences, Kancheepuram, Tamilnadu, India.
Methods: An observational study conducted in field practice area of Karpaga Vinayaga Institute of Medical Sciences, Tamilnadu, India from March 2016 to April 2016. Study participant who aged above 60 years were administered by pre tested, semi structured questionnaire after obtained informed consent. Descriptive statistics were calculated by using SPSS 18V.
Results: Among 72 study participants, most common morbidity were arthritis (75%), followed by hypertension (63.9%), cataract (55.6%), low back pain and other pain (52.8%), diabetes (33.3%). 61% of study subjects reported more than one illness.
Conclusions: There is high morbidity rate identified in this present study, there is an urgent need to develop geriatric health care services at primary health centre level.

Keywords: Ageing, Morbidity, Rural, Kancheepuram

INTRODUCTION

Aging is a process of deterioration in the individual's functional capacity that results from structural changes as age advances. It is not merely a matter of accumulating years but also a process of "adding life to years, not years to life". The WHO Theme for the year 2012 was "Good health adds life to years".[1,2] The focus was how good health throughout life could help older men and women to lead a productive life and be a resource for their families and communities. The elderly are afflicted by the process of ageing which causes a general decline in their health.

India has acquired the label of "an aging nation" with 7.7% of its population being more than 60 years old.[2] Certain diseases are more common among elderly than the younger people like degeneration diseases of heart and blood vessels, cancer, accidents, diabetes, diseases of locomotors system, respiratory illness, genito-urinary

tract diseases.[3] Elderly with disability, resulting from chronic diseases are also at a high risk of acute illness and injuries.[3] Although Primary Health Centers along with their sub- centers are distributed all over the country. They are not able to avail all the facilities owing to lack of transport, geographical distance, physical disabilities, for want of funds or physical help for travel.[3]

There are ample scope for research into the degeneration and other diseases of elderly, their treatment in hospital and general practice, family in preventive geriatrics and the epidemiology affecting the elderly. There is a need to highlight the medical and socio-economic problems that are being faced by the elderly people in India and strategies for bringing about an improvement in their quality of life which also needs to be explored. From the morbidity point of view, at least 50% of the elderly in India have chronic diseases. A thorough examination of geriatric morbidity and related risk factors are required to improve the delivery of health care to the elderly. Early surveillance of their health needs and knowledge of their situation and circumstances are essential to provide cost effective services and to plan strategies for intervention and care. This study was an attempt to study the morbidity status of the geriatric people residing in the rural area of Kancheepuram that may serve as a baseline data and also help in planning the health services. The objective of our study was to find the morbidity pattern among geriatric population in field practice area of Karpaga Vinayaga Institute of Medical Sciences, Kancheepuram, Tamilnadu, India.

METHODS

After obtaining the ethical clearance from Institutional Ethical Committee (IEC), KIMS and RC, Kancheepuram. A observational study was conducted in the Rural Health Training Centre, Pulipakkam, Chengalpattu from March 2016 to April 2016. The RHTC, Pulipakkam, Chengalpattu, is situated on the 12°43'8"N latitude and on the 79°58'35"E longitude. It is attached to the Department of Community Medicine, Karpaga Vinayaga Institute of Medical Sciences for the outreach activities and is also the field practice area for the under graduate MBBS students. The sample size 72, for the study was obtained by using table for minimum sample size calculation by WHO. The study participants were patients aged 60 and above, attending the geriatric clinic at the Rural Health Training Centre, Pulipakkam and who were permanent residents of Pullipakam.

After obtaining the written informed consent, a pre-tested, semi-structured questionnaire consisting of socio-demographic variables such as name, age, gender, education, occupation, income, SES, employment, religion, marital status, type of family, family support, property, social security, etc., was administered to patients attending the geriatric clinic in RHTC. All the consecutive patients fulfilling the inclusion criteria during the period of the study (two months) were included.

Patients who came for follow up for similar problem were considered only once. Morbidity pattern was assessed according to system wise. The data thus obtained were entered and analyzed using SPSS version 18.

Statistical analysis

Descriptive statistics such as age was expressed as mean and standard deviation and qualitative variables such as religion, type of family, marital status, SES, morbidity pattern according to system wise etc., were expressed in percentages.

RESULTS

In our study, the age of the study subjects ranged from 66.9+SD 6.9 years, 63.9% of them were females and 61.1% were married. 58.3% were not literates. Only 25% of them were getting pension and 11% were employed. Majority of them belonged to socio economic status IV and V, according to Modified Kuppuswamy classification (Table 1). 84% of geriatric people were dependent on their son or daughter either physically or economically. Nearly 44% of study subjects had social security like health insurance (8.3%), government pension (27.8%), and pension (8.3%). 22% of elderly people faced crisis and nearly 8 % of them lost their close ones. 38.9% of them reported verbal abuse and physical abuse among 2.9%. 5.6% of study participants took self-medication.

Table 1: Socio- demographic profile of study subjects (N = 72).

Variables	N (%)
Age	66.9 ± 6.9
Sex	
Male	26 (36.1%)
Female	46 (63.9%)
Religion	
Hindu	70 (97.2%)
Christians	2 (2.8%)
Marital Status	
Married	44 (61.1%)
Widow	28 (38.9%)
Education	
Not Literate	42 (58.3%)
Primary school	20 (27.8%)
Secondary school	8 (11.1%)
HSC/ Diploma	2 (2.8%)
Occupation	
Un employed	46 (63.9%)
Pensioner	18 (25%)
Employed	8 (11.1%)
Socio-economic Status*	
Class III	6 (8.3%)
Class IV	44 (61.1%)
Class V	22 (30.6%)

*Modified Kuppuswamy classification.

The most common morbidity among geriatric people in our study was Arthritis (75%), followed by Hypertension (63.9%), cataract (55.6%), low back pain and other pain (52.8%), Diabetes (33.3%). The other reported illness was Cardiac disease (16.7%), Neurological disease (11.1%), Urinary Tract Infection (11.1%), Gastro intestinal diseases (5.6%) and skin problems (5.6%). 61% of study subjects reported more than one illness (Figure 1).
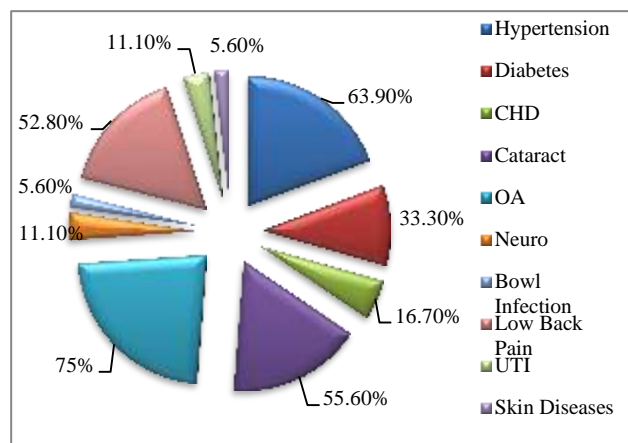

Figure 1: Morbidity pattern of geriatric population.

DISCUSSION

In our study, the mean age group of geriatric population was 66.9 yrs which was similar in study by Barman et al where 55% of the study subjects belonged to age group of 60 to 69 yrs and in contrast to other studies by Srinivas et al where majority (44%) of them were in age group of 60 to 64 yrs.4 Among the study subjects, 63.3% of them were females, which was similar in a study conducted in Puducherry by Anil et al, where in 58.8% of the study subjects were females.5 58.8% of them were not literates as compared to 78% according to study conducted in Tamilnadu by Piramanayagam et al and Majority of them belonged to Class IV socio economic status according to Modified Kuppuswamy classification which was similarly observed in a study by Quadri et al.[1,6] However, in contrast a study by Srinivas et al revealed that majority of them belonged to Class V socio economic status.[4]

Our study revealed that elderly people aged 60 and above were having high burden of non-communicable disease like Hypertension, Diabetes, Cataract and Osteoarthritis. The most common morbidity among geriatric people in our study was Arthritis (75%) which was similarly observed in Anil et al. However, in a study conducted by Bayapareddy et al, majority of them had ocular diseases.6 63.9% of them reported hypertension which was very high as compared to other studies done by Anil et al and Srinivas et al which reported 14% and 12%.4 It was found that 33.3% of our study subjects were Diabetic which was higher than other studies conducted in Vishakapatnam, Andhra Pradesh by Srinivas et al (6%)

and in Auranghabad by Jadha et al (13.92%).3,4 Hypertension and Diabetes are most common disease of elderly and since geriatric clinic in our field practice area is a well known clinic with availability of drugs free of cost and since 42% of them were literates, more cases could have been reported. 55.6% of them had Cataract in our study, which was lower than a study conducted in Bihar (61.25%).2 However, higher in studies conducted in Andhra Pradesh (20%) and (40.16%) Aurangabad.[3,4]

CONCLUSION

The study among the elderly in the rural area of Tamilnadu, Pondicherry, Bihar, Chandigarh, Haryana, India has highlighted a high prevalence of morbidity and identified common existing medical problems such as like arthritis, cataract, hypertension, and diabetes mellitus. There is an urgent need to develop geriatric health care services in the developing countries like India and provide training to health care providers to manage the commonly existing health problems in the community. Measures to be enhance social support systems and social integration like guidance, counselling to the family members and financial support to the elderly need to be provided through voluntary agencies and welfare associations. Health professionals need to be oriented to the needs of geriatric population at PHC level.

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Cite this article as: Gladius JH, Archana Lakshmi PA, Vidya DC, Das B. A study on morbidity status of geriatric population in the field practice area of Karpaga Vinayaga Institute of Medical Sciences, Tamil Nadu, India. Int J Community Med Public Health 2016;3:2575-8.