

Original Research Article

# Community based cross sectional study on the health status of geriatric population


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## Abstract

**Introduction:** Changing demographic profile has resulted in increase in number of elderly. They suffer from a multitude of problems.

**Materials and methods:** Cross sectional community based study was conducted upon elderly population of rural field practice area of medical college hospital. Socio-demographic details and morbidity profile was noted.

**Results:** 72% belonged to the age group of 60-69 years. 59% were females. 53% were illiterate and majority of them belonged to SES class IV and V. 79% of elderly were suffering from at least one medical condition. 42% had hypertension, 27% suffered from diabetes mellitus, 32% had joint problems, 12% had cataract and dementia was seen in 7%. 33% had respiratory infection and 19% suffered from GI infections.

**Conclusion:** Both acute and chronic health problems coexist in the elderly.

## Key words

Cross Sectional Study, Elderly, Health Status, Morbidity.

## Introduction

The expectation of life at birth in developed countries has increased over the years and has resulted in changes in the population pyramid resulting from the increase in number of elderly. Globally, there were estimated 605 Million

elderly in the year 2002 and is expected to rise to more than 1.2 billion by the year 2025. Elderly constitute about 8% of total population in India and is expected to rise to 19% by the year 2050 [1].

Elderly suffer from a multitude of medical problems. This group is vulnerable to infectious diseases as well as chronic life style disorders. Type 2 diabetes mellitus, hypertension, stroke, heart diseases, chronic lung disease, dementia, joint problems, cataracts etc. are common in this age group. Respiratory infections and GI involvement are also common [2].

Geriatric clinics have been established in the state of Bihar and cater to the needs of the elderly. Knowledge of profile of medical conditions of elderly can be helpful in planning of the services [3]. Hence, this study was undertaken.

### **Aim and objectives**

The present study was conducted to find the health status and morbidity pattern of elderly persons residing in rural field practice area of a medical college hospital.

### **Materials and methods**

The present study was community based cross sectional in nature conducted in the field practice area of a medical college hospital. The study subjects included residents of the area above 60 years of age. Seriously ill persons and those who were not usually resident were excluded.

Sarasakumari, et al. found the prevalence of acute diseases in elderly to be 83% [4]. Considering  $Z=1.96$  and  $L=10\%$ , the sample size was estimated to be 88. For the non-response rate of 10% and further rounding off, the sample size was calculated as 100. Systematic random sampling was done and every 5th house of the selected villages was selected in the study. A house to house visit of the area was done. Informed consent was taken from the head of the selected families. If the house did not have any elderly, next house was selected where elderly was available.

A pre-tested, semi-structured proforma was used for the data collection. Details regarding socio-demographic background, morbidity profile and

treatment seeking behavior were noted. Thorough clinical examination was done and findings were noted system wise.

The collected data was coded and entered into Microsoft Excel 2007 and was further analyzed using SPSS v 16.0. Numerical variables were summarized as Mean & SD and categorical variables as frequency and percentages. Appropriate statistical tests were done and p value of less than 0.05 was considered to be statistically significant.

### **Results and Discussion**

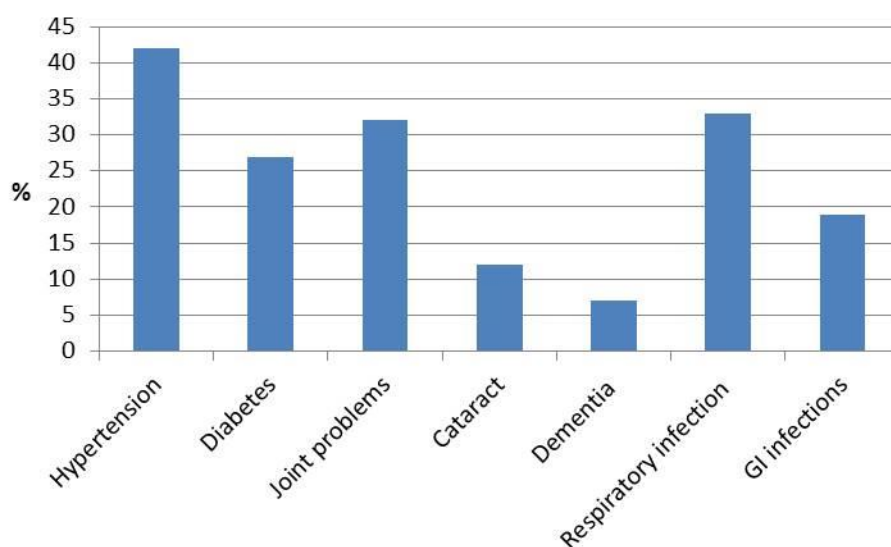
The present study included 100 study subjects. 72% of them belonged to the age group of 60-69 years. 59% of them were females. 53% were illiterate and majority of them belonged to SES class IV and V. About 1/3<sup>rd</sup> of them were widowed/ widower.

Kumar, et al. [5] observed in Varanasi that maximum subjects (47.0%) belonged to the 60–65 years age group, 52.7% were women, around three-fourth of the subjects belonged to OBC category (73.4%), and about 40% of the subjects were not working at present. Around two-third (63.9%) of the subjects were illiterate, and about 58% of the subjects were from middle class, which included SES classes II and III. Reshmi, et al. [6] found that 76% of the subjects were between the age of 60-69 years. 51% of the participants were male and 49% were female. 70% belonged to the lower socio-economic class. Saxena, et al. [7] observed that most of the elderly belonged to 60 to 70 years age group (74.6%). Only 7.4% of them were 80 years and above. 56.6% elderly did not have any formal schooling. 41% elderly belonged to Below Poverty Line as per Government of India's criterion. Although India is known for joint family system but surprisingly 71% elderly were living in nuclear family. 27% of elderly were widow/ widowers but there was no case of divorce. Majority of elderly were working (40.2%) as Government, Non- Government or self-employee. Only 9% were found to be retired.

In the present study, 79% of elderly were suffering from at least one medical condition. Among the chronic illnesses, 42% had hypertension, 27% suffered from diabetes mellitus, 32% had joint problems, 12% had

cataract and dementia was seen in 7%. Among acute infections, 33% had respiratory infection and 19% suffered from GI infections. 11% of them were dependent upon others for daily activities (**Graph – 1**).

**Graph - 1:** showing morbidity profile of elderly.



Kumar, et al. [5] observed that around 85% of the elderly experienced at least one health problem. The most frequent health problem was musculoskeletal problem (56%), followed by hypertension (34.1%) and cataract (25.4%). Majority of them preferred allopathic medicine (57.6%), followed by ayurvedic medicines (10.2%) and homeopathic medicine (6.1%) for their health problems, while 26% were not taking any medical help for their health problem.

Kamble, et al. [8] reported that the various symptoms reported by elderly people were, gastric acidity (11.3%), Hemorrhoids (3.4%), haematuria (1.01%) and urinary incontinence (1.01%). Among musculoskeletal disorders, osteoarthritis of knee was the commonest problem (24.7%). Sciatica was diagnosed among 1.42%, spondylitis among 1.2% and rheumatoid arthritis among 1% persons. Among neurological symptoms, 1% elderly people were hemiplegic, 0.61% was known case of Parkinsonism, 0.61% was having facial palsy, and 3% were having peripheral neuropathy. Asthma and chronic bronchitis was present among 2.6% and 2.4%

elderly people respectively. Reshmi, et al. [6] found that among the acute diseases, maximum prevalence was that of fever (37%) and followed by cough (36%). The least prevalence was that of tooth ache (1%). Among the chronic diseases; maximum prevalence was that of hypertension (49%) and the least prevalence was that skin diseases (1%) and cancer (7%). Dependency was seen in managing money (43%), followed by washing chores (32%).

Saxena, et al. [7] found that 30.8% people belonged to hypertensive category, while 24.3% individuals were in Pre-hypertensive category. Females were (39.2%) hypertensive than males (23.2%) however more males were found in Pre-hypertensive category. Cholesterol levels were found normal in 90% of population but 9.7% cases showed moderate to high risk level and the percentage of females in the high-risk group was higher. 8% population belonged to pre/frank diabetic status. Regarding addiction, 50% elderly male reported to be having habit of drinking alcohol. Smoking was reported by 31.3% elderly male while tobacco chewing was reported by

only 14.9%. Amongst women, most common addiction was smoking (25.4%).

### **Conclusion**

It is concluded from the present study that there are multiple health problems coexisting in the elderly. The physical and psychological implications of these are important and need the strengthening of geriatric health care services as per the programmatic guidelines and the local situation.

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