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# **Original Research Article**

# Morbidity pattern and psychosocial problems of elderly in a rural population of Uttar Pradesh, India: a cross-sectional study

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#### **ABSTRACT**

Background: Ageing is a universal process and it affects every individual, family, community and society. It is a normal, progressive and irreversible process. Ageing is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes, with advancement of age. Population ageing is a global phenomenon. Aim of the study was to study the morbidity profile and their psychosocial problems of the elderly in a rural population in the state of Uttar Pradesh, India.

Methods: This was a cross-sectional community based descriptive study. People of either sex, more than 60 yrs of age residing in the field practice areas of department of community medicine constituted the study population. Sociodemographic information like name, age, sex, religion, education, occupation etc. and other information like housing, ventilation, overcrowding were collected in semi-structured and pretested proforma, after obtaining informed consent. The multi-stage sampling methodology was adopted for the selection of study unit.

Results: A total of 272 elderly with 173 male and 99 females were interviewed in this study. About one fourth of the elderly belonged to age 60-61 years (25.7%). More than half of the elderly had a fall within last 12 months (66.2%). Not much difference was observed in the percentage of fall within 12 months in male (64.7%) and females (68.7%). The majority of the males (64.7%) and females (81.8%) had pain in joints as the presenting symptom. The second most common symptom was found to be weakness. Only 45.6% of the elderly were satisfied with their life. There was similar percentage of male (45.7%) and female (45.5%) elderly who were satisfied with their life. However, 51.8% felt empty in their life and 45.2% preferred to stay in the house.

**Conclusions:** The need for the hour is to set up special health services for geriatric population in accordance with the common existing problems. Providing screening services as well as curative, rehabilitative services and convalescent homes to provide long term care is also a priority.

**Keywords:** Elderly, Morbidity, Psychosocial

### INTRODUCTION

Ageing is a universal process and it affects every individual, family, community and society. It is a normal, progressive and irreversible process. Ageing is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes, with advancement of age. Population ageing is a global phenomenon. The proportion of the elderly population is growing much faster than the overall population due to decreasing fertility and increasing life expectancy. In Indian society the increasing number of older people has been well perceived. Though increase in population represents the socioeconomic development and good public health practice, it has also lead to economic and social crisis due to increased demand for health and welfare services.2 In India, the elderly population (more than 60 years of age)

is 10 crore, forming 10% of total population and it is estimated to reach up to 15 crore by 2020. The demographic population is rising due to better health control of communicable diseases and better treatment facilities of these diseases resulting in increased longevity. From the morbidity point of view, at least 50% of the elderly in India have chronic diseases. This poses a greater responsibility on the health services especially in developing countries like India where there is a greater strain on available health infrastructure.<sup>3</sup>

The elderly people mainly suffer from two types of health issues i.e. medical and psychosocial. Common medical problems include cardiovascular, musculoskeletal, visual, and gastrointestinal diseases etc., while common psychosocial problems include impaired memory and intelligence, anxiety, depression, rigidity of outlook, dependency and dissatisfaction with family members, earning and occupation. Vandana et al studied among elderly at Mumbai and found that 93.1% elderly were morbid in the study area. <sup>2</sup>

Despite a high pattern of morbidity among older individuals in India, very few and limited studies have been conducted in the state of Uttar Pradesh. The present study aimed to study the morbidity profile and their psychosocial problems of the elderly in a rural population in the state of Uttar Pradesh.

## **METHODS**

This was a cross-sectional community based descriptive study in the Field Practice Areas of Department of Community Medicine, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India. The study was approved by the Ethical Committee of the Institute. People of either sex, more than 60 years of age residing in the field practice areas of department of community medicine constituted the study population.

Elderly residing for at least six months in the area were considered as a resident and included in the study. Elderly whose native place was other than present place of residence, but the duration of stay was more than six months were included in the study. Socio-demographic information like name, age, sex, religion, education, occupation etc. and other information like housing, ventilation, overcrowding were collected in semi-structured and pretested proforma, after obtaining informed consent. The multi-stage sampling methodology was adopted for the selection of study subjects. Firstly, rural and urban training centres were selected. Secondly, villages and mohallas were selected, thirdly, households were selected and finally study subjects were selected.

## Statistical analysis

The collected data was entered in Microsoft Excel computer program. The appropriate statistical methods were used for the analysis of the data. All the analysis

was carried out by using SPSS 16.0 version (Chicago, Inc. USA).

#### RESULTS

A total of 272 elderly with 173 male and 99 females were interviewed in this study. About one fourth of the elderly belonged to age 60-64 years (25.7%). However, 34.1% were males and 11.1% were females. Majority of both male and female elderly belonged to Hindu community and backward caste. The percentage of illiterate elderly was higher in total (87.5%) as well as male (83.8%) and females (93.9%). In all, about half of the elderly were unemployed (50.7%). Females (82.8%) constituted higher percentage of unemployed than males (32.4%) (Table 1).

Table 1: Distribution of elderly according to sociodemographic profile.

Socio- demographic	Male (n=173)		Female (n=99)		Total (n=272)	
profile	No.	%	No.	%	No.	%
Age in years						
60-64	59	34.1	11	11.1	70	25.7
65-69	67	38.7	52	52.5	119	43.8
70-74	32	18.5	29	29.3	61	22.4
≥75	15	8.7	7	7.1	22	8.1
Religion	173	100.0	99	100.0	272	100.0
Hindu	146	84.4	79	79.8	225	82.7
Muslim	27	15.6	20	20.2	47	17.3
Caste	173	100.0	99	100.0	272	100.0
SC/ST	13	7.5	7	7.1	20	7.4
Backward	126	72.8	75	75.8	201	73.9
General	34	19.7	17	17.2	51	18.8
Education	173	100.0	99	100.0	272	100.0
Illiterate	145	83.8	93	93.9	238	87.5
Just literate	6	3.5	2	2.0	8	2.9
Primary-	5	2.9	1	1.0	6	2.2
junior high						
school						
High school-	7	4.0	2	2.0	9	3.3
Intermediate						
Graduate+	10	5.8	1	1.0	11	4.0
Occupation	173	100.0	99	100.0	272	100.
						0
Unemployed	56	32.4	82	82.8	138	50.7
Unskilled	14	8.1	8	8.1	22	8.1
Semi-skilled	12	6.9	3	3.0	15	5.5
Skilled	8	4.6	2	2.0	10	3.7
Clerical/Shop	25	14.5	3	3.0	28	10.3
owner						
Farmer	47	27.2	1	1.0	48	17.6
Semi-	8	4.6	0	0.0	8	2.9
professional						
Professional	3	1.7	0	0.0	3	1.1

More than half of the elderly had a fall within 12 months (66.2%). Not much difference was observed in the

percentage of fall within 12 months in male (64.7%) and females (68.7%) (Table 2).

The majority of the males (64.7%) and females (81.8%) had pain in joints as the presenting symptom. The second most common symptom was found to be weakness (Table 3). Only 45.6% of the elderly were satisfied with their life. There was similar percentage of male (45.7%) and female (45.5%) elderly who were satisfied with their life. However, 51.8% felt empty in their life and 45.2% preferred to stay in the house (Table 4).

Table 2: Distribution of elderly according to falls and injuries by area of residence.

Fall and injuries*	Male (n=173)		Female (n=99)		Total (n=272)	
	No.	%	No.	%	No.	%
Fall within 12months	112	64.7	68	68.7	180	66.2
Injuries within 12 months	72	41.6	48	48.5	120	44.1

<sup>\*</sup>Multiple response

Table 3: Distribution of elderly according to co-morbidity by area of residence.

Co-morbidity	Male (n=1'	Male (n=173)		:99)	Total (n=27	72)
	No.	%	No.	%	No.	%
Weakness	104	60.1	79	79.8	183	67.3
Hazziness	68	39.3	68	68.7	136	50.0
Ear pain	32	18.5	4	4.0	36	13.2
Cough	58	33.5	21	21.2	79	29.0
Dyspnoea	51	29.5	43	43.4	94	34.6
Constipation	45	26.0	34	34.3	79	29.0
Burning micturition	23	13.3	31	31.3	54	19.9
Pain in joints	112	64.7	81	81.8	193	71.0
Sleep disturbances	35	20.2	34	34.3	69	25.4

<sup>#</sup>Multiple response

Table 4: Distribution of elderly according to psychosocial problems by area of residence.

Psychosocial problems	Male (n=173)		Female (n=99)		Total (n=272)	
	No.	%	No.	%	No.	%
Satisfaction with their life	79	45.7	45	45.5	124	45.6
Feeling empty in life	65	37.6	76	76.8	141	51.8
Afraid about something bad to happen	47	27.2	49	49.5	96	35.3
Feel happy most of the time	59	34.1	39	39.4	98	36.0
Felt helpless	69	39.9	37	37.4	106	39.0
Prefer to stay in house	78	45.1	45	45.5	123	45.2
Feel full of energy	61	35.3	49	49.5	110	40.4
Other people are better	59	34.1	48	48.5	107	39.3

<sup>#</sup>Multiple response.

# **DISCUSSION**

India's elderly population has already crossed 100 million mark during 2011. As per analysis of census data and projections, elderly population sex ratio is in favor of female elderly. As per the census 2011, whereas for total Indian population sex ratio is in favor of male population in ratio 940:1000, for elderly at (60+) population it's in favor of elderly women by 1022:1000. Elderly population analysis shows that in upper age groups, population of older women is increasing remarkably. At the age of 65, 70, 75 and 80 there are 1310, 1590, 1758 and 1980 elderly women respectively per 1000 elderly men. Bharati et al assessed the health problems of the elderly in Pudicherry in across-sectional study carried out on 214

elderly persons from the age group of 60 years and above using a pre-designed and pre-tested questionnaire that addressed the disease magnitude in comparison with the socioeconomic variables.<sup>5</sup> In this study, the most of the elderly belonged to age group of 65-69 years and this corresponds with the findings reported by Singh and Siva and Tiwari et al.<sup>6,7</sup>

In the present study, majority of both male and female elderly belonged to Hindu community and backward caste. The percentage of illiterate elderly was higher in total as well as male and females. In all, about half of the elderly were unemployed. Females (constituted higher percentage of unemployed than males in the present study. Kishore and Garg had reported 55% of females

and 45% of males in a study conducted in the village Anji (Mothi) of Wardha district. Gurav et al found 48.02% males and 51.98% females in slum area near Kalwa of Thane district. 8,9 In the study done by Batia et al out of the total 361 aged persons, 152 were males and 209 were females. Bawalkar et al found 55.3% females over 44.7% of males, with sex ratio of 1362.75/1000 males. In the present study, more than half of the elderly had a fall within 12 months (66.2%).

Not much difference was observed in the percentage of fall within 12 months in male (64.7%) and females (68.7%). Stevens et al reported that one out of three older adults (those aged 65 or older) falls each year but less than half talk to their healthcare providers about it. <sup>12</sup> In this study, the majority of the males (64.7%) and females (81.8%) had pain in joints as the presenting symptom. The second most common symptom was found to be weakness. In a study by Banks had reported overall 60.2% of elderly had joint pains as a presenting symptom this study also reported that 70.4% Of elderly females and 48.1% of elderly males had joint pains. <sup>13</sup>

Agrawal et al examined patterns in morbidity prevalence and found that morbidity prevalence was 13% greater among older widows compared to older widowers. Adjusted prevalence of communicable and non-communicable diseases was found 74 and 192 per 1000 older widows respectively.

In this study, only 45.6% of the elderly were satisfied with their life. There was similar percentage of male (45.7%) and female (45.5%) elderly who were satisfied with their life. However, 51.8% felt empty in their life and 45.2% preferred to stay in the house. There is a need to effectively plan health care services for the elderly and prepare feasible implementation designs relevant to country needs. The problems associated with aging of population are inadequacy of facilities for medical treatment and provisioning of economic and social support hence information on morbidity profile of this population is felt essential for planning of its health care facilities in this area.

#### **CONCLUSION**

The need for the hour is to set up special health services for geriatric population in accordance with the common health problems/morbidity profile. Providing screening as well as curative, rehabilitative services and convalescent homes to provide long term care is also a priority.

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