

**ORIGINAL RESEARCH ARTICLE** 

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# A comparative Study of Health Seeking Behaviour of Elderly in Rural and Urban Area of Prayagraj

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# ABSTRACT

**Background:** Health of elderly is already a neglected area as general ageing comes with acceptance of diseases. The aim was to compare the health seeking behaviour of elderly in Prayagraj district in Uttar Pradesh.

**Methods:** A cross sectional study was carried out on elderly aged 60 years and above; selected from urban and rural areas of Prayagraj district by multistage random sampling and were interviewed using pre tested schedule. Data analysis was done on SPSS 16 version.

**Results:** A total of 400 elderly were surveyed, majority were lived in joint families (59%), illiterate (43.75%), and belonged to lower class (34.75%). More of urban elderly were seeking treatment (76%) than rural elderly (66%) whereas Allopathic therapy was preferred in both the group. In urban areas elderly prefer private facilities for the treatment (64.5%) whereas more of rural elderly preferred government health facilities (53%). The common cause of having no faith in government health services as stated by elderly in both rural (41.7%) and urban (29.3%) area was non availability of medicine.

**Conclusion:** Over all the study showed that more of urban elderly seek treatment for their health problems as compared to rural elderly which could be attributed to inaccessibility to health care services.

Keywords: Elderly, rural, urban, health seeking behaviour

# INTRODUCTION

Ageing is inevitable process which comes along with higher risk of diseases and disability. At the moment, there is no United Nations standard numerical criterion, but the UN agreed cut off is 60+ years to refer to the older population.<sup>1</sup>

Globally, more than 800 million people are aged 60 years and above, which represent 12% of total population.^2

In India, geriatric-aged population is 8.0% which corresponds to roughly 98 million. According to re-

cent statistics related to elderly people in India, in the year 2001, it was observed that as many as 75% of elderly persons were living in rural areas. About 48.2% of elderly persons were women. About 90% of the elderly were from the unorganized sector, i.e., they have no regular source of income. The number of centenarians in India is about 200,000.<sup>3</sup>

Elderly population in India is projected to rise to 12.4% of population by 2026 and to become 20% by 2050.4

On one hand the advance of modern medicine and

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success of public health measures, together has effectively declined the fertility along with increasing longevity has resulted in rising percentage of elderly which has huge impact on economic condition as well as on health care services.<sup>5</sup>

The health problems of elderly are often chronic and disabling and may require continues drug treatment, physiotherapy, and long-term rehabilitation. However, dedicated geriatric health care in India is still a newer concept, lack of specialized and trained workforce and absence of an well organized infrastructure beyond tertiary care hospital still poses a greater challenge to cater health services for the needful.<sup>6</sup>

Healthcare-seeking behaviour is defined as "any activity undertaken by individuals who perceived themselves to have a health problem or to be ill for purpose of finding an appropriate remedy"<sup>7</sup>. Healthcare-seeking behaviour includes the timing and types of healthcare service utilization and may affect population health outcomes <sup>8</sup>.

When elderly people take care of their problems at right time and approach the health system, the problems can be managed more effectively and there are lesser chances of developing complications. Healthseeking behaviors of elderly are influenced by a variety of factors such as socioeconomic conditions, age, social status of the person, gender, authority of the elderly within the family, financial security of elderly, their own perceived health status and illness, type of illness, and access to services and place of dwelling.<sup>9</sup>.

As three fourth of elderly population reside in rural area, this population is characterized by irregular utilization of healthcare services due to inaccessibility to health facilities, immobility, misconceptions, and poverty. <sup>10</sup> While some choose to self-medicate or use home remedies, the majority report that they do not seek treatment because their ailment is "not serious (32-50%) or because of financial constraints (20-28%).<sup>11</sup>

As the living, social and economical conditions of elderly living in rural and urban areas are different, we need to stratify and study the health seeking behavior separately so as for better understanding and effective utilization of health services.

# METHODOLOGY

Cross sectional study design was adopted in the present study. The study was done in randomly selected urban wards and primary health centers (PHC) of Prayagraj. There are 80 Wards and 26 PHC's in Prayagraj district with total population 59,54,391 (NFHS- III). The study was conducted for the period of one year i.e. August 2014 to July 2015. The study universe consists of all Elderly, aged 60 years and above of rural and urban areas of Prayagraj.

Elder, aged 60 and above has been taken as study unit. [Age was ascertained based on subject's own

statement. Most of them were able to state their approximate age, while those who were unable to state, then any other family members or friend were inquired or any major life event like marriage, birth of first child or any historic event in the history was inquired.]

Multi-stage random sampling was done. The urban wards of Prayagraj city and total PHC's of Allahabad were listed. In the First stage two wards from the urban area and two PHC's from rural area were selected randomly. These were the Ward number 28 and 47 from the urban area and Jasra and Ghoorpur PHC in rural area.

In the second stage, two colonies per ward were selected randomly. Those were 1) Beli colony and Tagore town from Ward no. 28 and 2) North Malaka and South Malaka from Ward no. 47. While two villages each was selected randomly from each of the two PHC (Jasra and Ghoorpur PHC). These were 1) Village Jasra and Village Khatagiya under Jasra PHC and 2) Village Bekar, and Village Birval under Ghorpur PHC. And finally each house in the colonies and villages were visited till the adequate sample size is met.



Fig 1: flow chart of study design

**Sample Size:** The study was conducted in rural and urban areas of Prayagraj district with a population of 59,54,391. The percentage of elderly above the age 60 years according to NFHS III is 8.5%. Thus, the total population of elderly above age of 60 years is likely to be 5,06,123. Using the table given by "The Research Adviser <sup>12</sup> the sample size was calculated, taking 5% as margin of error with confidence interval of 95%, the sample size comes out to be 384, and we have taken 400 for sample study.

Elderly aged 60 years and above were included in the study. Those elderly people who were not willing to participate or those that were not in position to give information due to any reasons were excluded from the study.

**Ethical issues:** Ethical clearance from the institutional ethics committee was obtained before conducting the study. Besides, informed consent was taken from each study participant.

Data was collected by house-to-house visits. Informed consent was obtained from the study subjects after explaining the purpose and objective of the study. The study subjects were interviewed and examined. The collected information was recorded on a pretested and pre-designed questionnaire. The survey questionnaire gleans information on health seeking behaviour, factors deterring them from seeking health care.

**Statistical Analysis**- The data was analyzed using statistical software, SPSS Version 16. Chi- square tests and Z- test were used to test the associations between the different variables. P value less than 0.05 was considered as significant.

### Measurements used in the study:

**Socioeconomic Classification:** it was based on Modified B.G. Prasad scale 2014<sup>13.</sup>

**Weight:** All the subjects were weighed without foot wear and heavy clothing, using an electronic weighing scale with an error of  $\pm 100$  grams by trained investigators. The weighing scale was regularly checked with known standard weights.

**Height:** It was measured using standardized measuring tape. The study subject were made stand on level

ground, without footwear, against a wall, by using measuring tape to the nearest of 0.5 cm.

**BMI:** Body mass index (BMI) was calculated as weight in kg divided by square of height in meters.

## RESULT

A total of 400 elderly surveyed, Male (53.75%) and Female (46.25%), majority of elderly belongs to age group 60-70 year in both the groups. In rural more than half (64.5%) and in urban about half (53.5%) were living in joint families, which was found to be statistically significant.

Significantly more than half (62%) elderly in rural were found to be illiterate as compared to (25.5%) in urban group. Most elderly in both groups (53%) i.e, were either retired from services or were not working at the time of study.

Among those working, more in rural areas were engaged in agricultural activities (22.5%), followed by (8.5%) who were laborer, while in urban area the proportion of elderly were engaged in service and semiskilled work, 7.5% and 5% respectively which was found to be significant as depicted in **Table 1**.

#### Table 1: Socio demographic Profile of Rural and Urban Elderly.

Variables	Rural (200)	Urban (200)	Total (400)	P- value
Age				
60-70	129 (64.5%)	124 (62%)	253 (63.25%)	p> 0.05
70-80	49 (24.5%)	58 (29%)	107 (26.75%)	
80 and above	22 (11%)	18 (9%)	40 (10%)	
Gender				
Male	110 (55%)	105 (52.5%)	215 (53.75%)	P> 0.05
Female	90 (45%)	95 (47.5%)	185 (46.25%)	
Type of Family				
Nuclear	31(15.5%)	56 (28%)	87 (21.75%)	p < 0.05*
Joint	129 (64.5%)	107 (53.5%)	236 (59%)	
Third Generation	36 (18%)	32 (16%)	68 (17%)	
Single members	04 (2%)	05 (2.5%)	09 (2.25%)	
Socioeconomic status				
Upper (I)	09(4.5%)	57 (28.5%)	66 (16.5%)	p < 0.05*
Upper Middle (II)	19 (9.5%)	41 (20.5%)	60 (15%)	-
Lower Middle (III)	25 (12.5%)	24 (12%)	49 (12.25%)	
Upper Lower (IV)	50 (25%)	36 (18%)	86 (21.5%)	
Lower (V)	97 (48.5%)	42 (21%)	139 (34.75%)	
Education				
Illiterate	124 (62%)	51 (25.5%)	175 (43.75%)	p < 0.05*
Literate	76 (38%)	149 (74.5%)	225 (56.25%)	•
Occupation				
Not Working/Retired	89 (44.5%)	123 (61.5%)	212 (53%)	p < 0.05*
Agriculture	45(22.5%)	02 (1%)	47 (11.75%)	-
Labourer	17 (8.5%)	03 (1.5%)	20 (5%)	
Semi-skilled worker	05 (2.5%)	10 (5%)	15 (3.75%)	
Skilled Worker	3 (1%)	07 (3.5%)	10 (2.5%)	
Business	07 (3.5%)	08 (4%)	15 (3.75%)	
Service	04(2%)	15 (7.5%)	19 (4.75%)	
Other (housewife)	30 (15%)	32 (16%)	62 (15.5%)	
Body Mass Index (BMI)				
Underweight ( $< 18.50$ Kg/m <sup>2</sup> )	77 (38.5%)	27 (13.5%)	104 (926%)	p < 0.05*
Normal Range (18.50 - 24.99 Kg/m <sup>2</sup> )	96 (48%)	103 (51.5%)	199 (49.75%)	•
Overweight ( 25.00 - 29.99 Kg/m <sup>2</sup> )	22 (11%)	55 (27.5%)	77 (19.25%)	
Obese $(30.00 - 40.00 \text{ Kg/m}^2)$	05 (2.5%)	15 (7.5%)	20 (5%)	

# Table 2: Health Seeking Behaviour of Elderly in Rural and Urban Area of Prayagraj

0	-			
Variable	Rural (200)	Urban (200)	Total (400)	P value
Taking Treatment				
Yes	132 (66%)	152 (76%)	284 (71%)	p<0.05**
No	68(34%)	48 (24%)	116 (29%)	
Type of Treatment*				
Allopathic	125(94.7%)	141(92.8%)	266(93.7%)	p>0.05
Ayurvedic	05 (1.5%)	06 (3.2%)	11 (3.9%)	
Homeopathic	02 (3.8%)	05 (4%)	7 (2.4%)	
Place of Treatment*				
Govt. facilities	70 (53%)	45 (29.6%)	115 (40.5%)	p<0.05**
Private Clinic/ Hospital	37 (28%)	98 (64.5%)	135 (47.5%)	
Local/Quack	21 (16%)	07 (4.6%)	28 (9.9%)	
Other	04 (3%)	02 (1.3%)	6 (2.1%)	
Distance of Nearest Health Facilities*	-	-	-	
<1 kilometer	63 (47.7%)	112(73.7%)	175 (61.6%)	p<0.05**
>3 kilometers	69 (52.3%)	40 (26.3%)	109 (38.4%)	-
Faith in Government Health Facilities*				
Yes	96 (73%)	77 (50.6%)	173 (60.9%)	p<0.05**
No	36 (27%)	75(49.4%)	111 (39.1)	-

\*Among those taking treatment at present time; \*\*Statistically significant



Figure 2: Reason Cited for Not Having Faith in Govt. Health Facilities

The socioeconomic classification showed that significantly more of rural elderly belonged to lower class [SES V] (48.5%) whereas more proportion of urban elderly belonged to upper class [SES I] (28.5%).

The body mass index shows more of rural elderly

(38.5%) were underweight, whereas prevalence of over- nutrition i.e, (overweight and obesity) were more in urban elderly (27.5%) and (7.5%) respectively. This difference was found to be statistically significant.

**Table No.2**, depict that significantly more of urban elderly 76% were taking treatment as compared to 66% of rural elderly. Both urban and rural elderly preferred predominantly allopathic treatment.

Among the elderly taking any kind of treatment at the time of study, in rural area about half 53% preferred taking treatment at Govt. Health facilities, whereas in urban areas more of elderly 64.5% preferred private clinics/ Hospital. The difference was found to be statistically significant.

In rural area for about half i.e, 52.3% the health facilities were located more than three kilometers. For more proportion of urban elderly 73.7%, it was located within the periphery of three kilometers as shown **Table No. 2**. This was also found to be statistically significant (p<0.05).

Majority of elderly (73%) in rural area as compared to (50.6%) in urban area had faith in government health facilities. The difference was found to be statistically significant (p<0.05.)

**From Fig 2,** it can be seen among the elderly having no faith in govt. health facilities, most common reason was non availability of medicine reported by 42% and 29% of rural and urban elderly respectively. The difference was found to significant statistically. Followed by overcrowding as stated by 25% rural and 23% of urban elderly respectively.

#### DISCUSSION

In present study, (66%) of elderly in rural area and (76%) of elderly in urban areas were taking treatment, which was also statistically significant which is similar to study done by P Ray Karmakar & et al<sup>14</sup> in Hoogly district where around 72% of elderly were seeking some kind of treatment which is similar to our urban finding and slightly higher than rural.

In our study out of 284 elderly taking treatment, both in rural and urban areas, majority 93.7% were taking Allopathic treatment, which is higher than study done by Deepak Sharma &et al<sup>15</sup> in Shimla, where overall 81.8% of elderly in both areas were taking allopathic treatment. Clausen F et al<sup>16</sup> in their study in Botswana found that the modern medicine was commonest choice of treatment which is similar to our study.

In present study out of 284 elderly taking treatment, around half (53%) in rural avail treatment in government facilities whereas in urban area more than half (64.5%) are taking treatment from private sectors, which is similar to study done by Deepak Sharma & et al <sup>15</sup> in urban and rural areas of Shimla and Marinkarvander Hoeven &et al <sup>17</sup> in South Africa, where more of rural elderly seek treatment from government health facilities, which could be attributed to fact that more of elderly in rural area belonged to lower socioeconomic class.

In rural area for about half (52.3%) whereas in urban area for only about one third (26.3%) health facilities were located more than three kilometers, which is similar to finding as mentioned by Ingel A. Nath & et al<sup>18</sup> where for 59.7% rural elderly the health care facilities were located more than three kilometers from there dwelling place. Satyajet Chakarborty & et al<sup>19</sup> in a cross-sectional study in rural area of West Bengal, found around 50% of subject received treatment from centre located within one kilometer and only 13% had to travel distance more than three kilometers which is contrary to our finding probably due to better availability of health care infrastructure.

Out of 284 elderly taking treatment, in rural areas (72.7%) had faith in government facilities as compared to urban area where around half (50.7%) had faith. In study by Deepak Sharma &et al <sup>15</sup> in urban and rural area of Shimla 60.7% of elderly had faith in govt. Health facilities which higher than urban area but lower than rural areas finding.

#### CONCLUSION

More of urban elderly were taking treatment, whereas rural elderly preferred public health facilities over private sector.

The main reason for non utilization of government health facilities was non availability of medicine common for both areas.

#### RECOMMENDATION

Mobile health care could be beneficial for elderly in

rural areas as accessibility to health facilities is one of main problem.

Geriatric clinics running in urban areas need to be extended to rural areas for maximum utilization.

To revive faith in government facilities esp in urban areas several loopholes i.e, inadequate drugs, lack of staff need to be addressed promptly

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