

# Health-seeking behaviour of elderly individuals: A community-based cross-sectional study

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## ABSTRACT

**Background.** The health-seeking behaviour of elderly individuals can help in ascertaining the determinants and in developing appropriate policies for their healthcare.

**Methods.** In this community-based cross-sectional study, we included 250 elderly persons above 60 years of age living in the urban field practice area of Shri Vasantrao Naik Government Medical College, Yavatmal, Maharashtra. We used a structured proforma to collect information about their health-seeking behaviour.

**Results.** Overall, 48% of the study subjects chose an allopathic practitioner. The difference in the health-seeking behaviour for self-treatment, treatment from traditional healers and paraprofessionals as one group and allopathic treatment as another group was significant for the determinants of age ( $p < 0.001$ ), educational level ( $p < 0.0001$ ) and poverty status ( $p = 0.0007$ ) and registration under any government scheme ( $p = 0.0446$ ). The average expenditure on health was significantly more among those who were above 75 years of age, employed, educated and above the poverty line, irrespective of gender.

**Conclusion.** Elderly persons who prefer allopathic treatment are likely to be above 75 years of age, those having some education and those above poverty line.

Natl Med J India 2015;28:181–4

## INTRODUCTION

Increase in life expectancy with decrease in fertility has led to a demographic transition towards a higher proportion of older individuals in India. The proportion of elderly people is expected to rise from 5.6% in 1961 to 12.4% of the population by the year 2026.<sup>1</sup> The old age dependency ratio has increased from 10.9% in 1961 to 13.1% in 2001 and is projected to increase to 16.1% by 2021.<sup>1</sup> Traditionally, the joint family system in India has provided social and economic security to the elderly. However, the rapidly changing social scenario and the emergence of nuclear families are likely to expose the elderly in India to emotional, physical and financial insecurity in the future.<sup>1</sup> About 90% of the elderly do not have a regular source of income.<sup>1</sup> Other basic needs that affect

their health status include a reduced ability to generate resources, economic dependency, poor housing, loneliness and lowered self-esteem.<sup>2-4</sup> The health status of elderly women is worse than men because of their low literacy rate, not being customary owners of property and their poor representation in the labour force during their prime age, particularly in the organized sector.<sup>1</sup> Whereas robust maternal and child health services exist in developed and developing countries, health policies for the elderly are almost non-existent.<sup>2</sup> It is a major challenge to create an environment for the elderly to lead a secure, dignified and productive life.<sup>1</sup>

Health-seeking behaviour is defined as 'any activity undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy'.<sup>5</sup> The way people conceptualize the cause of their health problem and their perception of symptoms plays an important role in seeking healthcare.<sup>6</sup> An individual who perceives himself or herself to be sick shows distinct behavioural changes including confining to the bed or staying away from routine activities or going to a health practitioner.<sup>3</sup> Studies have documented several important determinants of health-seeking behaviour such as age, sex, poverty,<sup>7</sup> education and income,<sup>6</sup> historical patterns of use, illness type and severity, pre-existing beliefs about illness causation, range and accessibility of therapeutic options and their perceived efficacy, convenience, cost and quality of services.<sup>8</sup> Delays in seeking healthcare have been attributed to ageing, low economic status and a negative attitude of health workers toward the care of the elderly.<sup>2</sup> It is necessary to understand health-seeking behaviour with its determinants to sensitize the elderly towards their needs and priorities.<sup>7</sup> We aimed to assess the health-seeking behaviour of elderly people (>60 years of age) and study its effect in relation to their age, sex, education, employment status, poverty and marital status.

## METHODS

We did this community-based cross-sectional study in the urban field practice area of the Department of Community Medicine, Shri Vasantrao Naik Government Medical College, Yavatmal, Maharashtra. We used the systematic random sampling technique to enlist elderly persons (>60 years of age) from about 2000 families that inhabited the practice area. Starting from one end of the identified area, every alternate house was visited to enquire about elderly persons for an interview. If no elderly person was found, the next house was visited. If a couple >60 years of age was present, both were included in the study. After 50 elderly people were included from one area, we moved to the next area; and thus included a total of 250 elderly persons from the five parts of the practice area.

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We obtained informed consent from those included, and used a structured, pre-tested questionnaire for a personal interview. We enquired about any illness in the past month, type of treatment sought for that illness and the expenditure incurred on the illness in the past month. The respondents described the symptoms of their illness in their own words. The responses were classified into various 'types' of illnesses. The type of treatment received was divided as:

1. No treatment received;
2. Self-medication (home remedies, over-the-counter drugs and other herbal preparations without consulting a professional);
3. Traditional treatment (sought from ayurvedic/herbal healers or spiritual healers);
4. Paraprofessionals (who had received training in diagnosis and treatment of common minor ailments and medical assistants and government and non-government community health workers who received basic preventive and curative health training);
5. Allopathic treatment (from a qualified allopathic practitioner either from a government or private set-up).<sup>5</sup>

On the basis of a pilot study that showed 63 of 100 elderly people had at least one disease, we calculated a sample size of 234 (63% as the prevalence and 10% error). Thus, 250 elderly persons (113 men, 137 women) were included in the study. We used chi-square test and Student *t*-test for statistical analysis.

## RESULTS

Most of the subjects were in the age group of 60–64 years (Table I). Significantly more women were unemployed and widowed than men. More women were living with children than men. Significantly more men were registered under government schemes for the elderly than women.

Cataract was the most common morbidity among both men and women. The next were musculoskeletal disorders (fibrositis, myositis, neuritis, gout, rheumatoid arthritis, osteoarthritis, spondylitis, etc.) among women and hypertension among men. Respiratory problems included chronic bronchitis, emphysema and asthma. Gastrointestinal diseases included dysphagia, acid peptic disease, constipation, diarrhoea, inflammatory bowel disease and haemorrhoids. Ear problems mainly included hearing impairments. Neurological problems included stroke, giddiness, and syncope. Genitorurinary problems included enlargement of prostate, dysuria, nocturia, frequency and urgency of micturition (Table II).

Women had multiple illnesses more frequently than men (Table III). Most subjects received allopathic treatment (120, 48%) (Table IV). This was followed by treatment from paraprofessionals (48, 19.2%), self-medication (35, 14%), traditional treatment (24, 9.6%) and no treatment (23, 9.2%).

The difference between no treatment, self-treatment, from traditional healers and paraprofessionals as one group and allopathic treatment as another group was significant when stratified

TABLE I. Distribution of study subjects according to their demographic characteristics

Characteristic	Men (n=113)	Women (n=137)	Total (n=250)	p value
<i>Age (in years)</i>				
60–64	48 (42.5)	49 (35.8)	97 (38.8)	<0.001
65–69	34 (30.1)	32 (23.4)	66 (26.4)	
70–74	21 (18.6)	21 (15.3)	42 (16.8)	
75–79	6 (5.3)	23 (16.8)	29 (11.6)	
≥80	4 (3.5)	12 (8.8)	16 (6.4)	
<i>Education</i>				
Illiterate	36 (31.9)	47 (34.3)	83 (33.2)	0.7
Primary school	62 (54.9)	82 (59.9)	144 (57.6)	
Middle school	11 (9.7)	8 (5.9)	19 (7.6)	
High school and more	4 (3.5)	0	4 (1.6)	
<i>Occupation</i>				
Unemployed	33 (29.2)	112 (81.8)	145 (58.0)	0.001
Employed	67 (59.3)	19 (13.9)	86 (34.4)	
Retired and receiving pension	13 (11.5)	6 (4.4)	19 (7.6)	
<i>Marital status</i>				
Married	85 (75.2)	47 (34.3)	132 (52.8)	0.001
Widowed	28 (24.8)	89 (65.0)	117 (46.8)	
Divorced	0	1 (0.7)	1 (0.4)	
<i>Living with</i>				
Spouse only	12 (10.6)	18 (13.1)	30 (12.0)	0.001
Spouse and children	73 (64.6)	29 (21.2)	102 (40.8)	
Only children	25 (22.1)	87 (63.5)	112 (44.8)	
Alone	3 (2.7)	3 (2.2)	6 (2.4)	
<i>Poverty status</i>				
Below poverty line	87 (77.0)	116 (84.7)	203 (81.2)	0.1
Above poverty line	26 (23.0)	21 (15.3)	47 (18.8)	
<i>Registered under a government scheme for the elderly</i>				
Yes	27 (23.9)	13 (9.5)	40 (16.0)	0.002
No	86 (76.1)	124 (90.5)	210 (84.0)	

Figures in parentheses are percentages

TABLE II. Distribution of study subjects according to type of illness

Illness	Men (n=113)	Women (n=137)	Total (n=250)
Fever	12 (10.6)	21 (15.3)	33 (13.2)
Cataract	67 (59.3)	76 (55.5)	143 (57.2)
Diabetes	20 (17.7)	25 (18.3)	45 (18.0)
Hypertension	45 (39.8)	39 (28.5)	84 (33.6)
Musculoskeletal disorders	36 (31.9)	57 (41.6)	93 (37.2)
Gastrointestinal problems	18 (15.9)	14 (10.2)	32 (12.8)
Respiratory problems	15 (13.3)	13 (9.5)	28 (11.2)
Skin problems	20 (17.7)	21 (15.3)	41 (16.4)
Ear problems	6 (5.3)	10 (7.3)	16 (6.4)
Neurological problems	5 (4.4)	9 (6.6)	14 (5.6)
Genitourinary tract disorders	23 (20.4)	35 (25.6)	58 (23.2)

\*There was no statistically significant difference among men and women  
Figures in parentheses are percentages

TABLE III. Distribution of subjects according to number of illnesses

Number of illness(es)	Men	Women	Total
0	48 (42.5)	41 (29.9)	89 (35.6)
1	65 (57.5)	96 (70.1)	161 (64.4)
2	53 (46.9)	81 (59.1)	134 (53.6)
3	18 (15.9)	23 (16.8)	41 (16.4)
≥4	3 (2.7)	6 (4.4)	9 (3.6)

Figures in parentheses are percentages

TABLE IV. Determinants affecting health-seeking behaviour of elderly subjects

Characteristic	No treatment (n=23)	Self-medication (n=35)	Traditional (n=24)	Paraprofessionals (n=48)	Allopathic (n=120)	Total (n=250)	p value
<i>Age (years)</i>							
60–75	16 (7.8)	28 (13.7)	5 (2.4)	42 (20.5)	114 (55.6)	205 (82)	0.001
>75	7 (15.6)	7 (15.6)	19 (42.2)	6 (13.3)	6 (13.3)	45 (18)	
<i>Sex</i>							
Men	8 (7.1)	19 (16.8)	12 (10.6)	22 (19.5)	52 (46.0)	113 (45.2)	0.26
Women	15 (11.0)	16 (11.7)	12 (8.8)	26 (19.0)	68 (49.6)	137 (54.8)	
<i>Education</i>							
Illiterate	17 (20.5)	24 (28.9)	18 (21.7)	13 (15.7)	11 (13.3)	83 (33.2)	<0.001
Educated	6 (3.6)	11 (6.6)	6 (3.7)	35 (21.0)	109 (65.3)	167 (66.8)	
<i>Employment status</i>							
Unemployed	21 (14.5)	17 (11.7)	20 (13.8)	19 (13.1)	68 (46.9)	145 (58)	0.68
Employed	2 (1.9)	18 (17.1)	4 (3.8)	29 (27.6)	52 (47.6)	105 (42)	
<i>Poverty line</i>							
Below	19 (9.4)	33 (16.3)	19 (9.4)	45 (22.2)	87 (42.9)	203 (81.2)	0.0007
Above	4 (8.5)	2 (4.3)	5 (10.6)	3 (6.4)	33 (70.2)	47 (18.8)	
<i>Marital status</i>							
Married	16 (12.1)	17 (12.8)	18 (13.6)	25 (18.9)	56 (42.4)	132 (52.8)	0.06
Unmarried	7 (5.9)	18 (15.5)	6 (5.1)	23 (19.5)	64 (54.2)	118 (47.2)	
<i>Registered under a government scheme</i>							
Yes	1 (1.3)	2 (2.5)	8 (10.0)	38 (47.5)	31 (38.8)	80 (32.0)	0.04
No	22 (13.0)	33 (19.4)	16 (34.8)	10 (5.9)	89 (52.4)	170 (68.0)	

Figures in parentheses are percentages

by parameters such as age, level of education and poverty (Table IV). Thus, people in the age group of 60–75 years were likely to choose allopathic treatment. Those who had some education as well as those above the poverty line were likely to take treatment from a qualified allopathic practitioner. However, those below the poverty line were likely to take treatment from traditional healers or paraprofessionals.

The difference in the average expenditure on self-healthcare among men and women when stratified for different parameters such as age, employment, education and poverty line was statistically significant (Table V). There was no difference on self-health expenditure among employed and unemployed men. Thus, the average health expenditure was more among those who were >75 years of age, employed, educated and above the poverty line.

DISCUSSION

We assessed the health-seeking behaviour of elderly people in an urban area in terms of the type of healthcare accessed, expenditure

TABLE V. Mean (SD) expenditure (in ₹) on self-healthcare in the past month

Characteristic	Men		Women	
	n=113	Expenditure	n=137	Expenditure
<i>Age (years)</i>				
60–75	103	50 (12.2)*	102	10 (3.3)*
>75	10	92 (23.1)*	35	75 (14.7)*
<i>Status of employment</i>				
Employed	80	85 (18.4)	112	56 (11.2)*
Not employed	33	75 (16.2)	25	25 (13.3)*
<i>Education</i>				
Illiterate	36	80 (15.3)*	57	47 (11.4)*
Educated	77	94 (21.4)*	80	59 (11.9)*
<i>Poverty line</i>				
Below	87	44 (12.9)*	116	40 (9.3)*
Above	26	105 (33.4)*	21	98 (23.2)*

\*p<0.05

on health and the determinants of their health-seeking behaviour such as age, sex, education, employment status, poverty and marital status.

Among our subjects, more women were widowed, unemployed, living with their children and were not registered under any government scheme. This is consistent with the findings from other studies.<sup>2,9-11</sup> However, it is surprising that though these women live in urban areas, few of them are registered under government schemes. The reason given by the majority of them was that these schemes were not useful and a lot of paper work was required.

Certain chronic problems occur more frequently among the elderly than among younger people.<sup>12</sup> Cataract was the most common problem among both men and women. More than half the subjects had a cataract even though it can be treated by a simple procedure.<sup>13</sup> The reasons given for not having it treated were children not accompanying them to hospital and fear of surgery.

The next most common problems were musculoskeletal disorders among women and hypertension among men. This was consistent with the findings of Prakash *et al.*<sup>14</sup> and Joshi *et al.*<sup>15</sup> However, Shradha *et al.*<sup>16</sup> found no significant difference in the prevalence of illnesses between men and women.

About 1 in 10 elderly people (9.2%) did not seek any treatment for their illness. Their reasons for this behaviour included the impression that the illness was minor, there was no one to escort them to the hospital, or they felt that the illness was not going to be cured even after taking treatment. Waweru *et al.*<sup>2</sup> have also reported that 14% of elderly individuals either took self-medication or from a family member.

The perceived severity of the elderly's health problem is a key factor that affects their health-seeking behaviour. Self-care including self-treatment (or treatment by family members) is common in many societies when the severity of illness is perceived to be low.<sup>16</sup> Only 3.6% of the elderly sought treatment from traditional healers, mainly practitioners of ayurveda. Most of these persons suffered from chronic musculoskeletal disorders. The elderly are more likely to use informal healthcare, home and folk remedies, traditional healers and medicine, not just because of economic reasons but also due to habit, tradition or personal beliefs and attitudes. Traditional healers live close to the people and their treatment is based on religion, magic and empiricism. Almost 1 in 5 (19.2%) of the elderly took treatment from paraprofessionals, though Ahmed *et al.* reported a larger percentage.<sup>5</sup> Paraprofessionals often belong to the same community, are closer to elderly people, and are less expensive than those providing allopathic treatment.

We found that age, education and poverty were significant determinants for the health-seeking behaviour of the elderly. Those in the age group of 60–75 years preferred allopathic treatment more often. The educated elderly were more likely to seek allopathic treatment than the illiterate.<sup>6,7,9</sup> Those with lower levels of education sought healthcare less often, indicating that they were either less willing or able to seek care. Poverty was an important determinant and those above the poverty line preferred

allopathic treatment. Poverty also undermines the capacity of families to take care of the elderly.<sup>7,8</sup>

Although gender and socioeconomic factors have been shown to influence health-seeking behaviour,<sup>2</sup> we did not find a significant difference in gender, employment status, marital status and registration under government schemes.

We found that expenditure on healthcare was significantly affected by age, employment, education and poverty status among men and women. However, Ahmed *et al.*<sup>7</sup> found poverty to be the only significant factor for healthcare expenditure. Expenditure on healthcare was more among men than women.<sup>4,5</sup>

### Conclusion

We found that about half the elderly people preferred allopathic treatment, while one-fifth chose self-medication. The health-seeking behaviour of the elderly was influenced by age, level of education and poverty. Thus, the average expenditure on health was more among those in the age group of 60–75 years, employed, educated and above the poverty line, irrespective of gender.

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