

Health status and health seeking behaviour of rural geriatric population of Varanasi district, India

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Abstract

Background: Population aging is a worldwide phenomenon. In India, according to the 2001 Census, the elderly population (60+ years) accounted for 77 million; however, the elderly population has crossed the 100 million mark according to the Census 2011. Aging results in a generalized deterioration of the most vital organs and systems, thereby leading to a lesser effectiveness in physiological functions and an increase in risk factors that leads to various diseases.

Objective: To assess the morbidity pattern and study the health-seeking behavior of rural geriatric population of Varanasi district, Uttar Pradesh, India.

Materials and Methods: A total of 402 elderly people aged 60 years and older were selected from Chiraigaon block of Varanasi district by simple random sampling. Data analysis was done by using SPSS, trial version 17.

Result: Of the 402 study subjects, around 85% 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.

Conclusion: This study revealed the elevated morbidity load among elderly population, which pressurizes for efforts to assist them with specialized healthcare. The study showed that, although most of the elderly people received treatment services from government hospital, there is a major group either receiving it from private sector or not receiving the treatment. On the basis of these findings, it can be recommended that there is a need to develop geriatric health-care services.

KEY WORDS: Health status, health-seeking behavior, geriatric population

Introduction

Globally, 10% of the world population is elderly people and it is expected to increase to 21% in the year 2051. In the year 2002, the number of elderly people in the world was estimated

to be 605 million, which is expected to rise to more than 1.2 billion by the year 2025.^[1] Population aging is a worldwide phenomenon, and India is no exception. Indian population has grown by three times in the past 50 years, but the elderly population has increased more than four times. In India, according to the 2001 Census, the elderly population (60+ years) accounted for 77 million; however, the elderly population has crossed the 100 million mark according to the Census 2011. It took more than 100 years for the aged population to double in most of the countries in the world, but in India, it has doubled in just 20 years.^[2]

In India, the elderly people experience two types of medical complications: communicable and noncommunicable diseases. In addition, they also reveal weakening of sensory

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functions such as vision and hearing. Moreover, a reduction in immunity and other age-related physiologic changes result in an elevated burden of communicable diseases in the elderly population.

The sequel of remedial steps that persons undertake to cure their alleged medical ailment is known as health-seeking behavior.^[3] In particular, in a rural Indian population, health-seeking behavior is a difficult phenomenon. The elderly people are commonly supposed to be more hesitant to seeking health care for their ill health. Very often, the aged people fail to seek health care, believing that the ailments are a part of aging process. Usually, they are unaware of the nature of problems and various treatment modalities available. This leads to the worsening of the existing problems and the development of complications. Timely interventions can prevent many problems in the elderly people.^[4]

So, this study was planned with the objectives to assess the morbidity pattern and study the health-seeking behavior of a rural geriatric population of Varanasi district.

Materials and Methods

This was a cross-sectional study conducted from January 2013 to March 2014 at Chiraigaon block of Varanasi district, Uttar Pradesh, India, where the Rural Health Training center of the Institute of Medical Sciences, Banaras Hindu University (BHU), is situated.

A pilot survey was conducted on 30 study sample, which showed that around 60% of the elderly were experiencing at least one health problem. The total sample size was estimated by using formula: $n = 4PQ/L^2$, where n is the sample size; P , prevalence of characteristic studied; taken as 60%; $Q = (1 - P)$; L , permissible margin of error in the estimated value, which was taken as a 5% with 95% confidence limit. The required sample size was calculated to be 384. Considering a nonresponse rate of 10%, the number of persons to be selected for interview was fixed at 422.

Villages of Chiraigaon Community Development block were divided into three strata according to distance (viz. <1 km, 1–2 km, and >2 km) from the Block headquarter. Then, from each stratum, one village was selected by simple random sampling method. The selected villages were Bariyasanpur, Rustampur, and Barai. In the selected villages, the total enumeration of elderly persons was done to prepare a sampling frame. The study subjects were selected by probability proportion to size sampling technique from the selected villages. In order to get the required number of study subject, simple random sampling was done. Twenty persons were not found during repeated visit; so, finally, 402 elderly persons were interviewed.

Respondents were asked for their various sociodemographic profiles that included their age, gender, caste, marital status, occupation, education, socioeconomic status (SES), and family type. SES was calculated by using Udai Parikh classification for the rural area.

Respondents were asked for their various health problems and their treatment-seeking behaviors. The blood pressure was measured using mercury sphygmomanometer by standard procedure. A random blood glucose sample of all the respondents was taken with the help of glucometer. Fasting and postprandial blood glucose levels of respondents were taken on the following day of those respondents with raised random blood glucose. Respondents were also asked for their various joint problems, diminished vision, and previous cataract surgery. Eyes were examined for the presence of cataract. History of various other problems was also taken. It included hearing problems, asthma, cancer, gastritis, bleeding per rectum, fissure, filariasis, tuberculosis, difficulty in urination, and so on. Data were entered in Excel sheet and exported to SPSS, trial version 17, for analysis.

Ethical clearance was taken from ethical committee of Institute of Medical Sciences, BHU. Informed consent was taken from the head of the household and the study subject selected for this study.

Results

As shown in Table 1, 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.

Of the 402 study subjects, around 85% were experiencing at least one health problem. The average number of morbidities per diseased person was 1.88. It was 1.77 for men and 1.98 for women. The most frequent health problem was musculoskeletal problem (56%), followed by hypertension in 34.1% of the older persons. Prevalence of cataract and diminished vision was 25.4% and 23.1%, respectively. Diabetes was prevalent in 6.7% of the population, while hearing problem was present in 6.5% of the study subjects [Table 2].

Of the 342 study subjects who were experiencing at least one health problem, 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. Most of the geriatric persons preferred going to a PHC/CHC/government hospital (61.9%) for treatment of their illness, followed by use of drug from consulting drug stores (20.9%) and private practitioners (17.4%) [Table 3].

Discussion

This study recorded a high prevalence of health problems (85%) in the study population. In agreement with our finding, studies carried out among older persons in northern India^[5]

Table 1: Distribution of study subjects according to their sociodemographic profile

Variables	Frequency	Percentage
Age group (years)		
60–65	189	47.0
66–70	82	20.4
71–75	72	17.9
Above 75	59	14.7
Gender		
Male	190	47.3
Female	212	52.7
Caste		
General	47	11.7
OBC	295	73.4
SC/ST	60	14.9
Marital status		
Married	271	67.4
Widowed/unmarried	131	32.6
Occupational status		
Not working	160	39.8
Laborer	28	7.0
Farmer	91	22.6
Business	33	8.2
Housewife	90	22.4
Educational status		
Illiterate	257	63.9
Primary	70	17.4
Middle	23	5.7
High school and above	52	12.9
Socioeconomic status		
I	26	6.5
II	86	21.4
III	149	37.1
IV	108	26.9
V	33	8.2

Table 2: Distribution of study subjects according to health status

Morbidity conditions	Male, N = 190 (%)	Female, N = 212 (%)	Total, N = 402 (%)
Musculoskeletal problems	82 (43.2)	145 (68.4)	227 (56.5)
Hypertension	66 (34.7)	71 (33.5)	137 (34.1)
Diabetes	21 (11.1)	6 (2.8)	27 (6.7)
Diminished vision	38 (20.0)	55 (25.9)	93 (23.1)
Cataract	34 (17.9)	68 (32.1)	102 (25.4)
Hearing problem	12 (6.3)	14 (6.6)	26 (6.5)
Stroke	5 (2.6)	3 (1.4)	8 (2.0)
Gastrointestinal problem	4 (2.1)	4 (1.9)	8 (2.0)
Pulmonary tuberculosis	2 (1.1)	1 (0.5)	3 (0.7)
Filariasis	2 (1.1)	3 (1.4)	5 (1.2)
Cancer	1 (0.5)	2 (0.9)	3 (0.7)
Others	5 (2.6)	2 (0.9)	7 (1.7)
Normal	37 (19.5)	23 (10.8)	60 (14.9)
Average No. of morbidities	1.77	1.98	1.88

Table 3: Distribution of study subjects according to health-seeking behavior

Preference of system of medicine for their medical problems by morbid persons, n = 342 (%)	
Allopathic	197 (57.6)
Ayurvedic	35 (10.2)
Homeopathic	21 (6.1)
Not seeking	89 (26.1)
Type of health facility preferred by morbid persons, n = 253 (%)	
PHC/CHC/government hospitals	156 (61.7)
Private practitioners	44 (17.4)
Over-the-counter drugs	53 (20.9)

and eastern India^[6] have reported presence of high morbidity (88.9% and 88%, respectively).

This study revealed that the most common chronic morbidity was musculoskeletal problems (56.5%). Shankar et al.^[6] in a study conducted in a rural area of Varanasi district also reported that the most common morbidity was joint problems (57.08%). Sharma et al.^[7] reported 55% multiple joint problem in the hilly area of Shimla. These data are consistent with other studies conducted among older persons in India^[8,9] and the world.^[10,11] In this study, hypertension was registered as the second most common morbidity (34.1%). Similar finding has been reported in a study among older persons in India^[7,12] and abroad.^[13,14] Cataract was present in 25.4% elderly subjects. Sharma et al.^[7] reported 30%; Shankar et al.,^[6] 48%; and Shradha et al.,^[15] 30.2%, from different rural parts of India.

In this study, the prevalence of chronic morbidity was found to be 85%. Joshi et al.^[5] in a study conducted in north India found the prevalence of morbidity to be 88.9%. Shankar et al.^[6] in a study conducted in a rural area of Varanasi district reported that 88.8% were found to experience one or more disease at the time of the study. The average number of morbidities per diseased person was 1.88. Shankar et al.^[6] in their study reported 2.18 illnesses per morbid person, while Sharma et al.^[7] reported it to be 2.34.

This study revealed that 74% sought treatment for their chronic illness and majority (61.7%) sought treatment from government hospitals, followed by pharmacy (20.9%) and private practitioner (17.4%). Hakmaosa et al.^[16] in their study in rural Assam found that 72% sought treatment for their chronic illness and majority (51.5%) sought treatment from government hospital followed by private hospital (25.7%), pharmacy (22.1%), and quack (0.7%). Sharma et al. in their study conducted in Shimla hills of north India reported that most of the older persons (60.7%) preferred going to a PHC/CHC/government hospital for treatment for their illness, 26.7% sought treatment from private practitioners, and 12.6% took over-the-counter drug. However, Narapureddy et al.^[17] in a study conducted in a rural area of Allahabad district, Uttar Pradesh, revealed that, among the 411 elderly persons, 188 (45.7%) sought treatment from private practitioners and private hospitals, 133 (32.3%) from nonregistered

practitioners (quacks), only 77 (18.9%) sought treatment from government hospitals, and remaining 13 (3.1%) used home remedies or sought help from traditional healers.

In this study, of the 253 elderly people who sought treatment for their chronic illness, 77.9% received allopathic treatment, while ayurvedic and homeopathic treatment was received by 13.8% and 8.3%, respectively. Sharma *et al.*^[7] found that 81.4% preferred allopathic medicine, 11.3% preferred ayurvedic, and 7.3% preferred homeopathic treatment. Qadri *et al.*^[18] in their study conducted in rural elderly population of district Ambala, Haryana, found that majority (93.6%) of the elderly people believed in modern system of medicine as far as their mode of treatment was concerned, whereas a very less number of subjects had faith in ayurveda and homeopathy (4.1% and 1.8%, respectively). We recorded blood pressure measurement and collected blood sample of all the elderly persons to detect hypertension and diabetes, respectively, rather than by simply asking their history. Despite of all these, there are possibilities that we were unable to identify other health problems in geriatric population, which might be taken as limitation of this study.

Conclusions

The elevated morbidity load among elderly population pressurizes for efforts to assist them with specialized healthcare. The elderly population must be made aware of periodic medical checkups to enable prevention and early recognition of the chronic ailments. Furthermore, the study shows that elderly living in rural areas are the most vulnerable group in their healthcare-seeking behavior. To overcome this, the policymakers must concentrate more on rural elderly population and their views, which stop them from seeking health care. The study showed that, although most of the elderly received treatment services from government health facilities, there is major group receiving it either from private sector or not receiving the treatment. On the basis of these findings, it can be recommended that there is a need to develop geriatric health-care services. To tackle the issue of use of over-the-counter drugs, the existing laws should be strictly enforced and should govern the distribution of over-the-counter drugs.

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