

ORIGINAL ARTICLE

Chronic morbidity and health care seeking behaviour amongst elderly population in rural areas of UttarakhandSurekha Kishore¹, Kapil Sharma², Richa Singh³, Bhanu Pratap Singh Gaur⁴¹Professor & Head, ^{2,3,4}Senior Resident, Department of Community and Family Medicine, AIIMS, Rishikesh.

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Abstract

Background: Ageing is a natural process, always associated with physiological and biological decline. Global population is ageing; the proportion of older persons has been rising steadily, from 7% in 1950 to 11% in 2007, with an expected rise to reach 22 % in 2050. With improving knowledge and awareness the health care seeking behavior has shown an increasingly positive trend. With increasing age, morbidity, especially those arising from chronic diseases also increases. On the contrary, health care delivered at household level has definitely gone down due to financial constraints and increasing cost of living, thus posing a problem for the elderly. **Aims & Objective:** To find out the prevalence of chronic morbidity and health care seeking behaviour amongst the elderly in rural areas of Uttarakhand. **Material and Methods:** A cross-sectional study was carried out in rural areas of Uttarakhand to assess the chronic morbidity amongst elderly population. All the persons above the age group of 60 years of the eight villages were interviewed using a pre-defined, pre-tested, semi-structured and indigenously developed questionnaire. **Results:** The study group suffered from various chronic morbidities like hypertension, diabetes, cardiovascular diseases. Men were greater in number (158, 62.2%). Participants belonging mostly to nuclear families (156, 61.9%). Below the poverty line were (98, 38.9%). Half of the study population had one or the other chronic morbid condition. Majority of the elderly men contacted the health care facility whereas majority of the elderly women chose to use remedies. **Conclusion:** There is definitely a need of provision of health care services for poor geriatric population. In addition to this government should take up some program for social security of this population along with creating an awareness about the same.

Key Words

Health Care Seeking; Morbidity; Elderly

Introduction

Ageing is a natural process, always associated with physiological and biological decline. In the words of Seneca; "Old age is an incurable disease". Global population is ageing; the proportion of older persons has been rising steadily, from 7% in 1950 to 11% in 2007, with an expected rise to reach 22 % in 2050.1 Globally, the population of older persons is growing at a rate of 2.6% per year, considerably faster than

the population as a whole, which is increasing at 1.1 % annually.(1)

Underdeveloped nations are aging faster; Asia in particular is facing accelerated aging. It is estimated that by 2040, the number of people in Asia aged above 60 years will surpass number of children.(2)

Chronic illnesses are the largest cause of death in the world. In 2002, the four leading chronic illnesses were cardiovascular disease, cancer, chronic lung

diseases and diabetes mellitus accounting for 29 million deaths worldwide. (3)

India is one of the few countries globally where the sex ratio in the elderly favors males. This could be attributed to higher female mortality in different age groups. (4, 5)

With improving knowledge and awareness the health care seeking behavior has shown an increasingly positive trend. With increasing age, morbidity, especially those arising from chronic diseases also increases. On the contrary, health care delivered at household level has definitely gone down due to financial constraints and increasing cost of living, thus posing a problem for the elderly. India still lacks a database with comprehensive morbidity statistics and patterns of diseases in the elderly population. Hence, the objective of the present study was to find out the magnitude of chronic illnesses and associated health seeking behavior in elderly population in Uttarakhand.

Aims & Objectives

To find out the magnitude of chronic illnesses and associated health seeking behavior in elderly population in Uttarakhand.

Material and Methods

A Community-based, cross-sectional study, in eight villages of Pauri & Tehri Garhwal districts of Uttarakhand were conducted using a purposive sampling. All the elderly people (>60 years of age) were enumerated and recruited for the study. They were interviewed in which questions related to the socio-demographic characteristics like age, marital status, education, history of any chronic illness etc. was asked. The interview was followed by general physical examination by a doctor. The data was collected using a pre-defined, pre-tested, semi-structured and indigenously developed questionnaire. The data was entered into Microsoft-Excel 2007. After cleaning the data, statistical analysis of the data was done on the SPSS 17.0 software. Frequency tables, cross tables were made and chi-square test was applied. A p-value of less than 0.05 was taken as statistically significant.

Results

The total population of these villages was 2100, out of which a total of 252(12%) persons were aged 60 years or more. The proportion of men was more than women that is 158/252 (62%) versus 94/252 (48%) respectively. Ninety eight (38.9%) participants were

below the poverty line. More women were below the poverty line as compared to men and this difference was found to be statistically significant ($P<0.001$). One hundred fifty six (61.9%) participants belonged to the nuclear families. More women belonged to nuclear families when compared to men and this difference was also found to be statistically significant ($P<0.001$). One hundred twenty (47.6%) respondents were illiterate. Women illiterates were higher 80/94 (85.1%) as compared to the male illiterates 40/158 (25.3%) and the difference was found to be statistically significant ($p<0.001$). Most of the elderly that is 155/252 (61.5%) were unemployed. Partners of 181 (71.8%) subjects were alive. Rest of them were staying either singly, were widows or separated.

[Table 2](#) shows that 127 (50.4%) of geriatric age group people had history of at least one or the other chronic illness. There was no sex difference. Majority of the chronic illnesses were related to musculoskeletal & cardiovascular system. Other Chronic illnesses included asthma, hypertension, diabetes, tuberculosis etc. 33 (13.1%) of these cases had osteoarthritis with a comparatively higher percent in females that is 23.4% of females and 7.6% of males. Among these morbidities low back ache was the commonest complain which was present in 50 (19.9%) cases.

[Table 3](#) shows that as far as health seeking behavior is concerned it was found that more number 120 (75.9%) of the males reported at the Government hospital as compared to the females 31 (32.9%) and the difference was found to be statistically significant ($p<0.001$). More number of females 49 (52.2%) undertook home management and other remedial measures as compared to males 11 (7%) and the difference was also found to be statistically significant ($p<0.001$). Home management and other remedial measures included the use of herbal decoctions and preparations as well as the use of witch craft.

Discussion

With technological advances in health sciences, there has been an increase in the life expectancy of a person. Increase in age leads to degenerative and senile changes. The issue of social security and dependence also arise. Though we are able to increase the life span but we fail to provide a better quality of life to all those senior citizens who are in need of it. Though the condition is more or less

similar in rural as well as urban areas, however in rural areas, people are either not aware or economically not sound enough to seek health care services. Over a period of time, the traditional systems of support are disappearing and social security is not so well established in rural areas, especially in hard to reach areas like the one in hilly region.

Additionally, the accessibility of services especially in the rural and hilly areas is difficult.

We found that 96 (38.1%) out of the sampled 252 elderly persons were living in joint families and 156 (61.9%) were living in nuclear families. This is similar to studies done by Rao *et al* (6) (26%) in Madurai, Narapureddy *et al* (7) (34%) in Allahabad, UP. Increasingly, the trend of joint families is declining, warranting more need of social security and support among elderly.

Almost half the elderly respondents (120/252, 47.6%) were illiterate and 52 (41.3%) were educated up to primary level. Narapureddy *et al* (7) also found a high proportion (70%) of illiteracy in their study.

At least one chronic illness was present in almost half (127/252, 50.4%) of the participants. The prevalence of low health status and coexisting chronic disease were seen in 84% in a study done by Deepak *et al* (8) in Shimla, 35.5% in a study done by Bourne *et al* (9) in Jamaica, and 23.6% in a study done by Moe *et al* (10) in Myanmar. 88.9% of participants reported illness based on their perception in a study done by Joshi *et al*. (11) This difference is probably due to the difference in morbidity conditions which were used to assess the magnitude of disease status.

Most common morbidity was low back ache, which was present in 50 (19.9%) study participants followed by arthritis, present in 33 (13.1%) respondents. Deepak *et al* (8) study found the prevalence of musculoskeletal problem in elderly as high as 55%. Joshi *et al* found the prevalence of osteoarthritis to be 33% in older individuals. (10)

In a community based study conducted in Delhi among 10,000 elderly people, it was found that problems related to vision and hearing topped the list, closely followed by backache and arthritis. (12)

Almost three fourth of the participants (192/252, 76.2%) were seeking treatment from government or private hospital. Which is almost similar to studies done by Deepak *et al* (8) (65.8%) and Narapureddy *et al* (7) (64.5%).

Abdullah Ladha *et al* in their study in Karachi found that 61.4% participants reported factors deterring them from seeking health care. (13)

An Indian Council of Medical Research (ICMR) report on the chronic morbidity profile in the elderly states that hearing impairment is the most common morbidity followed by visual impairment. (14) A study conducted in the rural area of Pondicherry reported decreased visual acuity due to cataract and refractive errors in 57% of the elderly followed by pain in the joints and joint stiffness in 43.4%, dental and chewing complaints in 42%, and hearing impairment in 15.4%. Other morbidities were hypertension (14%), diarrhea (12%), chronic cough (12%), skin diseases (12%), heart disease (9%), diabetes (8.1%), asthma (6%), and urinary complaints (5.6%). (15) A similar study that had been conducted among 200 elderly people in rural and urban areas of Chandigarh in Haryana observed that as many as 87.5% had minimal to severe disabilities. The most prevalent morbidity was anemia, followed by dental problems, hypertension, chronic obstructive airway disease (COAD), cataract, and osteoarthritis. (11)

The present study found that almost 50% of the geriatric population had some chronic ailment but the treatment seeking behavior was different. In most of the cases it was revealed that majority of the males approached a Government doctor/facility whereas the females tend to either seek the home made remedies or witch craft. Women who visited the Government Hospital for treatment, had the disease symptoms either severe or intolerable.

With the rapid and progressive urbanization there is a regressive social and family support leading to psychological and social imbalances. The health and socioeconomic challenges must be reviewed and studied thoroughly and measures to bring about the improvement in the quality of life of Geriatric population.

A “multi-disciplinary team” specifically trained to meet the needs of the geriatric population need to be created. This team would be comprised of a physician, psychiatrist, orthopaedician, diabetologist, gynecologist, cardiologist, urologist, eye surgeon, psychologist, physiotherapist, dietician, dentist, and nurses trained in geriatric medicine. (16)

Conclusion

To conclude almost half of the geriatric age group people had at least one or the other chronic illness.

Majority of illnesses are related to musculoskeletal system. Health seeking behavior was better in males as compared to females. Around half of the women seek home management and other remedial measures for diseases.

Recommendation

There is definitely a need of provision of health care services for poor geriatric population .In addition to this government should take up some program for social security of this population along with creating an awareness about the same.

Limitation of the study

Villages were purposively selected for study. Therefore the results cannot be generalized to whole of rural areas of Uttarakhand.

Relevance of the study

This study shows that there is need to raise the awareness regarding health seeking behavior in geriatric population especially in females.

Authors Contribution

SK was involved in concept, study design, data collection, data analysis, manuscript drafting and manuscript review. KS was involved in data analysis, manuscript drafting and manuscript review. RS & BPSG were involved in manuscript drafting and manuscript review

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Tables

TABLE 1 SOCIO-DEMOGRAPHIC FEATURES OF THE STUDY POPULATION (N=252)

Socio-demographic variables	Males 158(62%)	Females 94(48%)	Total 252	Chi-square, df, p- Value
Socioeconomic status				X2=9.351
Below poverty line	50(31.6%)	48(51.1%)	98(38.9%)	df=1
Above poverty line	108(68.4%)	46(48.9%)	154(61.1%)	P=0.002
Family type				X2=37.433
Nuclear	75(47.5%)	81 (86.2%)	156(61.9%)	df=1

Joint	83(52.5%)	13(13.8%)	48 (38.1%)	P<0.001
Education				
Illiterate	40(25.3%)	80(85.1%)	120(47.6%)	X2=86.176 df=2 P<0.001
Primary	90(56.9%)	14(14.9%)	104(41.3%)	
Middle	28(17.8%)	00	28(11.1%)	
Occupation				
Household work	00	78(83%)	78(31%)	X2=207.08 df=2 P<0.001
Working	9(5.7%)	10(10.6%)	19(7.5%)	
Non-working	149(94.3%)	6(6.4%)	155(61.5%)	
Marital status				
Married with live spouse	90(57%)	91 (96.8%)	181(71.8%)	X2=46.241 df=1 P<0.001
Single/widow/separated	68(43%)	3(3.2%)	71(28.2%)	

TABLE 2 CHRONIC ILLNESS BASED ON HISTORY (N=252)

	Male 158(62%)	Females 94(48%)	Total
At least one or other chronic illness	79 (50%)	48 (51.1%)	127(50.4%)
No illness	79(50%)	46(48.9%)	125(49.6%)
X2 =0.027 , df=1, p=0.87			
Cardiovascular related	7 (4.4%)	6 (6.4%)	13(5.2%)
Hypertension	14(8.9%)	3 (3.2%)	17(6.7%)
Asthma	8(5.1%)	00	8(3.2%)
Tuberculosis	3(1.9%)	00	3 (1.2%)
Diabetes	9(5.7%)	2(2.1%)	11(4.4%)
Low backache	8(5.1%)	42 (44.7%)	50 (19.9%)
Arthritis	12(7.6%)	22(23.4%)	33(13.1%)
Cataract	16(10.1%)	11(11.7%)	27(10.7%)

TABLE 3 HEALTH SEEKING BEHAVIOR (N=252)

Place of treatment	Males 158 (62%)	Females 94(48%)	Total
Government	120 (75.9%)	31(32.9%)	151(59.92%)
Private	27 (17.1%)	14 (14.9%)	41 (16.26%)
Home management	6 (3.8%)	29 (30.9%)	35 (13.88%)
Any other	5 (3.2%)	20 (21.3%)	25 (10.71%)
X2 =68.882, df=3, p<0.001			