Research Article

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Study of Health Problems and Addiction Pattern among Elderly Population in Rural Areas of Pune, India

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Abstract

Background: There is considerable rise in elderly population as per 2011 census of India and majority of them are residing in rural areas.

Objective: To study health problems amongst the elderly population of Rural areas of Pune, Maharashtra. To study pattern of addictions amongst the elderly population of rural areas of Pune, Maharashtra.

Materials and methods: A community based cross-sectional study was carried out in the rural areas of Pune, Maharashtra. Individuals of 60 years and above were included in the study. Interviews with help of pre-structured and pre-tested proforma and physical examination were done by house to house survey.

Results: In this study, 100 study subjects above 60 years were participated. There were 40 males and 60 females. The study showed that 80% of the study subjects were suffering from visual impairment followed by musculoskeletal problem were reported by 74% and hypertension by 35% and diabetes by 15%. Half i.e. 50% subjects were malnourished and 38% of the study subjects were addicted to masheri a kind of chewing tobacco. 25% of the males were addicted to alcohol and 34% addicted to smoking bidi. Majority 63% were aware about travelling concessions, while 27% aware about the pension scheme for elderly.

Conclusion: Visual impairment was commonest health problem followed by musculoskeletal problems. Addictions such as masheri, alcohol and smoking of bidi were observed commonly especially among males. Study subjects were aware about some welfare schemes for elderly.

Key words:

Elderly; Rural area; Health problems; Addictions

Introduction

Elderly or old age consists of ages nearing or surpassing the average life span of human beings. The boundary of old age cannot be defined exactly because it does not have the same meaning in all societies. Government of India adopted 'National Policy on Older Persons' in January, 1999. The policy defines 'senior citizen' or 'elderly' as a person who is of age 60 years or above [1]. Advancement in the field of medicine has improved the overall life span of the population all over the world and India is not an exception for the same. India is in a phase of demographic transition. In India the size of the elderly population, i.e. persons above the age of 60 years is fast growing. As per census of 2011, elderly population constitutes 8% of the population of India. In rural areas, around 8.1% of the population is above the age of 60 years, while in urban areas 7.9% of the population is above the age of 60 years. Rural areas have more burden of elderly population compared to urban areas of India. Maharashtra is second largest state as per population in India. In Maharashtra state, 9.3% population is above the age of 60 years, which considerably higher than national level. 10.3% of the elderly population in Maharashtra is residing in rural areas while 7.9% of the elderly population is residing in urban areas [2].

The increasing number of elderly persons will have a direct impact on the demand for health services. In view of the changing social system, social security measures for the prospective elderly may also become imperative. Mobilization of additional resources for geriatric care will emerge as a major responsibility of health care providers in future for countries like India. It is important to know medical problems among elderly population for proper providing better care to them especially in rural areas where the facilities are lacking. Thus this study was conducted with objectives of to study health problems and the pattern of addiction amongst elderly population residing in rural areas.

Materials and methods

A cross-sectional study was conducted in rural field practice area of medical college in Pune city of Maharashtra state of India during the period of January 2015 to December 2015. The rural field practice area caters to 19 villages.

The study sample was randomly selected from these 19 villages with stratified sampling method as per population of individuals 60 years and above according to Census of 2011. A total of 100 individuals who have 60 years and above and residing in rural field practice area and has given written informed consent were included in the study by purposive sample method.

The study was performed by house to house survey. After taking the written informed consent, each individual was subjected to personal interview and clinical examination. The information was collected on a pre-tested proforma. The proforma consisted of the demographic characteristics, findings of physical examination, details related to any addictions. The visits to the house ensured the examination of the environmental conditions, the socio-economic status and the participation of the family members in the care of the aged.

Statistical analysis

Data was analyzed by using Primer of Biostatistics [3]. For descriptive statistics mean, standard deviation, proportions and percentages were used.

Ethical aspects

The study was conducted according to the guidelines of the Helsinki Declaration and of Good Clinical Research Practice. The research study was approved by an institutional ethical committee. All the study participants were told about the nature and outcome of study and written informed consent was taken.

Results

Socio-demographic profile

A total of 100 elderly were included in the present study. Of the total 40% were males and 60% were females. Out of the 100 elderly subjects, majority were 60-65 years of age, of those 61% were males and 63% were females. There were 30% males and 31% females were in the age group of 66-70 years age-groups, 5% males and 3% were in the age group of 71-75 years. Overall of 5 elderly were above the age of 75 of which 3 were males and 2 were females.

Sr. No.	Health Problem	Frequency
1	Visual impairment	80
2	Musculoskeletal disorder	74
3	Hypertension	25
4	Diabetes Mellitus	15
5	Respiratory disorder	15
6	Hearing Impairment	7
7	Dental disoders	7
*Frequencies are not mutually exclusive		

Table 1: Health Problems of the study population (n=100).

In this study, all the 100 study subjects were residing in a semi pucca type of houses with water supply from local Gram Panchayat. Solid waste disposal was done indiscriminately and the water waste was disposed in open. Though 74% study subjects had latrine facility, only 27% study subjects were actually using latrines while others were going for open air defecation. 90 study subjects were staying with the family and 10 were staying alone. As most of the study subjects were either unable or were reluctant to tell the income the social classification was not performed. But majority that is 83% of the study subjects were dependent on the family members for their finances.

Health Problems

Visual impairment was the most common health problem i.e. 80% among the study subjects in whom uncorrected refractive errors and senile cataract were predominant. Musculoskeletal problems were present in 74% of the study subjects in which osteoarthritis was most common. About 35% were known hypertensive, while 15% were known diabetics. The other health problems were respiratory ailments observed in 15% and hearing loss & dental disorders in 7% of the study subjects (Table 1).

Sr. No.	Addiction	Frequency
1	Masheri	38
2	Tobacco with lime	36
3	Bidi smoking	34
4	Alcohol	15
*Frequencies are not mutually exclusive		

Table 2: Distribution of Addiction pattern (n=54).

Addiction Pattern

Out of total 100 study subjects, 54% had one or more addictions. 38% of the study subjects were addicted to Masheri which is a kind of chewing tobacco which is usually used for teeth cleaning. Most of the females were addicted to Masheri. 36% of males were chewing tobacco with lime. 34% of the males were smoking Bidi. 15% males were alcoholic. 63% were aware about travelling concessions, while 27% aware about the pension scheme for elderly (Table 2).

Discussion

In the study, majority of the geriatric subjects belonged to the age group 60-65 years of age-group. Females outnumbered the males in the study. 80% suffered from visual impairment and rest had undergone cataract surgery. Musculoskeletal disorders was the second most common health problem, comprising of 74% study subjects who had restriction in mobility and had retired from work, thereby limiting even day-to-day activities. 35% were known hypertensive and 15% were known diabetics and were on medications. 50% of the study subjects were malnourished.

As per study conducted by Thakur et al in rural areas of Pune high prevalence of visual impairment (83%) was observed in the study population. 30% had hypertension. In the study conducted by Shankar R et al in Rural areas of Varanasi district The most common health problem was arthritis with overall prevalence of 57% followed by cataract (48%), hypertension (11%). In the study conducted in Udupi taluk of Karnataka, most common health problems were hypertension, osteoarthritis, diabetes, or bronchial asthma. Others included cataract, anemia, and skin problems. Osteoarthritis was found to be more

common among females while other health problems were almost similar among both the genders [4-6]. Similar study conducted in urban slums of Pune city conducted by Pandve et al. found that in medical illnesses, most common was cataract affecting 68% of the study population followed by osteoarthritis (53%). Musculoskeletal problems restricting movements and low visibility made everyday chores difficult [7].

In the present study most shocking was high level of addictions amongst elderly people. Though alcohol intake and smoking was only reported by men. 54% had one or more addictions. 38% of the study subjects were addicted to Masheri which is a kind of chewing tobacco which is usually used for teeth cleaning. Most of the females were addicted to Masheri. 36% of males were chewing tobacco with lime. 34% of the males were smoking Bidi. 15% males were alcoholic. In the study conducted by Thakur et al[4] revealed that 58.97% study subjects were using some or the other form of tobacco. Prevalence was 55.38% more than half of the tobacco users were addicted to tobacco chewing in various forms. 2.7% of the study sample took alcohol. As per study conducted in urban slums of Pune city conducted by Pandve et al., tobacco chewing is bigger threat as not just men; women too were addicted to it. About 68% men and 17% women chewed tobacco. [7]

Conclusion

The results of this study showed that a major proportion of the elderly were out of the work force, partially or totally dependent on others, and suffered from range of health related problems. The elderly population from rural areas has similar health problems as well as addiction pattern to elderly population of the urban areas especially of urban slum area. There is a growing need for good quality geriatric health care services at the primary level and it should be based on the "felt needs". Also there should be sensitization and involvement of non-governmental organizations and voluntary organizations. Behavior and lifestyle modification in the form of primordial prevention and counseling of the high risk groups should be carried to improve the quality of life of the aged. Further research, especially qualitative research, is needed to explore the depth of the problems of the elderly.

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