

Illness Pattern of Elderly Residing in Old Age Homes of Varanasi

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Abstract

Introduction: Ageing is a multidimensional process of closing period of life of an individual. The elderly population has increased worldwide. As life expectancy has increased, hundreds of old age homes have sprung up in India. Older individuals usually have various health problems. Ageing is progressive impairment of functions resulting in loss of adaptive response to stress and an increasing risk of age-related diseases.

Objective: To study the illness pattern among elderly residing in old age homes.

Materials and Methods: The total number of old age homes situated in Varanasi was enlisted with the total number of elderly residing in different old age homes. The total 156 individuals aged 60 years and above were purposively selected for the study. The present investigation is a kind of field study in which primary tools used was a pre-designed and pretested interview schedule.

Results: It was inferred that a high vulnerability of the study population to various diseases and the female elderly were suffering from more number of diseases. The most common illness was arthritis & joint pain.

Conclusion: Physical health status of elderly deteriorated with ageing. Thus, specialized geriatric health services have to be adopted by the old age homes management so as to maintain healthy lifestyles in the old age homes.

Key words: Ageing, elderly, old age homes, geriatric health services.

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Introduction

Ageing is a multidimensional process; old age is the closing period of life of an individual. The elderly population has increased progressively worldwide. India is the second largest populous country in the world (Census 2001). The proportion of older person in India has risen from 5.63% in 1961 and is expected to be 12.4% in 2026¹. Elderly population in India accounts for 8% of total population in 2010 (World Health Statistics Report 2012). The problem of old age was never a problem in India. Old age homes were alien in concept and

elder abuse was considered a western problem. As life expectancy has increased, hundreds of old age homes have sprung up in India. Older individuals usually have various health problems. To ensure optimum quality of life and also to alleviate the financial and psychological burdens arising from ageing for the individuals and their families and the society as a whole, good health is important. Ageing is progressive impairment of functions resulting in loss of adaptive response to stress and an increasing risk of age-related diseases. Ageing occurs at different levels: social, chronological, behavioral, physiological, morphological, cellular and molecular.

The physiological decline in ageing refers to the physical changes as individual experiences because of the decline in the normal functioning of the body resulting in poor mobility, vision, hearing, along with decline in memory, inability to eat and

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digest food properly, inability to control certain physiological functions, and various chronic conditions. Nutritional well being is an integral component of the health, independence and quality of life of older individuals.^{2,3} Change in socio-economic status adversely affects the individual's way of life after retirement. The economic loss is due to a change from salary to pension or unemployment leading to economic dependency on children or relatives. A feeling of low self-worth may be felt due to the loss of earning power and social recognition. This state of mind is harmful. With the prospect of this situation worsening in the coming decades, ways and means of managing the stress effectively needs to be examined.⁴ The present study is focused to find out the prevalent illness pattern among elderly residing in different old age homes of Varanasi.

Materials and Method

All old age homes located in Varanasi district were purposively selected for the present study. The total number of old age homes situated in Varanasi was enlisted with the total number of elderly residing in different old age homes. Total enumeration process was adopted for the study. The total 156 individuals aged 60 years and above were interviewed. The present investigation is a kind of field study in which primary tools used was a pre-designed and pretested interview schedule for recording information pertaining to the individuals considered for the study.

Software package SPSS, 17 version was used for the data analysis as well as for statistical calculations of different measures. Appropriate and required statistical techniques were applied in the observations, such as percentage, mean, standard deviation, chi square test, degree of freedom (df), and level of significance (P).

Result

The findings regarding illness load about the frequency of illness with sex is presented in Table 1. Majority of the respondents (24.4%, 23.1% & 12.8%) had two, three and four morbidities whereas (12.2%, 7.7% & 5.8%) of individuals had five, six and seven & above number of illness. 3.2% of elderly did not report any type of illness at the time of survey. The average number of illness was obtained (3.28 ± 1.77) in total respondents while it was (3.14 ± 1.79) in male elderly group and (3.34 ± 1.77) in females but this difference was not statistically significant.

The present study envisages highlighting the demographic association of old age related illness. For this purpose old age related illness were identified and segregated according to sex and age of study subjects in Table 2 and 3 respectively. Table 2 indicates that the most common illness was arthritis & joint pain, the overall prevalence was 60.3% in which the proportion of females was significantly higher than the proportion of male respondents.

Blood pressure & heart related diseases, diseases related to eyes, ear, nose & throat and gastro-intestinal troubles were the other common illness in the study subjects and had been observed in 53.8%, 46.2% and 48.1% of the study subjects respectively.

Other type of illness reported by the respondents were respiratory disease in 18.6%, injury & accidents 14.7%, neurological disorders 4.5%, endocrine and other type of diseases in 8.3% and 25.0% respectively. In these diseases the section of male elderly was accounted to be higher in comparison to female population but statistically these differences were insignificant.

Any type of pain combined together were found to be in 13.5% of elderly people in which 15.1% were females and 10.0% were male but difference was statistically insignificant.

According to age structure of respondents the prevalence of various type of diseases are classified which reflects that blood pressure & heart related disease was found to be (57.7%) in (60-69) age group of elderly, followed by (70-79) years of age group (52.9%) and >80 years of age group (50.0%) respectively (Table 3). The prevalence of these diseases was in decreasing order as age advances. The incidence and prevalence of coronary heart disease (CHD) was highest in patients older than 60 years. The other major diseases such as arthritis & joint pain, eyes & ear, nose and throat (ENT) disorder, gastro intestinal tract (GIT) disorder, all type of body ache, endocrinal and other type of ailment were in more percentages of the elderly (70-79) years of age group and minimum in (>80 years) with the exception of the illness as arthritis & joint pain. The remaining reported illnesses like respiratory diseases, injury & accidents and neurological problems were found to be more in >80 years age of group and minimum in age-group (70-79) years respectively. There were some differences in the prevalence of different type of diseases among various age-groups of the elderly but statistically found to be insignificant, except injury & accidents.

Table 1. Sex wise distribution of respondents according to number of illness reported by elderly at old age homes

Number of illness	Sex					
	Male		Female		Total	
	Number	%	Number	%	Number	%
0	02	4.0	03	2.8	05	3.2
1	05	10.0	12	11.3	17	10.9
2	15	30.0	23	21.7	38	24.4
3	11	22.0	25	23.6	36	23.1
4	06	12.0	14	13.2	20	12.8
5	04	8.0	15	14.2	19	12.2
6	04	8.0	08	7.5	12	7.7
7 and above	03	6.0	06	5.7	09	5.8
Total	50	100.0	106	100.0	156	100.0
Average Number of Illness ###SD	3.14###1.79		3.34###1.77		3.28###1.77	
	t=0.66 ,		df=154,		P>0.05	

*Using Chi square test of significance.

Table 2. Sex wise distribution of study subjects according to the illness

Present Illness	Sex						df = 1
	Male		Female		Total		Value of X ² , P*
	Number	%	Number	%	Number	%	
BP and heart diseases	30	60.0	54	50.9	84	53.8	1.21, >0.05
Respiratory diseases	10	20.0	19	17.9	29	18.6	2.10, >0.05
Arthritis & joint pain	24	48.0	70	66.0	94	60.3	4.62, <0.05
Eyes & E.N.T. diseases	19	38.0	53	50.0	72	46.2	1.97, >0.05
G.I.T. diseases	23	46.0	52	49.1	75	48.1	2.13, >0.05
Injury & accidents	09	18.0	14	13.2	23	14.7	0.62, >0.05
Neurological disorders	03	6.0	04	3.8	07	4.5	0.39, >0.05
Any type of ache	05	10.0	16	15.1	21	13.5	0.76, >0.05
Endocrine diseases	06	12.0	07	6.6	13	8.3	1.30, >0.05
Other diseases	17	34.0	22	20.8	39	25.0	3.18, >0.05

*Using Chi square test of significance.

Discussion

Old age is a vital last phase of human life. Old age implies consideration not only of biological but also of psychological and social attributes of an individual.⁵ Ageing is accompanied by changes, which may impair bodily functions viz food acquisition, digestion and metabolism and finally causing multi factorial disorders.^{6, 7}

The review of demographic ageing of population in India highlights the fact that one out of every seven elderly in the world is an Indian. Due to longevity of life, a great extent of people has

the risk of developing chronic and debilitating diseases.⁸ Studies on health and nutritional status of elderly had reported high intake of saturated fats, irregular meals, addiction towards alcohol and smoking started in young age seen to be major culprit of high morbidity prevalence in old age.⁹ With respect to disease profile, data on major and minor illness were dental problems, endocrine problems, CVD and bone related problems, whereas lethargy, lack of appetite and pain in joints were most prevalent minor problems among all the age group elderly subjects.

The result of the present study shows a high vulnerability of the study population to various

diseases and the female elderly were suffering from more number of diseases comparatively to male elderly may be due to unawareness about health, lower economic condition as well as lower educational status and lack of family support. The illness load observed among the present study population is comparable to the 3.97 episodes per person reported.¹⁰ Majority of elderly (42.5%) were diagnosed as having 4-6 morbidities, 23% had 7-9,

1.5% had a maximum of 13, and only 0.5% had no morbidity¹¹. The mean number of morbidities among the total elderly population was 6.1. The mean number of morbidities among the male elderly was 5.9 compared with 6.4 among females. The possible reasons for the variations could be either the differences in the list of illness studied or the period or area of the study.

Table 3. Age wise distribution of study subjects according to present illness

Present illness	Age Groups (Years)								df=2 Value of χ^2 , P*
	60-69 (No.=52)		70-79 (No.=68)		80 and above (No.=36)		Total		
	No.	%	No.	%	No.	%	No.	%	
BP & heart diseases	30	57.7	36	52.9	18	50.0	84	53.8	0.05,>0.05
Respiratory diseases	10	19.2	09	13.2	10	27.8	29	18.6	3.31, 0.05
Arthritis & joint pain	29	55.8	44	64.7	21	58.3	94	60.3	1.06, 0.05
Eyes & E.N.T diseases	23	44.2	34	50.0	15	41.7	72	46.2	0.77, 0.05
G.I.T diseases	26	50.0	35	51.5	14	38.9	75	48.1	1.61, 0.05
Injury & accidents	10	19.2	04	5.9	09	25.0	23	14.7	8.09,<0.05
Neurological disorder	–	–	04	5.9	03	8.3	07	4.5	3.99, 0.05
Any type of ache	07	13.5	10	14.7	04	11.1	21	13.5	0.26, 0.05
Endocrine diseases	03	5.8	08	11.8	02	5.6	13	8.3	1.86, 0.05
Other diseases	08	15.4	21	30.9	10	27.8	39	25.0	3.97,>0.05

*Using Chi square test of significance

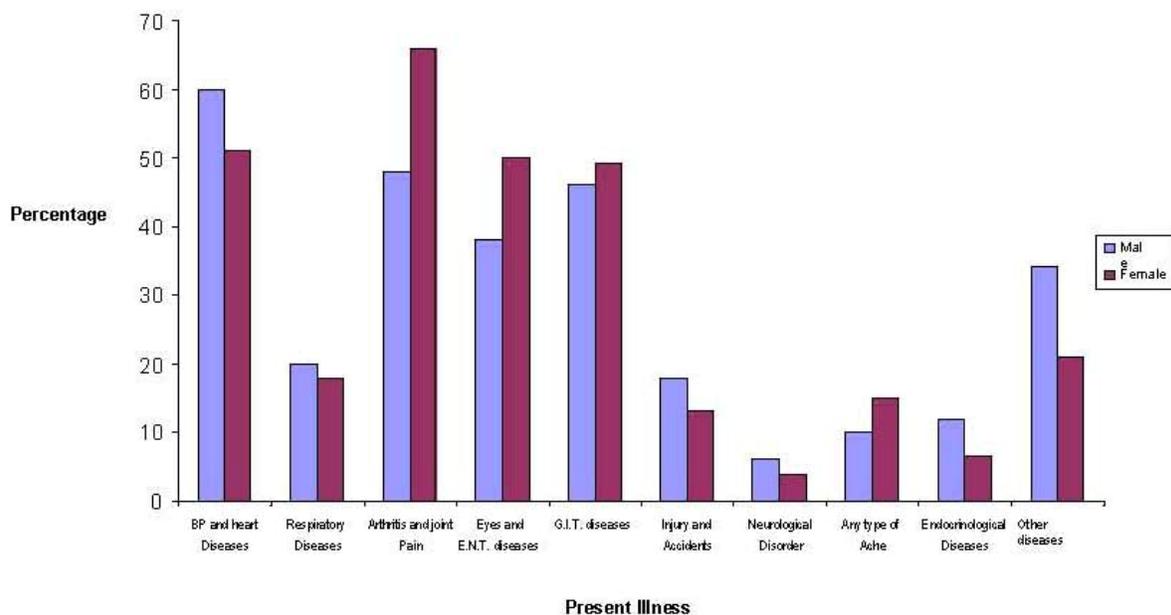


Figure 1: Sex wise distribution of study subjects according to present illness

The result of present study regarding illness pattern is comparable with alike studies carried out in different parts of India such as study in Udupi Taluk, Karnataka, their result shows that osteoarthritis was found to be more common among females while other health problems were almost similar among both the genders.¹² The total prevalence was in accordance to the reported prevalence of arthritis and joint pain in 57.5% and 57.1% among the geriatric people in urban and rural area of Varanasi.^{13,14} In another study 60.6% prevalence of arthritis & joint pain was reported among aged person in Amritsar.¹⁵

The main health-related problems among the aged were those of the circulatory system, with about two fifty suffering from hypertension.¹⁶ Males suffered more from blood pressure and heart related diseases than the females, while just reverse pattern was observed in eyes and ENT and GIT diseases respectively but the differences were not statistically significant.^{14, 15}

The major illnesses reported in the present study were arthritis and joint pain, blood pressure, heart related diseases, eyes and ENT, GIT and respiratory diseases in the elderly people as the resultant of consumption of less nutritious diet, stressful life, lack of medical treatment facilities and effect of ageing in all physiological systems of body. The coronary heart disease (CHD) was the leading cause of morbidity and mortality in the elderly.¹⁷

Conclusion

The most common illness observed in old age home residents was arthritis and joint pain, the overall prevalence was 60.3% in which the proportion of females was significantly higher than the proportion of male respondents. Blood pressure and heart related diseases, diseases related eyes, ear, nose and throat and gastro-intestinal troubles were the next most common illness in the study subjects and had been observed in 53.8%, 46.2% and 48.1% of the study subjects respectively. There are powerful economic, social, political and cultural determinants which influence how women age with far reaching consequences for health and quality of life, as well as costs to the health care systems. Poor economic status earlier in life is a determinant of health at all stages of life. The older women often reflect the cumulative impact of poor diets. Another determinant is education. Increased literacy for older women will bring health benefits for them.

These findings reflect that an individual's health deteriorates with increasing age however ageing does not affect everybody equally. Thus,

specialized geriatric health services have to be adopted by old age home care givers en route maintaining and developing healthy lifestyles in the old age homes. Setting up health care facilities for the elderly at government and private hospitals along with medical colleges at low cost will provide comprehensive care in various morbidities and can lead to independent and disability free life.

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