Geriatric Morbidity Pattern and Depression in Relation to Family Support in Aged Population of Kashmir Valley

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Citation

Abstract

Background: To see the morbidity pattern and depression in relation to family support in Geriatric population of Kashmir valley of India having different cultural and geographical identity.

Objectives: The objective of the study was to see the morbidity pattern in Kashmir valley and to see the depression level in relation to the family support.

Design: The study was a questionnaire based survey of the people above the age of 60 years who attended the Out Patients Department of Regional Research Institute of Unani Medicine, Srinagar and also the aged people were contacted during the Mobile Clinical Programme of the Institute in the urban slums of Srinagar city.

Results: The survey was conducted on 210 aged people above the age of 60 years. The morbidity pattern was 67.6% having single ailment, 30.4% people having 2 ailments and only 2.0% having more than 3 ailments. 85.7% of the geriatric population was having family support and only 14.2% were without any family support. Out of the people having family support only 20.0% were depressed as against 60.0% depressed people in the category having no family support. The details are discussed in the paper.

Conclusion: It is concluded that the joint family system and strong family ties have some positive effect on the well being of the elderly and the morbidity pattern is quite different from the other studies conducted.

INTRODUCTION

Ageing is an irreversible process. In the words of Seneca, "old age is an incurable disease". More recently Sir James Sterling Ross commented, "you do not heal old age, you protect it, you promote it and you extend it". Expectation of life at birth has increased in recent years. The expected life projected in 2011 – 2016 has been 67 years for male and 69 years for female. United Nation has indicated that 21% of the Indian population will be above 60 years by 2050.

Industrialization, urbanization, education and exposure to western life style are bringing changes in values of life. Despite the strong family ties in India in general and Kashmir valley in particular, the old age population has become vulnerable due to which they become distressed and depressed.

In the valley of Kashmir, people leave their homes for the greener postures to different cities even outside the country to seek better employment leaving behind the aged ones to fend for themselves.

Old age is not a disease in itself but the elderly are vulnerable to long term diseases of insidious onset such as cardiovascular diseases, cancer, diabetes, musculoskeletal and mental disorders. There are multiple symptoms due to decline in the functioning of various body functions. According to Unani System of Medicine the temperament above the age of 60 is cold and wet, and it is due to the lowered Hararat-e-Garizia giving rise to different ailments. Thus different diet pattern and mashaikh have been prescribed for the aged ones in the Unani Classics.

MATERIAL AND METHODS

A cross sectional study was conducted on the pre-tested questionnaire specially designed for the assessment of the

morbidity pattern of the geriatric population. The survey was conducted in the Out Patient Department of Regional Research Institute of Unani Medicine, Srinagar, Kashmir running under the aegis of Central Council for Research in Unani Medicine, New Delhi and during the mobile clinical programme of Regional Research Institute of Unani Medicine, Srinagar in the urban slums of Srinagar city. The purpose of the study was explained and the confidentiality assured.

The anthropometric data was collected and a detailed history was taken regarding depression, family support, appetite, sleep, memory status, etc. Separate diagnostic criterions were used for the diagnosis of different ailments. If the sleep was less than 4 hours/night it was taken as disturbed.

STATISTICS

The data thus collected was calculated with cross tabulation on hp personal computer using Instat-3 programme for statistical calculations. Mean, standard deviation (SD), standard error of mean (SEM), maximum and minimum were calculated for age, weight, height, body mass index (BMI), correlation between family support and depression etc. The p-value was calculated by applying Fisher's exact test of the significance.

RESULTS

A total of 210 people above the age of 60 years were recruited for the study. Out of 210 aged persons 122 were female and 88 male with mean age 70.53 (SD 7.32) of the population. The mean age of female was 69.75 (SD 7.43) and that of male it was 71.6 (SD 7.12). The mean body mass index (BMI) of male was 22.73 (SD 4.17) and that of female it was 25.91 (SD 4.76). Out of 210 aged people 48 (22.8%) were from rural areas, 116 (55.2%) from urban areas and 46 (21.9%) belonged to urban slums of Srinagar city (Table I).

Figure 1

Table 1: Anthropometric data

	Male	Female	Total
Mean age (SD)	71.6 (7.12)	69.7 (7.43)	70.53 (7.32)
Urban (%)	44 (37.9%)	72 (62.0%)	116 (55.2%)
Rural (%)	24 (50%)	24 (50%)	48 (22.8%)
Urban Slums (%)	20 (43.4%)	26 (56.5%)	46 (21.9%)
Mean BMI (SD)	22.73 (4.17)	25.91 (4.76)	24.16 (4.75)
Smokers	60 (78.9%)	16 (21.0%)	76 (36.1%)
Non smokers	28 (20.8%)	106 (79.1%)	134 (63.8%)
No income	42 (28.7%)	104 (71.2%)	146 (69.5%)
Having some income	46 (71.8%)	18 (28.1%)	64 (30.4%)

Anthropometric data regarding the geriatric people surveyed depicting mean age, BMI, and social status

Family support and Depression:

As evident from the table (Table II) the majority of the aged population were having family support as 85.7% (n=180) were having family support and 14.3% (n=30) were not having any family support.

Figure 2

Table 2: Family support in relation to depression

	Number of People	Depression	No Depression
With family support	180 (85.7%)	36 (20.0%)	144 (80.0%)
Without family support	30 (14.2%)	18 (60.0%)	12 (40.0%)

Depression and family support with regard to geriatric population in Kashmir, India. After applying Fisher's test of significance the p-value was <0.0001 on both sides.

The depression was correlated with family support as only 20% (n=36) of aged population having family support was found depressed as against 60% (n=18) depressed people amongst those without family support. After applying the Fisher's exact test the two sided p value is <0.0001, considered extremely significant. The row/column association is statistically significant, which gives the impression that family support leads to healthy life. During the study it was found that 56% (n=118, male 36 and female 82) people were having impaired vision and 34.2% (n=72) people were having impaired hearing. Hypertension being the major problem of the aged and the same was found during the current study as 79.0% (n=166, male 66 and female 100) people were having raised blood pressure and majority was of the females. Out of 210 aged persons studied 136 (64.7%) persons were having disturbed sleep while as 134 (63.8%) persons were having normal appetite.

Morbidity Pattern:

Figure 3

Table 3: Morbidity pattern of the population

Number of ailments	Number of people	Percentage
Single ailment	142	67.6
Two ailments	64	30.4
More than 3 ailments	4	2.0

Number of ailments with regard to the morbidity pattern in geriatric population

The morbidity pattern was studied among all persons and only 4 (2.0%) persons were having 3 or more diseases where as 64 (30.4%) population were suffering from 2 diseases. The majority of the population 67.6% (n=142) were having only single ailment (Table III). The different ailments of the aged were also taken into consideration and it was found that majority of the population were suffering from musculoskeletal disorders amounting to 44.7% (n=94), followed by 17.1% (n=36) suffering from gastrointestinal

disorders. Genitourinary ailments were present 15.2% (n=32) persons with majority having benign prostatic hyperplasia (BPH) and respiratory disorders were present in 11.4% (n=24) persons (Table IV).

Figure 4

Table 4: Diseasewise distribution

Disease	Number of persons	Percentage
Musculoskeletal Disorders	94	44.7
Gastrointestinal Disorders	36	17.1
Urogenital Disorders	32	15.2
Respiratory Ailments	24	11.4
Cardiovascular Ailments	24	11.4
Miscellaneous	22	10.4
Diabetes	14	6.6

Disease wise distribution of the people above the age of 60 years

DISCUSSION

From the present study it is evident that the depression of the aged population is directly proportional to the family support as minimum depression was found in the people having family support as 20% of the population having family support were suffering from the depression while as 60% of the population was depressed who were not having any kind of family support. After applying Fisher's test of significance the two sided p – value is <0.0001 considered to be highly significant. The prevalence of depression in the present study was 25.7%. The prevalence of depression in Caucasian elderly population in the West varies from 1% to 42% (Djernes J K 2006). As far as the developing countries are concerned the literature is not sufficient. The prevalence rate of depression in a community samples of elderly in India have varied from 6% to 50% (Venkoba RA 1993, Nandi PS et al 1997). The traditional family system in South Asia is the joint family system (Mason KO 1992). The greater proportion of the population in India in general and in Kashmir in particular live in rural areas (80%) and the main occupation being farming. The joint family system is predominant in rural areas and one of the main advantage of joint family system is the availability of a large workforce for occupation.

In joint family system there exists a strong differentiation of authority across generations, and a relatively passive role of females. In the urban areas there is distribution of joint family system. On of the main consequences of nuclear family is loss of 'elderly power' over the younger generation (Thornton A et al 1987). The nucleation leads to a decrease in co-residence of the elderly with adult children and therefore a decrease in care and support for the aged.

Mason has suggested that urbanization would lead to nucleation of family system in developing countries and a decrease in the support of elderly (Mason KO 1992).

The current study shows the importance of joint family system as persons with family support were less prone to depression as against the persons without family support and the depression was 3 times higher in the people without family support 60% against 20%.

As far as the gender is concerned the prevalence of depression was twice more in female subjects as compared to male subjects (32.7% vs 15.4%) which is in accordance to the study conducted in Pakistan by Taqui et al where 33% female elderly were found depressed as against 15.7% male population (Taqui AM et al 2007). Also certain reviews showed the females being significant risk factors for depression in elderly (Dfernes JK 2006, Cole MG et al 2003).

MORBIDITY PROFILE

The present study showed 79% of elderly population was found having hypertension while as in a study conducted in Udaipur, India the incidence of hypertension was 48% (Prakash R et al 2004). In a study by Hanger et al reported Christ Church study of elderly observed prevalence of hypertension at 43.6% (Hanger et al 1990). Joshi et al in their study from Northern India have reported83% of the elderly population having more than three morbidities (Joshi K et al 2003). In the present study majority of the aged 67.6% were having only single morbidity which is quite different and the difference can be attributed to the vast difference in the culture and geography of the region. In a similar study on a community dwelling in Israel, Fushs et al have reported 22.2% of the Israeli Jewish population aged 75-94 years having single ailment while as 20.1% had two ailments and 44.4% had three or more ailments (Fushs Z et al 1998). In our study 30.4% aged people were having two morbidities and only 2.0% people were having three or more ailments.

Kishore and Garg have reported the commonest morbidity in the elderly in the rural areas were cataract in 30%, arthritis and arthralgia in 15.6%, anaemia in 13.3%, respiratory ailment in 7.3% (Kishore S et al 1992). In the present study the majority of the population above 60 years of age were suffering from musculoskeletal disorders(44.7%), followed by gastrointestinal ailments (17.1%), urogenital disorders (15.2%), respiratory ailments (11.4%), cardiovascular

disorders (11.4%), diabetes (6.6%) and the other miscellaneous ailments were found in 10.4% of the people. These results are in accordance to the study conducted by Sunder et al in Rohtak district of Haryana (India) where 51.8% of the elderly population was found to be suffering from joint pain and 58.0% having breathing problem (Sunder L et al 1999). Sunder et al have also reported visual impairment in 65% of the elderly (Sunder L et al 1999) which is in accordance to the present study where 56.2% of the elderly population was having visual impairment, also the hearing impairment was found in 34.2% of the aged population. Joshi et al have reported the visual impairment in 61% of the population above the age of 60 years(Joshi K et al 2003).

CONCLUSION

The present study found that residing in a nuclear family is a strong independent predictor of depression among elderly. The morbidity profile in our study was quite different to what has been reported from India and other parts of the world. The degenerative diseases such as arthritis have been found more prevalent in elderly population while as cardiovascular ailments are not so high.

A study on a large sample size is needed in this part of the world having quite different culture and geographical location as compared to other parts of Asia.

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