ORIGINAL RESEARCH ARTICLE
pISSN 0976 3325 | eISSN 2229 6816
Open Access Article
www.njcmindia.org

Psychosocial Assessment of Patients Attending Geriatrics OPD at Civil Hospital in Ahmedabad

Neeta Mathur[1]

Financial Support: None declared
Conflict of Interest: None declared
Copy Right: The Journal retains the copyrights of this article. However, reproduction is permissible with due acknowledgement of the source.

How to cite this article:
Mathur N. Psychosocial Assessment of Patients Attending Geriatrics OPD at Civil Hospital in Ahmedabad. Natl J Community Med 2018;9(7):541-545

Author's Affiliation:
[1]Associate Professor, Dept of Community Medicine, Apollo Institute of Medical Sciences & Research, Hyderabad

Correspondence
Neeta Mathur
neetamathur10@yahoo.co.in

Date of Submission: 26-06-18
Date of Acceptance: 23-07-18
Date of Publication: 31-07-18

ABSTRACT

Background: Health status is an important factor that has a significant impact on the quality of life of an elderly population. The aim of the study is to determine the medical, psychological and social characteristics among geriatric patients.

Methods: A hospital based study was conducted in Civil Hospital, Ahmedabad. The patients aged 65 years and above were included in the geriatrics outpatient department. The geriatric patients were interviewed during their geriatric clinic visit using a structured questionnaire regarding their socio-demographic characteristics, addiction history, perceived health status and a short version of the geriatric depression scale.

Results: Depression was found in 31.5% of the patients. It was due to combined effect of sedentary life style, medication used and greater number of reported symptoms. Not due to difference in gender, age group, loss of spouse, employment, educational status & living arrangement.

Conclusions: In order to improve the health status of the geriatric patients it is important to carry out more studies in different areas to identify various factors that are related to psychological distress and disability, which should lead to efforts to develop effective programmes in disease prevention.

Key words: geriatric, geriatric depression scale, perceived health status

INTRODUCTION

The World Health Organization (WHO) has predicted that developing countries will account for most of the increase in the world's elderly population by the year 2000.[1] Many health problems are known to increase with age and this demographic trend may lead to an increase in the absolute number of health conditions in the population.[2] The health problems of the elderly are complicated by social, economic and psychological interactions to a greater degree than younger people. Moreover, the health problems of the elderly are usually multiple and are often masked by sensory and cognitive impairments so that special skills are required to detect them. [3] Both factors contribute to a worsening of morbidity and mortality.

The importance of early surveillance of the health needs of elderly people has been emphasized. [4,5] Geriatric assessment is a multidimensional diagnostic process designed to identify medical, psychosocial and functional capabilities and problems, and to produce a comprehensive plan for the management of elderly people. [6] The aim of this study was to determine the psychological and social characteristics of geriatric patients attending the geriatric clinic in Civil Hospital, Ahmedabad.

MATERIAL & METHODS

A hospital-based survey was conducted in Civil Hospital, Ahmedabad between July and September 2006. The total number of geriatric subjects aged 65 years and above registered in the geriatric clinic during the 3 months duration was 327. All the participants in the study were interviewed during their geriatric clinic visit using a structured questionnaire to collect the following data:

Sociodemographic characteristics including age, sex, loss of spouse, educational level, employment, living arrangements (alone or with others), care provider, source of income, life style, medications used.

Addiction history which includes history of chewing, smoking and alcohol

Perceived health status: Each participant was questioned about physical health, symptoms related to different body systems and age-related health problems, such as headache, bodyache, joint pain, loss of teeth, dyspepsia, loss of weight, insomnia, lack of energy, frequency of fall, shortness of breath, constipation, impaired vision, poor appetite, dizziness, incontinence, impaired hearing, poor self-perception of health, pedel edema, tremors of the hand and impaired memory over the preceding 6 months. The overall physical health status as perceived by the participant was rated using a scoring system giving 1 point for the presence of each complaint or symptom of poor health and zero points for the absence of such complaints or symptoms. The total score thus ranged from 0 to 20 points. Scores between 0 and 5 were considered to indicate good physical health, 6–13 average health and 14–20 poor health.

The short version of the **geriatric depression scale** [7,8] was used to screen for depression.

Data were analysed using EPI-Info statistical packages. Using scoring system, mean, standard deviation (SD), Significance of the results was tested using the chi-squared test and z test was used to compare quantitative data.

RESULTS

A total of 327 geriatric patients were interviewed. Their characteristics according to sex are shown in Table 1. About two-thirds of all geriatric patients (70.9%) were aged 65–74 years, with those aged 85 years or more constituting only 5.1% of all geriatric patients. Of all the participants, 44.8% reported loss of spouse, 33.9% were illiterate and 86.1% were unemployed. Females constituted significantly higher proportions of loss of spouse ($P < 0.001$) and uneducated ($P < 0.001$) geriatric patients than males.

Table 2 shows the social characteristics of geriatric patients according to sex. Of all the patients, 5.3% were living alone and 27.3% had sedentary life style. Regarding Care Provider, over three-forth subjects were dependent on their children or other relatives. Children provided the main financial support for their mothers (df=3 $P < 0.005$), while the pension was the main source of support for men. Female geriatric patients took significantly large number of drugs (df=1 $P < 0.05$). Table 3 shows the Addiction history of geriatric subjects according to sex. Males geriatric patients had significantly higher proportions of history of smoking ($P < 0.001$) and history of alcohol ($P < 0.001$) than females.

Table 4 shows self-rated health status in the 6 months prior to the survey based on symptoms.

Table 1 Characteristics of 337 geriatric subjects in Civil Hospital by sex

Characteristics	Male (n=204) (%)	Female (n=133) (%)	Total (n=337) (%)	X2	P value
Age (years)					
65-74	139 (68.1)	100 (75.2)	239 (70.9)	2.1	0.35
75-84	53 (30)	28 (21.1)	81 (24)		
85+	12 (5.9)	5 (3.7)	17 (5.1)		
Loss of Spouse					
Yes	74 (36.3)	77 (57.9)	151 (44.8)	15	<0.001
No	130 (63.7)	56 (42.1)	186 (55.2)		
Education					
College	24 (11.8)	2 (1.5)	26 (7.7)	60	<0.001
Secondary	20 (9.8)	6 (4.5)	26 (7.7)		
Middle	43 (21.1)	8 (6)	51 (15.1)		
Primary	78 (38.2)	42 (31.6)	120 (35.6)		
Illiterate	39 (19.1)	75 (56.4)	114 (33.9)		
Employment					
Employed	32 (15.7)	15 (11.3)	47 (13.9)	1.3	0.253
Unemployed	172 (84.3)	118 (88.7)	290 (86.1)		

Table 2: Social characteristics of geriatric subjects according to sex

Characteristics	Male (n=204) (%)	Female (n=133) (%)	Total (n=337) (%)	X2	P value
Living Arrangement					
Alone	8 (3.9)	10 (7.5)	18 (5.3)	3.1	0.209
With spouse	34 (16.7)	16 (12)	50 (14.8)		
With spouse & childre	162 (79.4)	107 (80.5)	269 (79.9)		
Care Provider					
Self	15 (7.4)	28 (21.1)	43 (12.8)	21	<0.001
Spouse	41 (20.1)	9 (6.8)	50 (14.8)		
Children & grandchild	148 (72.5)	96 (72.1)	244 (72.4)		
Source of Income					
Current work	24 (11.8)	15 (11.3)	39 (11.6)	16	<0.005
Pension	47 (23)	13 (9.8)	60 (17.8)		
Support from children	121 (59.3)	103 (77.4)	224 (66.5)		
Others	12 (5.9)	2 (1.5)	14 (4.1)		
Life Style					
Sedentary	64 (31.4)	28 (21.1)	92 (27.3)	4.9	0.088
Exercise	83 (40.7)	67 (50.4)	150 (44.5)		
Puja	57 (27.9)	38 (28.5)	95 (28.2)		
Medications used					
None	40 (19.6)	14 (10.5)	54 (16)	4.9	<0.05
1-2 drugs	34 (16.7)	47 (35.3)	81 (24)		
3-4 drugs	38 (18.6)	44 (33.1)	82 (24.4)		
5+ drugs	92 (45.1)	28 (21.1)	120 (35.6)		

Table 3: Addiction history of geriatric subjects according to sex

Characteristics	Male (n=204) (%)	Female (n=133) (%)	Total (n=337) (%)	X2	P value
H/o Chewing					
Yes	34 (16.7)	34 (25.6)	68 (20.4)		
No	170 (83.3)	99 (74.4)	269 (80.6)	4	0.047
H/o Smoking					
Yes	77 (37.7)	8 (6)	85 (25.2)		
No	127 (62.3)	125 (94)	252 (74.8)	42.8	<0.001
H/o Alcohol					
Yes	20 (9.8)	1 (0.8)	21 (6.2)		
No	184 (90.2)	132 (99.2)	316 (93.8)	11.3	<0.001

Table 4 Health status based on reported symptoms by elderly subjects

Characteristics	Male (n=204) (%)	Female (n=133) (%)	Total (n=337) (%)	P value
Headache	70 (34.3)	81 (60.9)	151 (44.8)	<0.001
Body aches	80 (39.2)	91 (68.4)	171 (50.7)	<0.001
Joint pain	124 (60.8)	91 (68.4)	215 (63.8)	0.153
Loss of teeth	136 (66.7)	105 (78.9)	241 (71.5)	0.0154
Dyspepsia	40 (19.6)	56 (42.1)	96 (28.5)	<0.001
Loss of weight	48 (23.5)	48 (36.1)	96 (28.5)	0.013
Insomnia	112 (54.9)	78 (58.6)	190 (56.4)	0.498
Lack of energy	88 (43.1)	112 (84.2)	200 (59.3)	<0.001
Frequency of fall	52 (25.5)	49 (36.8)	101 (30)	0.026
Shortness of breath	76 (37.3)	48 (36.1)	124 (36.8)	0.828
Constipation	68 (33.3)	14 (10.5)	82 (24.3)	<0.001
Impaired vision	95 (46.6)	77 (57.9)	172 (51)	0.042
Poor appetite	40 (19.6)	42 (31.6)	82 (24.3)	0.012
Dizziness	26 (12.7)	49 (36.8)	75 (22.3)	<0.001
Incontinence	29 (14.2)	28 (21.1)	57 (16.9)	0.102
Impaired hearing	60 (29.4)	28 (21.1)	88 (26.1)	0.088
Poor self-perception of health	52 (25.5)	50 (37.6)	102 (30.3)	0.018
Pedel edema	40 (19.6)	35 (26.3)	75 (22.3)	0.148
Tremors of the hand	28 (13.7)	14 (10.5)	42 (12.5)	0.384
Impaired memory	48 (23.5)	7 (5.3)	55 (16.3)	<0.001
Mean (SD) of symptoms reported	6.43 (3.6)	8.29 (3.7)	7.17 (3.7)	Highly significant

SD = standard deviation ; # = Z test

Table 5: Depression score and some risk factors for depression among the geriatric subjects

Predictor	Depressed (n=106) (%)	Not depressed (n=231) (%)	X2 (P value)
Sex			
Male (204)	64 (31.4)	140 (68.6)	0.001 (0.968)
Female (133)	42 (31.6)	91 (68.4)	
Age (years)			
65-74 (239)	72 (30.1)	167 (69.9)	1.07 (0.585)
75-84 (81)	27 (33.3)	54 (66.7)	
85+ (17)	7 (41.2)	10 (58.8)	
Loss of spouse			
Yes (151)	52 (34.4)	99 (65.6)	1.13(0.288)
No (186)	54 (29)	132 (71)	
Employment			
Employed (47)	16 (34)	31 (66)	0.17 (0.680)
Unemployed (290)	90 (31)	200 (69)	
Educational status			
Formal education (223)	73 (32.7)	150 (67.3)	0.50 (0.479)
Illiterate (114)	33 (28.9)	81 (71.1)	
Living arrangement			
Alone (18)	8 (44.4)	10 (55.6)	1.49 (0.222)
With family members (319)	98 (30.7)	221 (69.3)	
Life style			
Sedentary (92)	45 (48.9)	47 (51.1)	17.89 (P<0.001)
Active (245)	61 (24.9)	184 (75.1)	
Medications used			
None (54)	10 (18.5)	44 (81.5)	4.99(0.025)
Drugs (283)	96 (33.9)	187 (66.1)	

The majority of patients (71.5%) reported loss of teeth to the extent of interference with chewing of food, joint pain (63.8%), lack of energy (59.3%), insomnia (56.4%), impaired vision (51%), bodyache (50.7%), headache (44.8%), shortness of breath (36.8%), poor self perception of health (30.3%), frequency of fall (30%), dyspepsia (28.5%), loss of weight (28.5%), impaired hearing (26.1%), constipation (24.3%), poor appetite (24.3%), dizziness (22.3%), pedel edema (22.3%). Less frequently incontinence (16.9%), impaired memory (16.3%) and tremors of the hand (12.5%) were reported. Female geriatric patients had significantly higher proportion (P<0.001) of bodyache, headache, dyspepsia, lack of energy and dizziness; While significant results (P<0.05) in loss of teeth, loss of weight, frequency of fall, impaired vision, poor appetite and poor self perception of health then males. Male geriatric patients had significantly higher proportion (P<0.001) of constipation and impaired memory then females. Mean score of number of symptoms reported by female elderly patients were highly significant (P<0.005)

As shown in table 5 the prevalence of depression was significantly higher (P<0.001) among geriatric patients having sedentary life style. Use of medication was associated with depression (P<0.05). No significant depression scores observed in sex, age, loss of spouse, employment, educational status & living arrangement. Mean scores were significant in greater number of reported symptoms.

DISCUSSION

This study explored the psychosocial status of geriatric patients based on their socio-demographic characteristics, addiction history, perceived health status and a short version of the geriatric depression scale.

Almost all geriatric patients in the present study lived with their families (94.7%), while only 5.3% lived alone. Children were the caregivers for over 72% of geriatric patients. It is the cultural norm for children to care for aged parents and grandparents and homes for the elderly in the country, as in all countries in the region, tend to make the younger generation feel guilty for having failed to take on their natural responsibility. [8] However, it is difficult to say how long this practice will persist.

Many elderly people have one or more chronic conditions for which they are taking medication, and it is against this backdrop that acute disease patterns must be assessed. It is therefore often difficult to identify one major etiological factor to explain the deteriorating health status of an elderly person. [9] In our study, nearly one third patients were on more than 5 medications a finding that emphasizes drug use as a major problem in the elderly. Today, it is recognized that geriatricians must attempt to reduce the number and/or dosage of drugs a patient receives.

There is an implicit assumption that disease and deterioration of ill-health are inevitably associated

with chronological ageing. However, physical decline in old age is not always identical in all those in a particular age group. [10] Some geriatric patients are sick while others maintain good health status even into advanced age. Hence, it is important to know from the geriatric patients how they evaluate their health since health comprises subjective and objective evaluations. In this study, out of 20 symptoms mean number of symptoms reported by geriatric patients were 7.17. It was also noticed that geriatric female were relatively more ill than the geriatric male. Old age is usually accompanied by a decline in physical fitness and increasing experience of body aches and pains. Based on the ageing survey by Rajan and others, [11] 35% of the surveyed elderly people over 60 years old reported having some perennial health problems which seemed to increase in proportion with increase in age of the respondents. Sunder et al.[12] reported that, in a rural area of Rohtak district of Haryana (India), the leading symptoms among the male elderly were visual impairment (65%), chronic cough with or without expectoration and difficulty in breathing (58%), joint pains (51.8%), hearing problems (18.3%), and gastrointestinal problems (9.9%) compared with the present study where loss of teeth (66.7%) and joint pain (60.8%) followed by Insomnia (54.9%) and impaired vision (46.6%) were the commonest symptoms. A study conducted in the rural area of Pondicherry [13] 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%.

Mental disorders are common in elderly people. In most developing countries, depressive disorders are not well characterized and are often dismissed as the normal behaviour of old age or senility. [14] The routine use of the geriatric depression scale has been recommended for the early detection of depression.[7,8] In this study, this screening tool detected 106 previously undiagnosed cases of depression, giving a prevalence of 31.5%. This is relatively high compared to a prevalence of around 10% in the Western communities [15,16] and 17.5% in Abolfotouch et al.[17] The frequency of depression in geriatric patients was significantly associated with lifestyle, medications used and self reported symptoms.

CONCLUSION

In order to improve the health status of the geriatric patients it is important to carry out more studies in different areas to identify various factors that are related to psychological distress and disability, which should lead to efforts to develop effective programmes in disease prevention.

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Hafez G, Bagchi K, Badr A. Ageing populations of the Eastern Mediterranean Region: a challenge for health care systems. Health services journal of the Eastern Mediterranean Region, WHO, 1992, 6:15.
2. Gijsen R, Hoeymans N, Schellevis F, Ruwaard D, Satariano W, Van den Bos G. Causes and consequences of comorbidity: A review. J Clin Epidemiol. 2001; 54:661–74.
3. Harrison S et al. Assessing the needs of the elderly using unsolicited visits by health visitors. Journal of the Royal Society of Medicine. 1985;78:557–61.
4. Arie T. Prevention of mental disorders of old age. Journal of the American Geriatric Patients Society. 1984;32:460–5.
5. Pathy MS et al. Randomised trial of case finding and surveillance of elderly people at home. Lancet. 1992;340:890–3.
6. Morely JE. Geriatric update. Saudi medical journal. 1989;10:15–20.
7. Allen N et al. A brief sensitive screening instrument for depression in late life. Age and ageing. 1994;23:213–8.
8. Hafez G, Bagchi K, Badr A. Ageing populations of the Eastern Mediterranean Region: a challenge for health care systems. Health services journal of the Eastern Mediterranean Region WHO. 1992, 6:15.
9. Morely JE. Geriatric update. Saudi medical journal, 1989, 10:15–20.
10. Prakash IJ. Health **and** morbidity **in** later years. Psycho-Social Gerontology: Tra**inin**g Material For Mental Health Pr**of**essionals. 1999: 6–8.
11. Rajan SI, Misra US, Sarma PS. The Liv**in**g Conditions **of** the **Elderly** People. **In**dia's **Elderly**. Delhi: Sage Publication. 1999:211–50.
12. Sunder L, Chadha SL, Bhatia PC. A study on senior citizens in rural areas. Health for the Millions. 1999;25:18–20.
13. Purty AJ, Bazroy J, Kar M, Vasudevan K, Veliath A, Panda P. Morbidity Pattern among the elderly population in the rural area of Tamil Nadu, India. Turk J Med Sci. 2006;36:45–50.
14. Hafez G, Bagchi K, eds. Health care for the elderly: a manual for primary health care workers. Alexandria, World Health Organization Regional Office for the Eastern Mediterranean, 1994 (WHO Regional publications, Eastern Mediterranean Series 10).
15. Livingston G, Hawkins A, Graham N, Blizard B, Mann A. The Gospel Oak Study: Prevalence rates of dementia, depression and activity limitation among elderly residents in inner London. Psychol Med. 1990;20:137–46.
16. Copeland JR, Dewey ME, Wood N, Searle R, Davidson IA, McWilliam C. Range of mental illness among the elderly in the community. Prevalence in liverpool using the GMS–AGECAT package. Br J Psychiatry. 1987;150:815–23.
17. Abolfotouh MA, Daffallah AA, Khan MY, Khattab MS, Abdulmoneim I. Psychosocial assessment of geriatric subjects in Abha City, Saudi Arabia. East Mediterr Health J. 2001;7:481–91.