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Original Research Paper

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A RETROSPECTIVE STUDY OF SOCIODEMOGRAPHIC PROFILE AND PSYCHIATRIC MORBIDITY IN GERIATRIC PATIENTS ATTENDING PSYCHIATRIC DEPARTMENT IN A TERTIARY CARE HOSPITAL IN A SUB URBAN POPULATION

Dr. Ananthakrishnan V. S* MBBS , Postgraduate in Psychiatry, Department of Psychiatry, Meenakshi medical college and research institute, Kanchipuram, Tamilnadu. *Corresponding Author

Dr. Dulla Nageswara Rao MBBS , Postgraduate in General Medicine, Department of General Medicine , Meenakshi medical college and research institute, Kanchipuram, Tamilnadu.

Dr. Prashant Jain MBBS , Postgraduate in Psychiatry, Department of Psychiatry, Meenakshi medical college and research institute, Kanchipuram, Tamilnadu.

Dr. Ashweeja N MBBS , Postgraduate in Psychiatry, Department of Psychiatry, Meenakshi medical college and research institute, Kanchipuram, Tamilnadu.

Dr.Shailaja Bandla MBBS, MD (Psy), Associate professor, Department of Psychiatry, Pinnamaneni Siddhartha Medical College, Chinna Avutapalle, Andhra Pradesh.

ABSTRACT

Background: Globally there is an increase in elderly population. Psychiatric morbidity is also increasing in elderly owing to increased longevity and changing social circumstances.

Aims: A retrospective study of sociodemographic profile and psychiatric morbidity in geriatric patients attending psychiatric department in a tertiary care hospital in a sub urban population

Materials and Methods: Mini Mental Status Examination was used to screen for dementia. Hamilton Rating Scale for Depression was used to quantify depression. SPSS 24was used for statistical analysis.

Results: Psychiatric disorders were more prevalent in individuals aged > 80 years(72%). Predominant psychiatric diagnosiswere depression, dementia, somatic complaints, alcohol dependence, panic attacks and GAD.Presence of dementia was associated with increased age.Depression was associated with Low education status, female sex, involuntary admission in old age home, presence of physical illness and visual impairment. Individuals in old age home had lesser prevalence of psychiatric disorders than those in community.

Conclusion: The overall prevalence of psychiatric morbidity was 59.2%. Psychiatric morbidity was less in old age home population owing to better availability of care, less number of social stressors etc. The study highlights the importance of delivery of structured care facilities in elderly population.

KEYWORDS : geriatric population, psychiatric morbidity, tertiary care hospital,sub urban population

Introduction:

Globally there is an increase in geriatric population (defined as those aged 60 years or above) [1]owing to increased longevity and better health care facilities. People aged 60 years and above will constitute 10.2% of the total world population by 2025.[2] They constitute about 8% of the total population of India in 2011.[3]The life expectency of an average indian has increased to 67.3 years in males and 69.6 years in females in 2011,[3]which is likely to increase to 18.4% by 2025.[4]

Due to the normal ageing of the brain, deteriorating physical health and cerebral pathology, the overall prevalence of mental and behavioral disorders tends to increase with age[5]

Disability arising due to various illnesses, loneliness, lack of family support, restricted personal autonomy, and financial dependency are other important contributing factors for higher prevalence of mental and behavioural disorders.[6]

Also diagnosis of psychiatric disorders in this population is a challenge owing to comorbidity with other physical illness. A multitude of scales are available to assess the psychiatric morbidity in elderly people.[7]

Prevalence of psychiatric disorders in elderly population across india varies between various studies. Venkoba rao etal [8] reported a prevalence of 89/1000 in 1982, Nandi etal[9]61% inrural population in 1975, Tiwari etal[10, 11] 43.3% in 2000and 42.8% in 2010. etc. Hence a wide variation in prevalence rates exists. Depression,cognitive decline/dementia, anxiety disorders, substance use disorders etc are common psychiatric disorders in this population.

Because of changing social circumstances and various other reasons , the elderly are forced to stay in old age homes. Prevalence in psychiatric morbidity is found to be less in old age homes than those in community (Tiple etal[12],Singh etal[13])

Need for the study: In view of scarcity of studies comparing prevalence of psychiatric disorders among the rural community and old age home, the present study was done.

Aims & Objectives of the study: A retrospective study of sociodemographic profile and psychiatric morbidity in geriatric patients attending psychiatric department in a tertiary care hospital in a sub urban population

Materials and Methods: This was a cross sectional study. After getting necessary permission, medical records of 140 elderly people visiting psychiatry outpatient department in past 2 years Study proforma containing socio demographic profile were collected, and diagnosis were filled according to ICD 10..For statistical convenience people were divided into diagnostic group. Statistical analysis was done using SPSS24.

Tools used:

1. A semi structured Intake proforma designed for this studyfor collecting socio-demographic details was used.

2. Mini Mental State Examination:[14](Developed by the Indo-US cross national Dementia Epidemiological Study). Maximumscore 30. Scores below 24 are supposed to have cognitive decline.

3.Hamilton Rating Scale for Depression:(HAM-D): [16]This is a clinician administered scale to quantify the severity of depression. It consists of 21 items. Only the first 17 will be scored. A score above 7 is considered as depression.

8-13 Mild depression,14-18 moderate depression, 19-22 severe depression, >23 very severe depression.

Results:

Table 1 shows the sociodemographic data of the elderly subjects.

Of the 60 subjects in old age home, 38(63.34%) were females and 22(36.66%) were males. When the reasons for staying in old age home were explored,19(31.7%) of them were not having any family members to stay with, 12(20%) of them were forced to stay in old age home and 29(48.3%)of them have volunteered to stay.

In our study, the persons in the age group of >80 years have more prevalence of psychiatric disorders(72%) followed by those in the age group of 70-79 years (60.41%) and 60-69 years (53.2%).

Of 47 males, 24(51%) had psychiatric disorder and of 73 females, 48(65%) were having a psychiatric disorder.

The prevalence of psychiatric disorders in old age home 32(53.3%) was less when compared to that of community40(66.67%).

Table 2: Depression was found to be the most common psychiatric disorder in the old age home (46.67%) and in the community (56.67%) followed by Dementia(10.8%), somatoform disorders (10.8%), panic disorder(6.7%), alcohol dependence syndrome (4.1%), psychosis 2.5% and Generalized anxiety disorder (1.6%).

Dementia was significantly associated with increasing age. Depression was significantly associated with Low education status, female sex, involuntary admission in old age home, presence of physical illness and visual impairment.

Among physical illness, hypertension was found in 58(48.3%) followed by Diabetes mellitus in 52(43.3%), Arthritis 20(16.7%) and other physical disorders(hypothyroidism, ischemic heart disease, stroke, renal disease, seizures, asthma, cancer, etc.) were seen in 29(24.2%) of elderly people.

Discussion:

The study population consisted of 60 individuals living in an old age home and 60 individuals from the community.

Most of the study sample belong to the age group of 70-79 years(40%) followed by those 60-69 years(39.2%) and >80 years(20.8%). This could be due to the fact that there is a gradual decline in the number of persons surviving with increasing age(life expectancy in India- 67.3 years)[3]. Similar distribution was seen in both old age home and in the community.

In our study, the population in the age group >80 years have more prevalence of psychiatric disorders(72%) followed by those in the age group of 70-79 years (60.41%) and 60-69 years (53.2%). Similar pattern was seen in both old age home and community. These findings are in accordance with a study by Nandi etal[19] in which there was a gradual increase in psychiatric morbidity with age. Where as in other studies by singh etal[13] no such increase in psychiatric morbidity with age was found.

The prevalence of psychiatric morbidity in females was higher (65%) when compared to that of males (51%). This could be due to the fact that women survive longer than their spouse because of marginal age difference in the married couple in India, lack of social support and delay in help seeking behaviour. Similar findings were reported by other studies where females had more psychiatric morbidity (singh etal[20], Jain etal[21]).Psychiatric morbidity in females was found to be 63.15%in old age home and and 68.57% in community. Men in community had more psychiatric morbidity(64%) when compared to that of men in old age home(31.8%) which was found to be statistically significant. (p=0.027).

This could be due to the reason that men in community have more psychosocial stressors when compared to those in old age home. Also 15(68.18%) of 22 men in old age home came voluntarily to stay there, they have cordial relationship with children, widower status and a constant income in the form of pension. Women in old age home had more psychiatric morbidity when compared to men(p=0.04).

Psychiatric morbidity was more in those who are illiterate/ having primary education 26(81.25%) (p=0.02). The reason for this finding in illiterates could be due to the lack of awareness about illness, delay in help seeking behaviour, and seeking treatment from native and alternate systems of medicine there by leading to prolonged suffering. Similar findings were reported by Seby etal.[22]and Singh etal[20].

The prevalence of psychiatric morbidity in community 40(66.7%) was found to be higher than that in old age home 32(53.3%) (p=0.06). similar findings were reported by Tiple etal[12] and Singh etal[20]. The changing family structure, more social stressors could be the factors contributing to higher psychiatric morbidity in the community. On the other hand, people in old age homes have a more structured daily routine, constant income(most of them were pensioners) and probably less stressors and lack of additional responsibilities contributing to lesser morbidity in them. But a feeling of lack of sense of purpose was reported in majority of those living in old age home.

Overall prevalence of psychiatric disorder in this study was found to be 71(59.2%).There is a wide variation in the prevalence of psychiatric disorders in elderly population in India across studies. Prevalence is found to be higher in studies done in rural population(Nandi etal[9] 61%, Tiwari etal[10] 43.3%) when compared to those done in urban geriatric population(Singh etal 34.2%[20], Malik etal[23] 43.3%). This difference could be due to higher financial difficulties, lack of better health care facilities, lack of awareness regarding illness , delay in help seeking behaviour, use of traditional/alternative methods of treatment in rural elderly individuals contributing to higher psychiatric morbidity. Also difference in various diagnostic tools and diagnostic guidelines across studies would also have contributed for the difference.

The presence of psychiatric disorder was seen in those who are unemployed(p=0.04), those who have marital discord(0.01) and those who are having other physical disorders like hypothyroidism, stroke, Coronary artery disease etc(p=0.01).

Among the psychiatric illnesses mood disorders were the most prevalent in our study. There were no patients with Bipolar Affective Disorder or Mania and all the patients in the category of mood disorders were diagnosed to have depression. 28(46.67%) of those living in old age home had depression when compared to 34(56.67%) of those living in community. When scores on Hamilton rating scale for depression were analysed, majority of them were found to have mild depression followed by moderate, severe and very severe depression. Among factors associated with Depression, it was found to be more in illiterates (p=0.018), those from low socio economic status (p=0.02), those who are forced to stay in old age home (p=0.01),those who have physical illnesses like Diabetes, Hypertension and Hypothyroidism(p=0.02) and those who are having problems with vision (p=0.01). Females living in old age home were found to have more depression than men. The reason for this may be that about 24(63.15%) of them were either forced to stay in old age home or they had no family to stay with(p=0.016). Depression was seen in those who doesn't have any recreational activities(p=0.04)/ spend lesser time in such activities, particularly in community.

Dementia/Cognitive decline as assessed by MMSE was found to be 13(10.8%).This study is similar to study by Seby etal[22]where prevalence of dementia was found to be 14.9% .6(10%) of those living in old age home and 7(11.67%) in community were having

dementia/cognitive decline. Prevalence of dementia was found to be more in those aged 80 years and above when compared to younger age groups (p=0.01 in old age home, p=0.03 in community).

Psychosis was found in 3(3%) of those living in community, whereas no one had psychosis in old age home . prevalence of psychosis in other studies were 0.6% Tiwari etal.[24]Psychosis was associated with hearing difficulties(p=0.03).

Somatic complaints were found to be about 12(10%), 9(15%) in Old age home and 3(5%) in community. However sub syndromal somatic complaints were found to be more in old age home 12(20%) than in those in community 4(6.7%). Somatic complaints were more in females in community when compared to that of males(p=0.03).The presence of somatic complaints was seen in those who have arthritis(p=0.001), problems with vision(0.03), those who have restricted mobility(0.006). Somatic complaints were also seen in those who have no recreational activities. (p=0.01)
Among the patients who had anxiety disorders, panic attacks were found in 8(6.6%) of elderly people. Panic attacks were more in those staying in old age home 6(10%). Generalized anxiety disorder was found in 1(1.7%) each in both old age home and community. Singh etal[20]reported prevalence of GAD to be 5.8% in their study.

Alcohol dependence syndrome was found in 5(8.3%) of those living in community. All of them were men. No one in the old age home has present diagnosis of alcohol dependence syndrome. One of the reason may be the admission policy of oldage home doesn't permit them to take alcohol. 5(8.3%) of those in community were also found to have alcohol abuse. Similar results were seen from other studies.(Singh etal[20], Goswami etal[25]). Nicotine was the other substance used by those in community, but no one met the criteria for abuse/ dependence. Among other substances one female in old age home has benzodiazepine addiction.

No one met the criteria for eating disorders.

Among the 29 elderly subjets having other physical disorders (other physical disorders (hypothyroidism, ischemic heart disease, stroke, renal disease, seizures , asthma, cancer, etc), 20(68.96%) were found to have Depression. (p=0.02).

This is a study where a comprehensive assement of psychiatric disorders was done. Overall prevalence of psychiatric disorders in community was found to be more than those in old age home. This could be because of lesser psycho social stressors and more structured routine and recreational activities available to those at old age homes. Hence this study highlights the need for a structured care delivery to elderly individuals living in community.

Limitations:

1. Small sample size
2. It's a retrospective study.
3. Most of the patients belonged to lower and middle SES and upper SES were very less to compare the psychiatric morbidity between them.

Conclusion:

The overall prevalence of psychiatric disorders was found to be 59.2%.The prevalence of psychiatric morbidity was less in old age home population owing to better availability of care, less number of social stressors etc. Most common psychiatric disorder was depression, followed by dementia. The study highlights the importance of delivery of structured care facilities in elderly population.

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Table 1:Socio Demographic data.

variable	Total n=120	Old age home n=30	Community n=30
Age groups			
60-69 years	47(39.2%)	19(31.7%)	28(46.7%)
70-79 years	48(40.0%)	26(43.3%)	22(36.7%)
>80 yrs	25(20.8%)	15(25%)	10(16.7%)
Sex			
Male	47(39.2%)	22(46.8%)	25(53.2%)
Female	73(60.8%)	38(52.1%)	35(47.9%)
Socio economic status			
Lower	8(6.7%)	3(37.5%)	5(62.5%)
Middle	55(45.8%)	27(49.1%)	28(50.9%)
High	57(47.5%)	30(52.6%)	27(47.4%)
Marital status			
Unmarried	3(5%)	3(5%)	0(0%)
Married	59(49.2%)	18(30%)	41(68.3%)
Divorced/separated	4(3%)	3(5%)	1(1.7%)
Widowed	54(45%)	36(60%)	18(30%)
Education			
Illeterate and primary	32(26.7%)	13(21.7%)	19(31.7%)
High school/PUC/Diploma	55(45.8%)	38(63.3%)	17(28.3%)
Graduate/PG	24(20%)	8(13.3%)	16(26.7%)
Professional/Honors	9(7.5%)	1(1.7%)	8(13.3%)
Children			
No children	26(21.7%)	24(40%)	2(3.3%)
Children in India	75(62.5%)	27(45%)	48(80%)
Children -Abroad	19(15.8%)	9(15%)	10(16.7%)

Table II: Psychiatric disorders in elderly population.

Diagnosis	Old age home N(%) (n=60)	Test of Significance (Chi square test)	Community	Test of Significance (Chi square test)
Psychiatric disorders	32(53.3%)	p=0.17	40(66.7%)	p=0.65
Cognitive Decline/Dementia	6(10%)	p=0.01	7(11.67%)	p=0.02
Depression	28(46.67%)	p=0.69	34(56.67%)	p=0.28
Psychosis	0(0)		3(5%)	p=0.25
Somatic complaints	12(20%)		4(6.7%)	
Somatization disorder	9(15%)	p=0.54	4(6.7%)	p=0.40
Panic attacks	6(10%)	p=0.29	2(3.3%)	p=0.30
Genaralized Anxiety Disorder	1(1.7%)	p=0.51	1(1.7%)	p=0.55
Eating Disorder	0(0)		0(0)	
Alcohol dependence	0(0)		5(8.3%)	

(Psychiatric Disorders vs Age groups ,Test of Significance chi square p<0.05)

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