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Mental Health

Screening for Mental Health Impairments in Geriatric Patients Attending Government Hospital in Maharashtra

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Abstract **Original Research Article**

Introduction: Mental health is very important in older age group. Health care of older age group is incomplete without due consideration of their mental health. ***Objectives:*** 1. To study the socio-demographic profile of the geriatric patients. 2. To Screen Geriatric Patients for Mental Health Impairments attending Government Hospital in Maharashtra. ***Methodology:*** A descriptive cross-sectional study for screening of geriatric patients for mental health impairments was done for two months (Oct-Nov 2015) at Government Medical College Miraj. Total sample size was calculated and found to be around 126. Pre- designed, pre tested and semi structured questionnaire was used and interview of study subjects were taken. The questionnaire consisted of general information including socio-demographic data, health related information and DASS-21 score to assess mental health impairments. ***Statistical analysis:*** Descriptive statistics will be applied using frequencies and percentages. ***Results:*** Out of 126 study subjects, 57.14% were males, 83.33% were Hindus, 59.52% were from urban area and 97.61% were married. 6.34% were found to have depression, 30.13% had anxiety and 3.95% were under stress. Depression and anxiety were found more commonly in females than males while stress was more common in males. Proportion of respondents having depression was significantly higher in those not staying with their children than others. ***Conclusion:*** Around 30% were found as anxious, about 7% were depressed and 4% were stressed. Mental health services for geriatric population are essential.

Keywords: Mental Health, Geriatric Patients, Morbidity, Mental aliments.

INTRODUCTION

Older adults make an important contribution to the society as family members, volunteers and active participants in the workforce [1]. The world's population is rapidly increasing, between 2015-2050 the proportion of world's older adults is estimated to almost double from 12% to 22%. Mental health is very important in older age group [1]. Health care of older age group is incomplete without due consideration of their mental health.

As old age is not a disease in itself, but the elderly are vulnerable to long term diseases of insidious onset such as cardiovascular illness, cancer, diabetes, musculoskeletal and mental illnesses [9].

Mental health impairments showed wide range of prevalence (3.9% to 30.1%). The overall prevalence rate of depressive disorders among the elderly generally varies between 10 and 20% as estimated by world health organization. Elderly depression is not yet perceived as a public health problem in India, even if India is the second-most populated country in the world, in terms of elderly population of 60 years and above [7].

The elderly often have multiple co-existing medical and psychological problems which makes them a vulnerable group in whom depression is under treated. Most common neuropsychiatric disorders in this age group are dementia, depression and anxiety. If these impairments left untreated, it will result in onset of physical, cognitive, functional, social impairment as well as decreased quality of life, delayed recovery from medical/surgical illness and increased health care utilization and suicidal attempts (esp. in depression).

Therefore prompt treatment of these mental health impairments is essential. Screening for depression, stress is one of the secondary preventive

measures amenable to preventive health care in the elderly. Hence the present study is conducted.

The objectives of the study were to study the socio-demographic profile of the geriatric patients and to screen geriatric patients for mental health impairments attending government hospital.

MATERIALS AND METHODS

This is the cross-sectional descriptive study conducted among geriatric patients attending Geriatric OPD at Government Medical College Hospital, Miraj, Maharashtra.

As per ICMR (Indian council of medical Research) survey conducted in 1985, about 8.5% of the elderly persons (>60 years of age) were found to have psychiatric problem [2]. The required sample size is estimated by formula [3] considering the prevalence as 9% and absolute allowable error as 5%. The estimated sample size was 126. Systematic random sampling was used for data collection.

Inclusion criteria

Geriatric patients attending the study settings during study period as a patient in OPD hours and those who were willing to participate in the study.

Exclusion criteria

All those who were not willing to participate in the study and who were seriously ill and were not in the position to give information and those who were visiting the study setting during out-side OPD timings.

Study participants were interviewed who fulfilled the inclusion criteria. Pre-designed, pre-tested and Semi structured questionnaire was used to collect the data after obtaining written informed consent.

It consists of sections as follows:

1. General information including socio-demographic data.
2. Health related information.
3. Assessment of mental health impairments by using DASS-21 [4] (Depression, Anxiety, Stress Score) in vernacular language which was prepared and validated by the Psychiatry department at KEM hospital, Mumbai.

Table-1: Scoring of DASS -21 [5]

Grading	Depression	Anxiety	Stress
Normal	0-4	0-3	0-7
Mild	5-6	4-5	8-9
Moderate	7-10	6-7	10-12
Severe	11-13	8-9	13-16
Extremely severe	14+	10+	17+

Statistical analysis was done using Microsoft excel and Epi-info 7.

RESULTS

Table-2: Socio-demographic profile of the study participants.

Sr. No.	Variables	Categories	Frequency	%
1.	Age (in years)	61-70	91	72.23
		71-80	30	23.81
		>80	5	3.96
2.	Sex	Male	72	57.15
		Female	54	42.85
3.	Religion	Hindu	105	83.33
		Muslim	18	14.28
		Christian	3	2.39
4.	Residence	Urban	75	59.53
		Rural	51	40.47
5.	Education	Illiterate	50	39.68
		Primary school	22	17.46
		Secondary school	41	32.53
		Higher secondary school	5	3.96
		Graduate	8	6.34
6.	Marital status	Currently married	84	66.67
		Widowed	39	30.95
		Unmarried	3	2.38
7.	Working status	Currently working	37	29.36
		Currently not working	88	69.84
8.	Family type	Joint	67	53.17
		Nuclear	59	46.82

Total 126 geriatric patients were interviewed. The socio- demographic profile of the study population was shown in Table 2. It shows that out of 126 study subjects 72(57.15%) were males, 105(83.33%) were Hindus, 75(59.53%) were from urban area and 123(97.62%) were married.

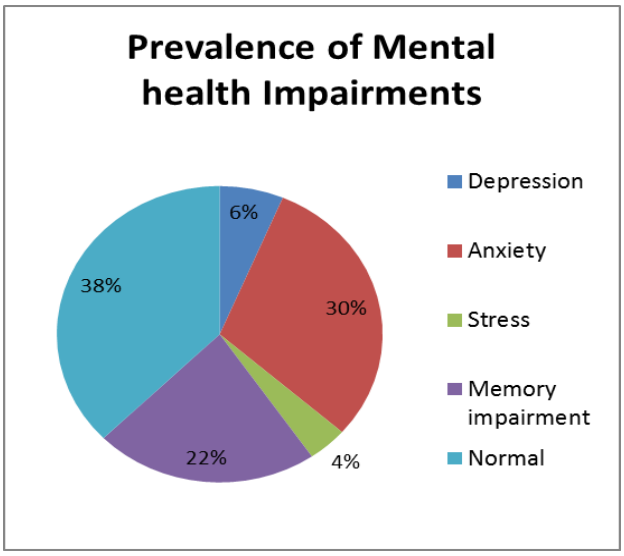

Fig-1: Prevalence of Mental health impairments

As shown in Fig 1. Out of total study population, (6.34%) were found to have depression, (30.13%) had anxiety (3.95%) were under stress. Memory impairment was present in (22.22%) of the study subjects.

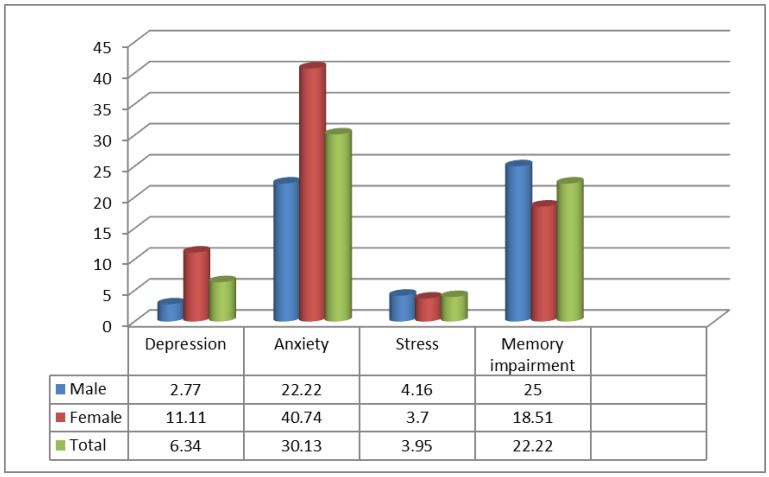

Fig-2: Sex wise prevalence of mental aliments.

It is seen from Fig 2. That depression and anxiety were found more commonly in females as compared to males while stress was more common in males.

Table-3: Findings of DASS 21 score.

Grading of score	Mental health impairments		
	Depression n (%)	Anxiety n (%)	Stress n (%)
Mild	3(37.5)	18(47.37)	2(40)
Moderate	4(50)	8(21.05)	2(40)
Severe	0	7(18.43)	1(20)
Extremely severe	1(12.5)	5(13.15)	0
Total	8(100)	38(100)	5(100)

The findings of DASS 21 score are shown in Table 3. As per the score, Depreesion, Anxiety and Stress were categorized into mild, moderate, severe and extremely severe.

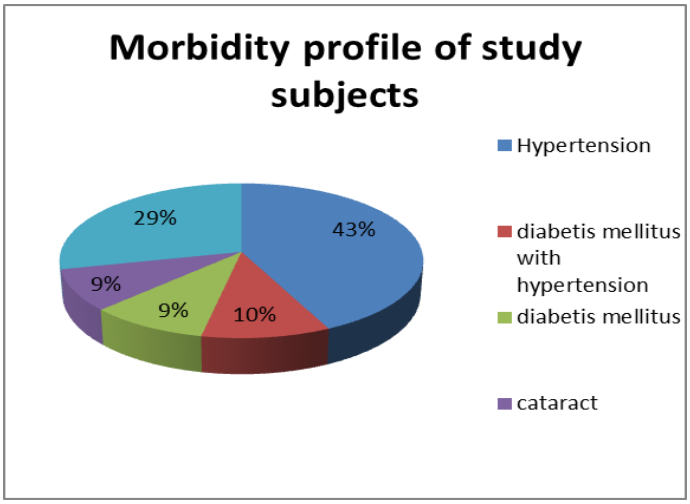

Fig-3: Morbidity profile of study subjects

Morbidity profile of study subjects is shown in Fig. 3. It showed that 43% were suffering from Hypertension while 10% had Diabetes along with hypertension and 29% had other conditions.

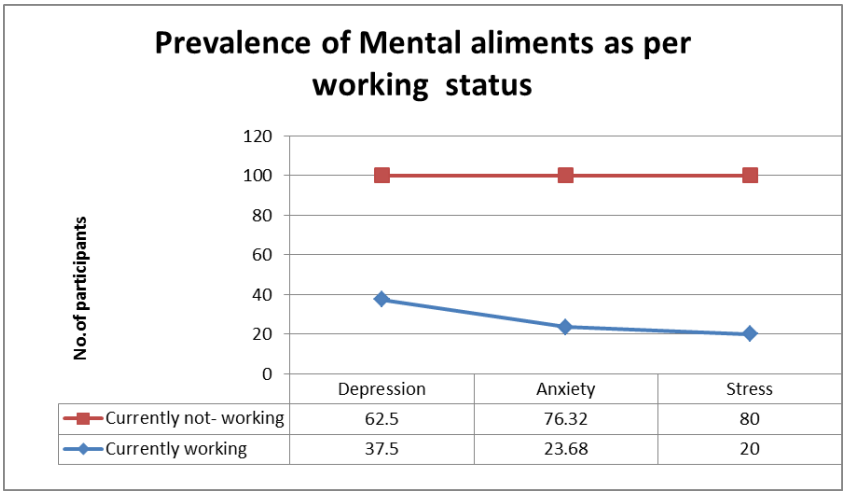

Fig-4: Prevalence of Mental aliments as per working status of study subjects

In the study subjects those not currently working were more depressed (62.5%), anxious (76.32%) and under stress (80%) as compared to those currently working which is shown in Fig 4.Those not getting pension were more anxious (30.90%) and under stress (5.45%) as compared to others.

DISCUSSION

- Nearly 3/4th of the study subjects were from less than 70 years age group, it signifies that older age need to be reached by other means like home visits or community based care.
- Though 44% of study subjects were having mental impairment, the major reasons to visit health facility were other and very few had consulted for psychiatric problem. Screening will help to identify the patients with mental impairment and timely intervention is possible.
- Prevalence of depression was 6.34% which is quite less as compared to other studies and WHO estimates.
- The prevalence of Anxiety in current study (30.13%) is similar to study by Wang Z et al [8] (30.11%); but was higher than the study by Bryant C et al [10] (16%) and the study by Olivera J et al [11] (15.7%). This difference in prevalence of anxiety disorders may be due to the fact that anxiety was measured by another scale.
- The prevalence of depression is higher in female study subjects (11.11%) as compared to males (2.77%) which is similar to study conducted in Surat city by Jariwala Vishal et al [9] 2010 and study by Samnelesson G et al [12].

- As well as study subjects with financial insecurity not getting pension were more anxious (30.90%) and under stress (5.45%). This finding was in contrast with study by Maulik et al [13] in which study subjects who were financially insecured showed depression.

CONCLUSIONS & RECOMMENDATIONS

- Majority of the geriatric patients who visited the government hospital were males, from age group 61-70 years, residing in Urban area, not currently working and the major reason for visit was Medical problems.
- More than 2/5th of geriatric patients (43.65%) had mental health impairment. So routine screening of these geriatric patients will be beneficial.
- Further studies are needed to understand the reasons of high prevalence of Anxiety and Memory impairment. Community based study will remove the effect of current illness on the mental status.
- Lesser prevalence of Depression should be confirmed by studies using specific scale like Geriatric Depression scale (GDS).
- 22.22% of study subjects had memory impairment, out of which 46% reported recent memory loss. Further expert assessment is needed to rule out early signs of Alzheimer's disease.
- Mental health services should be integral part of the routine geriatric health care.

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