



A Study on Prevalence of Selected Mental Disorders (Anxiety, Depression, Dementia) Among Residents of Old Age Home in Jabalpur City, Madhya Pradesh, India

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ABSTRACT

Introduction: Ageing is a normal phenomenon and an inescapable process. According to WHO. World-wide over 20% of adults aged 60 and over suffer from a mental or neurological disorder and according to the National Mental Health Survey of India (2015-16) the prevalence of mental disorders in geriatric population in our country is 10.90%. Thus, this study aims to assess anxiety, depression and cognitive disorders among persons living in OAH and to explore the various factors associated with it.

Methodology: A descriptive cross-sectional study was conducted in OAH Jabalpur. All residents of OAH were included in the study so no need for sampling. The sample size was 73. A Predesigned semi-structured Questionnaire was used which comprised of the socio-demographic profile with using GAD-7, GDS-15 & MMSE-30 for screening of psychiatric morbidity. Data analysis was done by using IBM SPSS-23.

Results: The result shows the mean age of the study subject was 72.14 ± 7.48. The prevalence of Anxiety was 19.2%, prevalence of depression was 41.1% and prevalence of cognitive impairment was 23.3%.

Conclusion: In this study it was found out that substantial proportion of older adults were suffering from anxiety, depression and cognitive impairment, most of older adults were widowed and there is a need to provide psychological support, a positive environment and proper care to improve mental health.

Keywords: Older adult, Anxiety, Depression, Cognitive Impairment, Old age home

INTRODUCTION

Ageing is a normal phenomenon and an inescapable process. Aging refers to the multidimensional process of physical, psychological and social changes. Recent advances in health-related knowledge, health sciences and improvement in social conditions have led to an increase in life expectancy in most countries of the world. However, increased life expectancy around the world also brought new public health challenges, such as increasing incidence and prevalence of chronic, age-related disorders¹. The geriatric population is defined as population aged 60 years and above². People aged 60 years and over are ex-

pected constitute to 10.2% of the total world population by 2025². The life expectancy of an average Indian has been increased from 36.7 in 1951 to over 67.14 in 2012. In addition, the population of older adults aged ≥60 years in India increased to 102 million in 2011. The proportion of elderly persons in India rose from 5.3% in 1961 to 7.5% in 2001, and was currently 8.4% in 2011³. There is no health without mental health. Mental health is a very essential & integral component of health. Mental health is influenced by a complex interaction between biological, social, environmental, cultural & economic factors; the imbalance of these determinants may lead to

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mental disorders, which affect everyone irrespective of age, gender, residence & living standards. According to W.H.O. Worldwide over 20% of adults aged 60 and over suffer from a mental or neurological disorder (excluding headache disorders) and 6.6% of all disability (disability adjusted life years-DALYs) among person age more than 60 years is attributed to mental and neurological disorders³. The most common mental and neurological disorders in this age group are depression, dementia and anxiety disorders which affect approximately 7% and 5% and 3.8% of the world's older population, respectively³. According to National Mental Health Survey of India (2015-16) the prevalence of mental disorders in geriatric population in the country is 10.90%.⁴ The persons living in OAHs often various problems due to living with unknown person, not a personal room or a separate area, highly institutionalized, depersonalized, and bureaucratic atmosphere in OAHs. Elderly living in such homes face problems due to tight and rigid schedules, separation from the family members, isolation from the social life, anxiety over adopting oneself to a new environment. A recent study was reported that misbehaviour of children (29.8%) and lack of financial support (29.3%) were the most common reasons for living in OAHs⁵. Whereas study conducted by Akbar s et al, depression was the most prevalent disorder (53.7%), as compare to dementia (21.6%) in older adults residing in OAH⁶. Therefore, with this background, the present study is carried out to estimate prevalence and pattern of selected mental disorders (dementia, depression, anxiety) and associated socio-demographic factors among residents of old age home in Jabalpur district, Madhya Pradesh, India

MATERIALS & METHODS

A cross sectional study was conducted among geriatric people who were living in the red cross old age home (OAH) in Jabalpur city Madhya Pradesh from December 8th, 2021 to January 31st, 2022.

The inclusion criteria: All older adults aged 60 years and above residing in old age home for 1 month or more, able to understand and reply to all questions, and giving written informed consent were included in the study.

Exclusion criteria: Residents diagnosed with any severe mental /physical health problem which can impede the interview were excluded from the study.

Before initiating the study written permission was obtained for the present study from the administrative authority of Old Age Home. Then interview of study participants was conducted. A total 73 eligible participants were included in the study. The purpose of the study was explained to every study participant and their written informed consent was obtained. Data collection was done using following study tools.

(i) A semi-structured interview proforma, (ii) Generalized anxiety disorders-7 (GAD-7)⁷ for anxiety, (iii) Geriatric Depression scale (GDS-15) for depression⁸, and (iv) Mini Mental Status Examination (MMSE)⁹ for cognitive impairment of study participants. The statistical data analysis was done by using IBM SPSS statistics for window, version 23. Chi square test was applied as a test of significance while P value less than 0.05 was considered significant. Further clinical evaluation of those persons who detected with mental disorder was conducted in the NSCB Medical college hospital.

Table 1: Socio-demographic variables & their association with anxiety

Socio-demographic variable	Frequency (n=73) (%)	Anxiety		p Value
		Present (%)	Absent (%)	
Gender				
Male	28(38.4)	4(14.2)	24(85.8)	0.402
Female	45(61.6)	10(22.2)	35(77.8)	
Age (Years)				
60-65	19(26)	02(10.5)	17(89.5)	0.757
66-70	14(19.2)	03(21.4)	11(78.6)	
71-75	19(26)	05(26.3)	14(73.7)	
76-80	08(11)	02(15.3)	06(84.7)	
>80	13(17.8)	02(15.4)	11(84.6)	
Marital status				
Unmarried/Single	19(26)	02(10.5)	17(89.5)	0.705
Married	06(8.2)	01(16.6)	05(83.4)	
Divorced	08(11)	06(75)	02(25)	
Widowed/Widower	40(54.8)	09(22.5)	31(77.5)	
Stay Duration at OAH (Years)				
<1	08(11)	01(12.5)	07(87.5)	0.661
1-5	22(30.1)	03(14.3)	19(85.7)	
6-10	31(42.5)	08(25.8)	23(74.2)	
>10	12(16.4)	02(16.7)	10(83.3)	
Talking with Any dear ones				
Weekly	02(2.7)	01(50)	01(50)	0.745
Every fortnight	08(11)	02(25)	06(75)	
Monthly	10(13.7)	01(10)	09(90)	
Yearly	16(21.9)	03(18.7)	13(81.3)	
Never	37(50.7)	07(18.9)	30(81.1)	

RESULT

Table 1 shows that out of total 73 study participants 28 were male while 45 were female. Among them majority of participants (45%) were between 60 to 70 years age group and 17.8% were above 80 years of age. Of them more than 50% were wid-
ow/widower. Prevalence of Anxiety was 14 (19.2%)

& majority shows in female gender. Age group between 71-75yrs have higher prevalence 05 (26.3%). Divorcee study participants have more prevalence 06 (75%) than others. 6-10 years of stay duration in old age shows 08 (25.8%) prevalence compared to others and study participants who never talked with anyone have more Anxiety 07 (18.9%). No significant association was noted.

Table 2: Socio-demographic variables & their association with depression

Socio-demographic Variable	Frequency (n=73) (%)	Depression		p Value
		Present (%)	Absent (%)	
Gender				
Male	28(38.4)	10(35.7)	18(64.3)	0.461
Female	45(61.6)	20(44.4)	25(55.6)	
Age (Years)				
60-65	19(26)	07(36.8)	12(63.2)	0.755
66-70	14(19.2)	06(42.9)	08(57.1)	
71-75	19(26)	08(42.1)	11(57.9)	
76-80	08(11)	02(25)	06(75)	
>80	13(17.8)	07(53.9)	06(46.1)	
Marital status				
Unmarried/Single	19(26)	04(21.1)	15(78.9)	0.139
Married	06(8.2)	02(33.3)	04(66.7)	
Divorced	08(11)	05(62.5)	03(37.5)	
Widowed/Widower	40(54.8)	19(47.5)	21(52.5)	
Stay Duration at OAH(Years)				
<1	08(11)	03(37.5)	05(62.5)	0.997
1-5	22(30.1)	09(42.8)	13(57.2)	
6-10	31(42.5)	13(41.9)	18(58.1)	
>10	12(16.4)	05(41.7)	07(58.3)	
Talking with Any dear ones				
Weekly	02(2.7)	01(50)	01(50)	0.712
Every fortnight	08(11)	03(37.5)	05(62.5)	
Monthly	10(13.7)	03(30)	07(70)	
Yearly	16(21.9)	05(31.3)	11(68.7)	
Never	37(50.7)	18(48.7)	19(51.3)	

Table 3: Socio-demographic variables & their association with dementia

Socio-demographic variable	Frequency (n=73) (%)	Dementia		p Value
		Present (%)	Absent (%)	
Gender				
Male	28(38.4)	07(25)	21(75)	0.785
Female	45(61.6)	10(22.2)	35(77.8)	
Age (Years)				
60-65	19(26)	02(10.5)	17(89.5)	0.374
66-70	14(19.2)	04(28.5)	10(71.5)	
71-75	19(26)	05(26.3)	14(73.7)	
76-80	08(11)	01(12.5)	07(87.5)	
>80	13(17.8)	05(38.5)	08(61.5)	
Marital status				
Unmarried/Single	19(26)	05(26.3)	14(73.7)	0.147
Married	06(8.2)	00(00)	06(100)	
Divorced	08(11)	04(50)	04(50)	
Widowed/Widower	40(54.8)	08(20)	32(80)	
Stay Duration at OAH (Years)				
<1	08(11)	01(12.5)	07(87.5)	0.017
1-5	22(30.1)	03(14.3)	19(85.7)	
6-10	31(42.5)	06(19.3)	25(80.7)	
>10	12(16.4)	07(58.3)	05(41.7)	
Talking with Any dear ones				
Weekly	02(2.7)	00(00)	02(100)	0.698
Every fortnight	08(11)	02(25)	06(75)	
Monthly	10(13.7)	03(30)	07(70)	
Yearly	16(21.9)	02(12.5)	14(87.5)	
Never	37(50.7)	10(27.1)	27(72.9)	

Table 4: Severity of anxiety, depression, and dementia

Severity	Anxiety (%)	Depression (%)	Dementia (%)
Normal	59 (80.82)	39 (53.42)	56 (76.71)
Mild	11 (15.07)	18 (24.66)	12 (16.44)
Moderate	2 (2.74)	8 (10.96)	3 (4.11)
Severe	1 (1.37)	4 (5.48)	2 (2.74)

Table 2 shows Prevalence of Depression was 30 (41.1%). Female gender has more prevalence 20 (44.4%) compared to male. Age >80 years have more depression 07 (53.9%). Divorced persons have 05(62.5%) prevalence. 09 (42.8%) depression was present in 1-5 years duration in old age home. Person who never talked with anyone have 18 (48.7%) depression.

Table 3 shows prevalence of dementia was 17 (23.2%). Male gender has more prevalence 07 (25%) than female 10(22.2). Aged >80 years have more dementia 05(38.5%). In view of marital status, maximum prevalence of dementia was observed in divorcees 04 (50%). Stay duration (>10years) at old age home shows 07 (58.3%) dementia which was statistically significant and about 10 (27.1%) dementia was seen in people who never talked with anyone.

The overall prevalence of Anxiety was 19% in our study. Among them 11 (15%) had mild anxiety, 02 (3%) had moderate anxiety, and 01(1%) had severe anxiety. The overall prevalence of Depression was 41% in our study. Among them 18 (25%) had mild depression, 08 (11%) had moderate depression, and 04(5%) had severe depression. The overall prevalence of Dementia was 23.3% in our study. Among them 12(16.4%) had mild dementia, 03 (4.1%) had moderate dementia, and 02(2.7%) had severe dementia. (Table 4)

DISCUSSION

The result of present study revealed that depression was found most prevalent (41.1%) mental disorder followed by dementia (23.3%) then anxiety (19.2%). Similarly, another study conducted in old age homes in Lucknow India among the elderly residing in the old age homes to find the prevalence of psychiatric illness by Tiwari S et al¹⁰ shows that the prevalence of depression was 37.7 and the most common psychiatric condition prevalent in northern India. The result is almost comparable with the present study. Whereas a study done by Santosh et al¹¹ at old age home in Davangere District, Karnataka showed higher prevalence of depression (50.5%) then our study.

In present study the prevalence of Anxiety was 19.2% & Prevalence of dementia was 23.2%. Prevalence of depression was found more in female (44.4%) then male (35.7%) while dementia was more prevalent among male (25%) as compared to female (22.2%). The reason for higher magnitude of

psychiatric illness in old age home may be social, financial or a health-related problem. Tiwari S et al¹⁰, In their study found that the prevalence of Anxiety was 13.3% & prevalence of dementia was 11.1%. Another study done by Shamsi A et al⁶ shows the prevalence of dementia was 21.6% in old age homes northern India which was similar to present study. The reason for dementia and depression, as the most common mental health problems in the present study, could be attributed to multidimensional risk factors such as financial constraints, lack of spouse/partner, poor infrastructure of the OAHs, no association between family members, and problem in physical health. In fact, as the female participants were more in this study and most of them were widows. There were many studies emphasizing on widowhood which could be strongly associated with depression.

In present study we found that dementia was statistically significantly associated with stay duration in old age homes ($P<0.05$). In addition, physical ailments and impairments, which were not the focus of our study, could have affected the anxiety and depression related problems, as found by a study reporting the OAH inhabitants suffering from psychiatric illnesses, had one or more associated physical morbidity.¹⁰

CONCLUSION

In the present study prevalence of mental disorders was substantially high among study participants. From the study we can conclude that as age advancing the prevalence of mental disorders specially dementia increases, imposing a greater demand on health care. Stay duration (>10years) at old age home was found a significant risk factor for dementia. Person who never talks to any family members or relatives showed higher prevalence of mental morbidity. These findings suggest the need for integrated mental health services aiming at psychological, psychiatric, and cognitive betterment of the institutionalized elderly and for reducing loneliness old age People should be engaged in recreation activities. Regular health check-ups, counselling and psychological services should be provided in old age homes to address the co-morbidities and screening of mental disorders.

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