Original Article

**PREVALENCE OF DEPRESSION AMONG GERIATRIC
POPULATION IN AN OLD AGE HOME IN KOLKATA-
HIGH TIME FOR US TO TAKE NOTICE.**

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ABSTRACT : The objectives of the study were to determine the prevalence of depression in elderly population and also study the sociodemographic correlates of the depressive disorders among the elderly in an old age home in Kolkata, West Bengal, India. It was cross sectional study performed on the elderly subjects of the said centre for 2 months period. A total of 227 elderly individuals of age group of 60 years and above, were interrogated : results were subjected to statistical analysis. Proportions and Chi-square tests were computed. The prevalence of depression in elderly population was determined to be 64.5%. The prevalence of depression in the age group of 80 years and above was found to be 83.3%, 75.3% among males and the highest was found among widowed/divorced/separated groups (95.8%).

Key words: Depression, Elderly, Old age home.

INTRODUCTION

In the Indian context, the proportion of those who are be aged 60 years and above is estimated to be 7.7% for the year 2000, and this proportion is expected to reach 12.6% in 2025.¹ With increasing life expectancy, the proportion of mental disorders specially depression is bound to be on the rise¹. The future projection shows that mental disorders are projected to increase to 15% of the global disease burden and unipolar major depression could become the second leading cause disease burden after ischemic heart disease especially in high-income countries². The community based mental health studies have revealed that the point prevalence of depressive disorders among the geriatric population in India varies between 13 and 25 percent .According to WHO, the major causes of depression in the elderly are chronic disease

and disability, pain, frustration with limitations in activities of daily living - events (widowhood, separation, divorce, bereavement, poverty, social, isolation) and lack of adequate social support³. Though depression is the commonest mental health problem in old age, very few old age home-based studies had been conducted in India, to understand the problem.

Lack of such studies specially in urban setting of West Bengal was the drive to carry out the present study to determine the disease burden of depressive disorders and to study the socio-demographic relationship of elderly with depression residing in old age home in Kolkata.

MATERIAL AND METHODS:

It was a an observational institution based cross-sectional study conducted for two months from April to May 2013 in an old age home located in central Kolkata under dept. of Community Medicine, Midnapore Medical College.

The total geriatric population (≥ 60 years) residing in the old age home was included in the study, exclusion criteria being those participants who refused to partake in the interview and those who were severely ill. Out of 250 elderly population, a total of 227 participants were included in the study.

A pre-designed, pre-tested semi-structured schedule containing information regarding the socio-economic status of the individual was used. Presence of depressive disorders was determined using short form of GDS questionnaire.⁴ Questions were translated into Bengali and Hindi by the researchers and back-translated into English by another expert.

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The investigators and co-investigator visited the old age home after permission from the head of the institution. Care was taken to ensure privacy and confidentiality of the interview as part of the study. A brief general health check-up of the respondents were conducted at the beginning to establish a good rapport and also to gain confidence. The collected data were

tabulated and analysed by using the statistical package SPSS (Statistical Package For Social Sciences) version 17.0. Findings were described in terms of proportions and their 95% confidence Intervals. Chi-square test was applied to study to test for statistical significance.

RESULT

Table 1: Showing socio-demographic characteristics of study participants (n=227)

Characteristics		Number (Percentage)
Age (years)	60-69	107 (41.7)
	70-79	90 (39.6)
	80-89	30 (18.7)
Sex	Male	162 (71.4)
	Female	65 (28.6)
Marital status	Never married	26 (11.4)
	Widowed/separated/divorced	145 (63.8)
	Currently married	56 (24.8)
Educational status	Literate	221 (95.2)
	Illiterate	6 (4.8)
Past Occupation	Service	114 (50.2)
	Business	62 (27.3)
	Unemployed	6 (2.6)
	Homemaker (females)	45 (19.8)

Highest proportion of patients belonged to age group of 60-69 years (41.7%) and above 80 years was the least (18.7%). 71.4% were males and the rest (28.6%) were females. Regarding marital status of the study participants it was found that 11.4% respondents were never married, 63.8% were widowed/separated/divorced while 24.8% of them

were currently married.. As high as 95.2% of respondents were literate and the rest just literate or illiterate. As per occupational status, 50.2% of them were previously in service, 27.3% had business of their own, 2.6% had a history of unemployment and 19.8% were home makers.

Table 2: Distribution of GDS 15 scores (n=227)

Depression per GDS score	Number	Percentage (%)
Absent (0-4)	82	35.6
Mild (5-8)	46	20.2
Moderate (9-11)	94	41.4
Severe (12-15)	5	2.8

GDS score revealed that 35.6% participants had no depression (scores 0-4) while as high as 64.4% of the respondents were diagnosed with depression. Among the participants who had depression, 31.7% had mild

depression (20.2% of total participants), 64.8% had moderate depression (41.4% of total participants) while 3.5% had severe depression (2.8% of total respondents).

Table 3: Socio-demographic variables and depression (n=227)

Characteristics		Depression present	Depression absent	p-value
Age (years)	60-69 (n=107)	62 (57.9%)	45 (42.1%)	<0.05
	70-79 (n=90)	58 (53.3%)	32 (46.7%)	
	80-89 (n=30)	25 (83.3%)	5 (16.7%)	
Sex	Male (n=162)	122 (75.3%)	40 (24.7%)	<0.05
	Female (n=65)	23 (35.4%)	42 (64.6%)	
Marital status	Never married (n=26)	10 (38.5%)	16 (61.5%)	<0.05
	Widowed/separated/ divorced (n=145)	139 (95.8%)	46 (4.2)	
	Currently married (n=56)	36 (64.3%)	20 (35.7%)	
Educational status	Illiterate (n=6)	4 (66.7%)	2 (33.3%)	>0.05
	Literate (n=221)	141 (63.8%)	80 (36.2%)	
Past occupation	Service (n=114)	84 (73.7%)	30 (26.3)	<0.05
	Business (62)	37 (59.7%)	25 (40.3%)	
	Unemployed (6)	1 (16.7%)	5 (83.3%)	
	Homemaker (females) (n=45)	23 (51.1%)	22 (48.9%)	
Total (in each category)		145	82	

Relationship of various socio-demographic variables and presence of depression showed that 80 years and above had highest prevalence of depression compared to the younger age group ($p < 0.05$, statistically significant).

Males were significantly found to be more depressed (75.3%) compared to their female counterparts (35.4%). The widowed/separated/divorced category were found to be mostly depressed (95.8%) followed by the currently married category (64.3%) while the singles were found to be least depressed. The findings were also found to be statistically significant.

Regarding literacy status and depression, the illiterate/just literate group was found to be slightly more depressed than literate group though the findings were not statistically significant ($p > 0.05$).

Finally regarding past occupation and depression, the past service holders were found to be mostly depressed while least depression was found among past unemployed group (results statistically significant, $p < 0.05$).

DISCUSSION

Studies conducted by several worker had observed

the prevalence of depressive disorders to be significantly higher among the elderly belonging to higher age group, as we found in our study⁵⁻⁷. The prevalence of depressive disorders was similar among the widowed or separated individuals (23.2%) as compared to their married counterparts (20.5%)⁶. Contrast findings were found in our study. Our study findings were also consistent with the previous studies who had documented a significantly high prevalence of depressive disorders among the widowed individuals⁸. Our study findings were in contrast to another study which showed higher prevalence of depressive disorders among illiterates (25.4%) as compared to literates (19.0%). The difference between the two groups was however, not found to be statistically significant⁹. This study also reported a significantly higher prevalence of depression among individuals with lower level of education. The proportion of housewives affected with depressive disorders was 20.1% while our study found more than 50% home makers were found to be depressed among the females⁹. The prevalence of depressive disorders was almost similar among the unskilled (23.1%) and skilled (24.5%) labourers⁹. Our study reported contrast findings.

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