



## A CROSS-SECTIONAL STUDY ON DEPRESSION AMONG ELDERLY PEOPLE LIVING IN OLD AGE HOME IN A CITY OF WESTERN MAHARASHTRA

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### ABSTRACT

**Background:** In India, geriatric population is 8.9%(2011 census) which is expected to increase to 20.8% by 2050. Depression among elderly is an important public health problem responsible for considerable morbidity and disability. **Objective:** To estimate magnitude and level of depression and to study socio-demographic factors associated with depression among elderly people living in old age home. **Methodology:** Descriptive cross-sectional study. All elderly people >60yrs residing in randomly selected Old Age Home for more than 6 months will be included in study. Geriatric depression scale will be used to assess depression containing 15 items. **Results:** The overall magnitude of depression was found to be 62.68% which is statistically significant with age, marital status and economic dependency.

**KEYWORDS :** Elderly, Depression, Geriatric Depression Scale, Socio-demographic variables, old age home.

### INTRODUCTION

The world is ageing rapidly. World's geriatric population above 60 yrs has been estimated to almost double up from 11% in 2015 to 22% by 2050<sup>1</sup>. In India life expectancy has increased from 45yrs in 1970 to 67 yrs in 2021 due to improved health services and better education resulting in increasing geriatric population<sup>2,3</sup>. The aged population in India is currently second largest in world. Currently in India elderly population constitutes 8.2% of national population and is expected to reach 20% by 2050<sup>4</sup>. Ageing is a normal physiological process associated with physical, social and psychological changes. Old age is an event and ageing is process. In old age, it is not only the physical ageing that affects them but also the challenges they have to face with their mental and social well being. Physical problems of ageing leading to limitations in daily activities dependence on others, financial insecurities after retirement, loss of social recognition, psychological illness, physical diseases, loss of spouse which leads to loneliness and depression<sup>5</sup>.

Depression is a common mental disorder that affects 20% of geriatric population, characterized by loss of interest, lower energy, feeling of guilt or lack of self worth, lack of concentration, loss of memory, disturbed sleep<sup>6</sup>. Depression decreases an individual's quality of life and increases dependence on others<sup>7</sup>. According to WHO the most common disorder among the elderly was found to be depression and it affects almost 7% of world's geriatric population. Depression is going to be second highest health problem and leading cause of disability and death world wide second to cardiovascular diseases<sup>4</sup>.

In India aged population are very emotional and would prefer to stay with family. Elderly living in old age home face problems of adjustment with new people, new surrounding, daily rigid schedule of old age home, separation from family, isolation from society, anxiety of adopting to new environment and close encounter with deaths which makes them more prone to develop psychological problems<sup>7</sup>. Early diagnosis and effective treatment of depression among elderly will help to reduce mortality and morbidity among elderly.

Thus, we conducted study to know the magnitude of depression among elderly living in old age home and it's relation with various factors and to know the preventive measures which would in turn help to improve the health and well-being of the elderly.

### Aims And Objectives:

- 1) To estimate magnitude and level of depression among

elderly people living in old age home,

- 2) To study socio-demographic factors associated with depression among elderly people living in old age home.

### Methodology

**Study design:** Descriptive cross-sectional study.

**Study area:** Old Age Home in Solapur city of Western Maharashtra.

**Study population:** All elderly people residing in selected Old Age Home following inclusion and exclusion criteria were included in study.

**Study period:** From 1st November to 30th November 2023

**Study Tool:** Geriatric depression scale<sup>9</sup> will be used to assess depression containing 15 items. Score of 1 is given to each bolded answer. A score of 5 or more suggests depression with level of depression being mild depression for score 5-8, moderate depression for score 9-11 and severe depression for score 12-15<sup>10</sup>.

**Study method:** Among all old age homes in city one old age home is selected by simple random sampling method. Permission was taken from the head of selected old age home. Data was collected by Interviewing the study participants after obtaining informed consent after explaining questionnaire to them in their local language.

### Inclusion criteria:

- 1) Elderly people aged above 60yrs living in selected old age home
- 2) Staying in old age home for 6 months or more
- 3) Able to communicate, understand and reply to questions

### Exclusion criteria:

- 1) Not willing to participate

Ethical approval from institutional ethical committee has taken.

### Statistical analysis:

The data analysis was carried out by using Microsoft excel. Chi square test was applied to test the significance. P value less than 0.05 was considered statistically significant.

**Table No.01: Socio-demographic Profile & its association with Depression (n=67)**

Variable	Number (n=67)	Depression present	No Depression	
1. Age (years)				
60-69	21 (31.34%)	16 (76.19%)	5 (23.80%)	$\chi^2=2.386$
70-79	39 (58.20%)	22 (56.41%)	17 (43.58%)	
>80	7 (10.44%)	4 (57.14%)	3 (42.85%)	

2. Gender				
Male	23 (34.32%)	10 (43.47%)	13 (56.52%)	$\chi^2 = 5.52^*$
Female	44 (65.67%)	32 (72.72%)	12 (27.27%)	
3. Marital status				
Married	11 (16%)	3 (27.27%)	8 (72.72%)	$\chi^2 = 14.99^*$
Unmarried/ divorced	8 (11.94%)	2 (25%)	6 (75%)	
Widowed	48 (71.64%)	37 (77.08%)	11 (22.91%)	
4. Education status				
Illiterate	6 (8.95%)	1 (16.66%)	5 (83.33%)	$\chi^2 = 7.43$
Primary /secondary	21 (8.95%)	16 (66.66%)	5 (23.80%)	
Higher secondary	10 (14.92%)	6 (60%)	4 (40%)	
Graduate	30 (44.77%)	19 (63.33%)	11 (36.66%)	
5. Economic Dependency				
Yes	52 (77.61%)	28 (53.84%)	24 (46.15%)	$\chi^2 = 7.76^*$
No	15 (22.38%)	14 (93.33%)	1 (6%)	

\*  $p < 0.05$  statistically significant

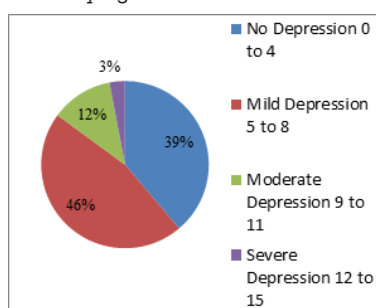


Figure No.01: Level of Depression among participants (n=67)

Table No.02: Depression among participants (n=67)

Depression present	42 (62.68%)
No Depression	25 (37.31%)
Total	67
$\chi^2 = 4.83, p < 0.05$ , significant	

## RESULTS:

Participants were divided into 3 groups as young old (60-69), old old (70-79) and oldest old (>80). Maximum number of participants were in age group of 70-79 years (58.20%). Majority of them were females (65.67%), widowed (71.64%), studied upto graduation (44.77%), and economically dependent (77.61%).

Prevalence of depression was more in age group 70-79 yrs but no significant relation was found with the increasing age. Prevalence of depression was more females (72.72%) when compared with males with significant p value ( $< 0.05$ ). Marital status has significant effect of development of depression as widowed participants were found to be more depressed (77.08%) and was significant with p value  $< 0.05$ .

Elderly who are economically dependent on others for their needs are found to be more depressed (53.84%) when compared to economically non dependent who are having some source of financial security such as pension.

The diagrammatic representation of figure no. 1 shows maximum participants (46%) had mild level of depression, 12% participants had moderate level of depression and only 3% participants had severe level of depression.

The overall magnitude of depression in this study was found to be 62.68% (table no.2) and depression is significantly

associated with economic sex, marital status and economic dependency of elderly living in old age homes.

## DISCUSSION

The findings of the present study are consistent with study carried out by R Subba et al<sup>10</sup>, which showed females living in old age homes are more depressed as compared to males and among them maximum are widowed. Study conducted by kumar et al<sup>11</sup> showed higher magnitude of depression among females and among them maximum are unmarried. In study done by Bathala et al<sup>5</sup> depression was more among elderly who were economically dependent and maximum participants had mild level of depression (38%)<sup>11</sup> finding is consistent with current study findings. No significant association was found between age and education of participants with depression. Bathala et al found out overall prevalence of depression among elderly living in old age home 66.7% compared to 62.68% in our study.

## CONCLUSION

Magnitude of depression in this study was found to be 62.68% among which 46% participants had mild level of depression which shows statistical significant association with age, marital status and economic dependency. As the magnitude of depression is more among inmates there is a need to provide emotional support and facilities to engage them in various social activities of the community.

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**Conflicts of interest :** None declared.

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