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# LATE LIFE DEPRESSION- A CROSS-SECTIONAL STUDY IN TRIBAL AREA

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### **ABSTRACT**

**Background of study:** Elderly population aged 60 years and above in the world will reach 1.2 billion by the year 2025, the majority of whom will be in developing countries. The increase in life expectancy has brought about increased number of illnesses, one of the major ones being depression. Geriatric Depression impacts general health status of elderly and quality of life of elderly. **Objective:** This study was conducted to study the prevalence of depression among the elderly population and factors associated with it. Research Methodology: A cross sectional study was conducted in the urban field practice area of Chitradurga which has a population of 20,000. The elderly people were interviewed by house to house survey. Data was collected using a questionnaire-guided interview method. A 15item Geriatric Depression Scale (GDS): short form questionnaire was used as the main screening instrument. Data was analyzed using the Statistical Package for Social Sciences version 18.0. Chisquare test was used, wherever applicable, to determine the relationship between socio-demographic factors and depression, p value of less than 0.05 was considered statistically significant. **Results:** The prevalence of depression in the study population was 41.7 %. Geriatric depression showed statistically significant association with advancing age, widowed, financially dependent, living in joint families and those who felt neglected. Conclusion: The prevalence of depression among the elderly is high and a cause of concern. Mental health problems among the elderly should receive more attention.

**Keywords**: Geriatrics Depression, Geriatrics problems, Elderly

### **INRODUCTION**

Senescence, process of ageing, involves two opposing type of changes, evolution (growth) and involution (atrophy). Both occur simultaneously but atrophy predominates in old age. Apart from these physical changes, there are social and psychological changes. The precise onset of old age varies culturally and historically. The persons in India, who have attained the age of sixty years and above, are considered as elderly for the purpose of availing old age benefits.

Demographic changes in India have resulted in change in structure of population, the population of 60 years and above which was 8.3% in the year 2011 will rise to 9.3% by the year 2016. In

absolute number, the population of persons above 60 years was around 98.5 million in 2011, will rise to nearly 179 million by 2031 and 324 million by 2050.<sup>2</sup> These demographic changes have been accompanied by rapid and profound socioeconomic changes impacting the lives of the elderly in India.

The increase in life expectancy has brought about increased numbers of certain illnesses, one of the major ones being chronic mental illnesses. Several studies carried out among the elderly in India have shown that depression is the commonest mental health illness in this population. Depression is a disorder that is characterized by sadness, changes in appetite, altered sleep pattern, feeling of

dejection or hopelessness and sometimes suicidal tendencies.<sup>3</sup> Geriatric Depression impacts general health status of elderly and quality of life of elderly.

Even though depression is the commonest psychiatric disorder in the elderly, it is commonly misdiagnosed and under treated. This could be due to the misconception that depression is part of ageing rather than a treatable condition. If depression is left untreated, there will be significant clinical and social implications in the lives of the elderly.<sup>4</sup> In order to effectively plan intervention services for this needy population, it is important to explore the context of the individual health status and wider sociodemographic determinants in the community.

## **OBJECTIVES**

This study was conducted with the objective to study the prevalence of depression among the elderly and factors associated with it.

### RESEARCH METHODOLOGY

A community based cross sectional study was conducted in the urban field practice area. The urban field practice area has 12 wards with approximate total population of 20,000. Considering the proportion of population of elderly around 9%, with 95% confidence level and 4 percentage of absolute precision the calculated sample size was 216.5 All 12 wards were considered as sampling units and 18 elderly were selected randomly from each ward to meet the sample size of 216. House to house survey was carried out and elderly people aged 60 years and above were included in the study. Those who had difficulties in communication, severely ill, and bedridden were excluded from the study.

Data was collected by questionnaire guided interview method. Geriatric depression scale- short form (GDS-SF) was used to evaluate the depressive symptoms of the elderly subjects in the past one week.<sup>6,7</sup> GDS-SF has shown good sensitivity and specificity for predicting depressive disorders in different settings.<sup>8</sup> This questionnaire

has 15 questions in a yes/no format. The total scores range from 0 to 15. The respondents' answers were scored by summing up the positive and negative responses. Based on the GDS guidelines, a predetermined cut off score of > 5was used to identify depression. Data was analyzed using the Statistical Package for Social Sciences version 18.0. Chi-square test was used, wherever applicable, to determine the relationship socio-demographic between factors and depression. p value of less than 0.05 was considered statistically significant.

## **RESULTS**

## Socio-demographic profile

Table I shows the characteristics of the respondents. A total of 216 elderly, 104 males and 112 females were interviewed. The mean age of the subjects was  $68.73 \pm 7.5$  years. Age ranged from 60-90 years. Median age was 66 years. There was decrease in the number of subjects with advancing age.

In this study, majority of the respondents (58.3%) were married, 65.07% men and 34.9% of women were married at the time of the study. 41.7% of the subjects were widowed. Among who were widowed, most were females (84.5%) compared to males (15.5%). We didn't get any never married or divorced subjects. 11.1 % of the subjects were living alone. Among those who were living alone most were females 66.7%.

About 57.4% of the subjects were living in joint family and 42.6% in nuclear families. 69.4% of the subjects were not working and 59.3% of the subjects were financially dependent.

## Geriatric Depression Scale (GDS) Score

Based on the GDS score of the respondents mean score was  $4.76 \pm 3.23$  and the median score was 4.00. The score ranged from 0 to 13. Out of 216 elderly people 90 were found to have depression and the prevalence of depression was found to be 41.7%.

## Socio demographic factors

Table II shows the association between depression and socio demographic factors. In this study, depression was more common among the respondents who were aged 70 years and above (54.34%), females(44.64%), not working(46.66%), financially dependent (50%), widowed (55.55%), those living in joint families (51.6%), and those who felt neglected (64.7%).

Geriatric depression showed statistically significant association with advancing age, financially dependent, widowed, and living in joint families and those who felt neglected.

However, gender, occupational status or those living alone were not showed statistically significant association with depression.

#### DISCUSSION

In this study the prevalence of depression among the elderly respondents was 41.7%. Whereas the studies conducted by Ramachandran V *et al.*<sup>9</sup> and Tiwari SC, <sup>10</sup> showed the prevalence of depressive disorders in the elderly population to be 24.1% and 13.5% respectively. The prevalence among the elderly in our study is high and a cause of concern. However, study conducted by Nandi PS *et al.* in the rural areas of West Bengal <sup>11</sup> showed a high prevalence of depressive disorders of 52.2%. There are differences between studies regarding the prevalence of depression in elderly. The increases in life expectancy have brought about increased numbers of certain illnesses, one of the major ones being depression.

In old age, person retires from active job and loses status. There may be loss of dear and near ones. The younger members of the family get busy in their lives. Due to this, there is painful feeling of futility and genuine loneliness. These mental changes are inevitable accompaniment of old age. The present study revealed that the elderly aged more than 70 years were more significantly depressed as compared to those in the age group of 60-70 years, similar finding were observed by Venkoba Rao, that the prevalence of depression increases with advancing age. 12

The present study showed that the prevalence of geriatric depression was higher in women than men.

The prevalence of depression was found to be significantly higher in the elderly who were widowed as compared to those got married and living with their spouse. Several studies have found these as risk factors for depression in the elderly. <sup>9, 13, 14</sup> The elderly who had lost their spouse were suffering from a higher rate of depression compared to those living with their spouse could be explained by the fact that late life support by the partner is important to their psychological health. Dependence of the elderly on their spouse increases as they age. Death of a spouse renders them vulnerable to mental stress.

There was a statistically significant association between depression and the type of family. In this study we observed that elderly people living in a joint family were more significantly depressed as compared to those living in nuclear families. Study conducted by Anther M Taqui *et al.*, <sup>15</sup> showed that the elderly people living in nuclear families were more significantly depressed. In contrast, our study showed, it is more common among people living in joint families. Statistically significant association was also found between depression and the people who felt neglected.

Our traditional cultural and social pattern of life is favourable to aged people. Emotional ties/bonds between old and young are strong and the old are respected as they share family goals. With economical progress, overall development and modernization we are losing our traditional social customs and values. Today most people are not guided by moral, religious principles. On the contrary they are increasingly selfish and show little regard for aged and the existing social institutions are not equipped to fill the gap.

This study showed a statistically significant association between depression and financial dependence similar findings were observed by K.-L. Chou *et al.*<sup>16</sup>

Nearly 72% live in rural areas and half of these are below poverty line. The remaining 28% of elderly live in urban areas. Further, about 90% of old persons in India are from unorganised sector, which means they do not have regular source of income. The dependency ratio for elderly was 13.2 in 2011 and it will rise to 16.7 by 2021. Most of the worries and anxiety in old age is mainly due to financial insecurity. National health policy addressed the financial insecurity of elderly people through old age pension schemes and several other schemes. These schemes are not utilised properly due to unawareness. Therefore, empowerment may serve as an effective intervention strategy in the prevention of depression among elderly.

#### **CONCLUSIONS**

Prevalence of depression among the elderly in this study was 41.7% and was found to be significantly associated with the advancing age, marital status, financial dependence, type of family and those who felt neglected.

## RECOMMENDATIONS

Mental health problems among the elderly should receive more attention. The findings of the present study reflect the importance of providing mental health care for elderly. Establishment of integrated geriatric health care centres must be considered for primary prevention and early detection of geriatric health problems including depression.

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Table I: Socio demographic profile of the elderly respondents (n=216)

Socio demographic profile	Number	Percentage (%)	
Age			
60-69 years old	124	57.4	
70 years old and above	92	42.6	
<u>Gender</u>			
Female	112	51.9	
Male	104	48.1	
Marital Status			
Married	126	58.3	
Widowed	90	41.7	
Living Arrangement			
Living alone	24	11.1	
Living with family	192	88.9	
<u>Education</u>			
Illiterate	70	32	
Primary	44	20	
Secondary	70	32	
High school	22	10	
Graduate / Postgraduate	10	4	
<u>Occupation</u>			
Not working	150	69.4	
Working	66	30.6	
<u>Financially</u>			
Dependent	128	59.3	
Independent	88	40.7	
Type of the family			
Joint	124	57.4	
Nuclear	92	42.6	

Table II: Association between depression and socio demographic factors

Socio demographic Factors	Depression	No Depression	Prevalence	p value
Age				
60-69 years old	40	84	32.25	*p<0.05
70 years old and above	50	42	54.34	p<0.03
Gender				
Female	50	62	44.64	p>0.05
Male	40	64	38.46	
<u>Occupation</u>				
Not working	70	80	46.66	P>0.05
Working	20	46	30.30	F>0.03
<u>Financially</u>				
Dependent	64	64	50	*p<0.05
Independent	26	62	29.54	p<0.03
Marital Status				
Married	40	86	31.74	*p<0.05
Widowed	50	40	55.55	
Living Arrangement				
Living alone	12	12	50	P>0.05
Living with family	78	114	40.62	P>0.03
Type of family				
Joint	64	60	51.6	*n <0.05
nuclear	26	66	28.26	*p<0.05
Feel neglected				
No	68	114	37.36	*n <0.05
Yes	22	12	64.7	*p<0.05