

Urban elderly women's depression: prevalence and risk factors

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Abstract

Background: Modern medical science has made it possible to increase the life expectancy of the population around the globe. It's expected to have double the geriatric population in the next couple of decades. Among the geriatric population psychological disorders such as depression and anxiety are the result of many socio-economic and cultural reasons. It has been observed that geriatric females suffer psychological depression more than the geriatric male population. Psychological depression can be easily managed with therapy and medication. Moreover, the dependence of geriatric women on their financial needs, biased based on gender, adds to the depression. This study aimed to evaluate the existence of depression in geriatric females and to study the determinants of depression and their correlation.

Methods: The depression scale of 30 points was used to assess the mental health of 200 geriatric women in the urban area. This was a cross-sectional study done on the community geriatric women dwelling in the urban area.

Results: 101 geriatric females were found to be suffering from depression, among the 200 women who took part in the study. 52 of them had depression at the milder stage whereas 49 of them had depression at a major stage. The determinants that were found to be responsible for depression were lack of activity, employment status, financial dependence, addiction and marital status. These were the major risk factors contributing to depression.

Conclusion: The existence of depression amongst geriatric females was found to be significant. There is a need for therapy centres at healthcare facilities dedicated especially to the geriatric population.

Keywords: Geriatric depression, geriatric depression scale, geriatric females

Introduction

The lifespan of Indians has increased significantly, specifically, the average lifespan of women has increased more than that of men [1]. It is expected that the contribution of the elderly population to the total population will be more than that of children by 2050 [2]. Although age expectancy has increased there is little, or no attention given to the non-communicable mental health disorder. All over the world, there will be 300 million people will be suffering from mental health disorders.

In the geriatric population with an ageing brain and the deterioration of physical health the chances of depression increase [3]. In India the depression amongst women is greater than men due to socio-cultural backgrounds, lack of employment for geriatric women, financial dependence, gender bias prevailing in the society and the taboo associated with mental health disorder [4, 5]. Depression can range from mild to severe. The geriatric population needs both medical as well as sociological assistance from the healthcare professional to live a quality life. Depression can eventually lead to mental and physical and mental disability [6]. Depression is a morbid disease, but it can be managed with appropriate therapy and medications. This study aims to evaluate the existence of depression amongst geriatric females dwelling in urban India and also study the determinants of depression and the correlation.

Materials and Methods

A cross-sectional survey was carried out in Gaya, Bihar of urban India for the duration of 4 months. Geriatric females were surveyed during this study. Since previous studies have reported the existence of depression amongst the Indian population to be 6% to 70%. Here 67% is assumed to determine the sample size of the population. The sample size was calculated in the following manner.

$$P= 67\%, Q= 100-67= 33\%$$

$$L=10\% \text{ (assumed existence of the disease or error)}$$

$$=10/100 \times 67= 6.7$$

$$N= 4 \times 67 \times 33 / 6.7 \times 6.7= 198$$

Gaya, Bihar was categorized into six zones randomly one of the zones was selected for the study each house had about 5 family members. 1300 houses so the population was estimated to be 6500. Each house was visited and if they had a lady above 60 years of age who gave consent for the survey then she was selected as a subject for the study. In case the house was locked, it was visited thrice and still, if the members were not there that house would be eliminated from the study. A total of 200 geriatric women were taken from 650 houses and the total population of these 650 houses was 333. So, the population of geriatric women was around 6% of the total population.

The mental health of geriatric women was evaluated using a mood evaluation scale. This mood-evaluating scale was nothing but a set of 30 rhetorical questions. Each 'yes' held 1 mark, and each 'no' had 0 marks. In the end, the sum of the scored marks was taken. The arbitrary scale was standardized which implied that the closer the score to 30 indicated severity of depression. If the score was near 0 to 10 it indicated that there is no depression. The score in between indicated mild depression. The determinants based on which the questionnaire was prepared were as follows employment, family type, activity, financial dependence, addiction and marital status.

The data obtained was then computed by a software package used for the analysis of statistical data for statistical analysis. For the survey ethical permission was taken from the ethical committee

Results

The social status of the subjects selected was evaluated and their correlation was indicated using statistical analysis. The association between age and depression was studied. Amongst the total women, 102 women were depressed and 50 of them were severely depressed as shown in table no.

1. When statistical analysis of age and depression was done the p-value was not significant.

Table 1. The correlation between depression and age

The association between literacy and depression was studied. Out of the total women without any

Age			
	No depression	Mildly depressed	Severely depressed
60 to 65	44	24	19
65 to 70	19	16	11
70 to 75	13	5	10
75 to 80	11	1	3
Above 80	11	06	7

formal education, 71 were not depressed whereas 75 were depressed as represented in table no.2.

Again, the p-value found for the correlation of age and depression was not significant.

Table 2. The correlation between determinants and depression

Literacy		
	No depression	Depression

No education	71	75
Primary education	16	20
Secondary education	09	04
Higher education	2	2
Family type		
Join family	28	19
Extended family	53	59
Separated family	17	24
Marital status		
Divorcee	01	01
Married	47	24
Widow	51	76
Employment status		
Unemployed	83	97
Employed	15	05
Activity status		
Active	22	10
Inactive	76	92
Financial dependence		
Dependent	83	97
Independent	15	5
Addiction history		

Yes	11	33
No	87	69

The association of marital status and depression showed that 47 married women were not depressed, and 24 married women were depressed. However, 52 widowed women were not depressed, and 76 widowed women were depressed as shown in table no. 2. The statistical correlation between marital status and depression had a significant p-value.

Depending upon the type of family 28 women in a joint family were not depressed and 19 women in a joint family were depressed. 53 women in extended family were not depressed and 59 women in extended family were depressed. 17 women in separated families were not depressed and 24 women in separated families were depressed as shown in table no. 2. The statistical correlation between the type of the family and depression was not significant.

Of the women who had addiction in present or past, out of them 11 were not depressed and 33 were depressed. The statistical relation between addiction and depression was significant. Of the women who had active lifestyles them, 22 were not depressed and 10 were depressed. Of the women who had inactive lifestyles 76 were depressed and 92 were not depressed. The relation between depression and activity was found to be significant statistically. Amongst economically independent women, 15 were not depressed and 5 were depressed. Of the women who were dependent financially 97 of them were depressed and 83 were not depressed the relation between financial dependence and depression was significant. 83 women were unemployed and not depressed whereas 97 women were unemployed and depressed. 15 women were employed and depressed compared to 5 women who were employed yet depressed as shown in table no.2. The relation between employment and depression was found to be significant.

Discussion

Although the statistical relation between and depression was not significant it can be easily observed that the women with more than 80 years of age were depressed comparatively. Similarly, the study shows that the relation between literacy and depression was not significant but the depression in illiterate women was prevalent more comparatively.

The relationship between marital status and depression was significant. The women who were prone to depression were the women who were either divorced or widowed. Discussing addiction here tobacco was used by the women who had addiction and the relation is significant which is consistent with various studies of addiction and depression [7]. On the same note as it is found in several studies that exercise eliminates depression [8] it is found to be true in the case of geriatric women dwelling in urban areas of India. Financial dependency as stated was a significant factor related to depression, and the cause of this was the male patriarchy [9]. The Indian culture is dominant and generally the household finances are controlled by men. Since employment rates in geriatric women are also lower, unemployment coupled with financial dependence makes geriatric women more prone towards depression [10, 11, 12].

Conclusion

Nearly half of the subjects showed signs of depression. The determinants of depression that were found to be significant were as follows financial dependency, marital status, inactive lifestyle, unemployment, and addiction. This study indicates the need for geriatric therapy centres at local healthcare facilities. The promotion of a healthy lifestyle in the geriatric population by the formation of a community should be undertaken under the guidance of mental healthcare professionals. In the adult stage of life, one should take necessary precautions to avoid depression during old age. The psychological evaluation along with other co-morbidity disease testing should

be a priority for healthcare professionals in the case of the geriatric population. The geriatric should be given financial aid and stability to avoid the depression due to financial dependence. They should be engaged in appropriate/ suitable employment activities.

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