



A Comparative Study of Prevalence of Depression and Associated Risk Factors among the Elderly Population

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Abstract

Introduction: *Depression (major depressive disorder) is a common and serious medical illness that negatively affects how you feel, the way you think and how you act. Depression is now categorised among the most common psychiatric disorders among the elderly people. It is projected that by 2050, elderly will constitute 20–30% of India's population. the median prevalence rate of depressive disorders in the world for the elderly population was determined to be 10.3%, while among the elderly Indian population, it was determined to be 21.9%.*

Aim: *This study aimed to estimate the prevalence of depression in the elderly population (>60 years old)*

Material and Method: *It is a cross sectional study, with a total sample size of 1060 elderly persons. For assessment of depression a 15-item geriatric depression scale (GDS) which consists of 15 self-report items was used in the study*

Results: *It was observed that majority of the subjects included in study had Mild depression (38.6%) and least (4.05%) of the elderly were severely depressed. Male and Female population in this study were almost equally distributed with male population (40.5%) being affected more by depression than the female population (39.6%) and Majority of subjects in the study were married (59.6%), and lived in a joint set up of family (81.6%). Majority of them were literate (67.9%) and financially not independent. Only the association between type of family, education and financial dependency with depression was found to be statically significant ($p = 0.00$) and rest variables were found to be statistically non-significant*

Conclusion: *With increasing longevity and proportion of the elderly population in India, Depression in elderly is a significant problem. As the trend now a days is towards urbanization and nucleation of the families, this problem may be categorised as “public health problem” in the near future.*

Introduction

Depression (major depressive disorder) is a common and serious medical illness that negatively affects how you feel, the way you think and how you act. Depression can results in reduced life satisfaction and quality and along with that it also leads to cognitive decline as well

as impairments in activities of daily living. The Global Burden of Disease (GBD) study projections show that depression will be the single leading cause of Disability Adjusted Life Years by 2020 in the developing world.^{1,2} Depression is now categorised among the most common psychiatric disorders among the elderly people.^{3,4}

As Ageing is a process during which a gradual transition takes place both physically and mentally. It is projected that by 2050, elderly will constitute 20–30% of India's population.² In reports of community -based mental health surveys on geriatric depressive disorders in those aged 60 years and above, conducted in the continents of Asia, Europe, Australia, North America, and South America between 1955 and 2005, the median prevalence rate of depressive disorders in the world for the elderly population was determined to be 10.3%, while among the elderly Indian population, it was determined to be 21.9%.⁵

Few community-based studies have been conducted in India so far to address this issue. Still Limited studies are there in literature to assess relation of depression among the elderly population and its causative variables. Hence, this study was conducted to estimate the prevalence of depression in the elderly (>60 years old)

Material and Methods

It is a cross sectional study, conducted in Department of Community Medicine for a period of 1 year and 4 months. A total sample size of 1060 elderly persons were included in this study. Approval of the Institutional Ethics Committee was obtained prior to commencement of the study. All the subjects of the study were interviewed using pre-designed, pre-tested and semi-structured questionnaire containing various socio-demographic parameters after obtaining their prior consent. Exclusion criteria: The deaf/dumb/blind, those with diagnosed psychiatric illness (schizophrenia, mental retardation) or neurological disorders (Parkinsonism, severe head injury, or brain neoplasm), and those who were ill at the time of the study were excluded, as there was no way to obtain reliable information from them.

For assessment of depression a 15-item geriatric depression scale (GDS) which consists of 15 self-report items was used in the study.⁶ Accuracy of the GDS-15 is not affected due medical conditions, age, or other bio-social characteristics.

Even presence of a major depressive episode among elderly home-bound adults can be reliably assessed. Those with a GDS score > 5 were categorized as depressed.

Statistical analysis

All the obtained Data was tabulated and evaluated and then statistical analysed Frequency distributions were calculated for almost all the variables. To test significant associations between independent variables and depression, chi-square test was used ($p < 0.05$).

Results

Out of total 1060 study subjects present in the study, on the basis of GDS-15 scores it was observed that majority of the subjects included in study had Mild depression (38.6%) and least (4.05%) of the elderly were severely depressed.

The age group included in the study ranged from above 60 yrs to above 80 yrs. These were sub categorized, out of which 60% were aged from 60-70 years followed by 31.9% in age range of 70-80 yrs and just 8% above 80 yrs of age.

Male and Female population in this study were almost equally distributed with male population (40.5%) being affected more by depression than the female population (39.6%) and Majority of subjects in the study were married (59.6%), and lived in a joint set up of family (81.6%)

The study subjects belonged to almost equally distributed socioeconomic status. Majority of them were literate (67.9%) and financially not independent. (Table 1)

It was observed that only the association between type of family, education and financial dependency with depression was found to be statically significant ($p = 0.00$) and rest variables were found to be statistically non-significant.

Table 1: Showing Relationship between Socio-Demographic Variables and Depression (N = 1060).

Variables		With Depression	Without Depression	Total
AGE	60-70	346 (38.6)	390 (61.3)	636 (60%)
	70-80	134 (39.5)	205(60.4)	339 (31.9)
	Above 80	39(45.8)	46(54.1)	85 (8%)
Gender	Male	214(40.5)	314(59.4)	528(49.8)
	Female	211(39.6)	321(60.33)	532(50.1)
Type Of Family	Nuclear	93(47.6)	102(52.3)	195(18.3)
	Joint	380(43.9)	485(56.1)	865(81.6)
Marital Status	Married	245(38.7)	387(61.2)	632(59.6)
	Unmarried	51(53.1)	45(46.8)	96(9.05)
	Others	173(52.1)	159(47.8)	332(31.3)
Socioeconomic Status	Upper Middle And Above	228(42.3)	311(57.6)	539(50.8)
	Lower Middle And Below	198 (38)	323(61.9)	521(49.1)
Education	Illiterate	198(58.23)	142(42.05)	340(32.07)
	Literate	231(32.08)	489(67.9)	720(67.9)
Employment	Employed	149(40.8)	216(59.1)	365(34.4)
	Unemployed	334(48.1)	361(51.9)	695(65.5)

Discussion

The prevalence of depression, based on GDS scores >5 , was found to be 6.05% in the present study. These results were comparatively less as compared to the other similar studies done in different areas like Ludhiana, Bihar, Vellore and Dharwad by various authors.^{7,8,9} This difference may be attributed due to different characteristics of the study population and difference in number of the total sample taken for the study.

In this study though male and female population were almost equally distributed still males were more associated with depression in comparison to females, though this difference was not statistically significant. This was in contrary with study report of Sengupta P⁷ and some other authors^{10,11}, in which they reported more statistically significant female preponderance. However no such findings were observed by Kumar et al¹² and Goyal et al¹³.

In the present study marital status was not significantly related to depression which was in accordance with the results of authors like Sengupta P⁷ and Goyal A¹³ where as Sinha et al¹⁰ and Taqui et al¹⁴ reported an association of those who were single (divorced, separated, widow, unmarried) with depression.

Depression was found significantly higher among those who belonged to upper socioeconomic group and those who were not financially dependent on other.

A significant association was observed between education and financial status with depression which was in accordance with Pracheth R⁸ and Jain RK¹¹.

Taking a review of some other studies it was observed that in one study done in Pakistan female gender, elderly without a spouse, low level of education, and unemployment were found to be independent predictors of dipression.¹⁴ Similar findings have been reported among the geriatric population in the urban slums of Mumbai and Dharwad.¹⁵

However, a study on in Tamil Nadu found that age, female gender, cognitive impairment, and disability status were not significantly associated with geriatric depression.¹²

Conclusion

With increasing longevity and proportion of the elderly population in India, Depression in elderly is a significant problem. As the trend now a days is towards urbanization and nucleation of the families, this problem may be categorised as “public health problem” in the near future.

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