

Original Research Article

Depression in Old Age: Prevalence and Predictors

Sailabala Mohanty¹, Sangita Pradhan², Rupanjali Patra², Minakshi Nayak²

¹Assistant Professor, Dept. of Community Health Nursing, SUM Nursing College, SOA University, Bhubaneswar, Odisha.

²M.S.c. Nursing Student, SOA University, Bhubaneswar, Odisha.

Corresponding Author: Sailabala Mohanty

Received: 15/01/2016

Revised: 15/02/2016

Accepted: 22/02/2016

ABSTRACT

Aging is a normal physiological process of growing old and mature. Unfortunately aging is accompanied with various types of pathological conditions which lead to morbidity and mortality. Depression is quiet common among elderly and approximately 25% older people are living with it.

Objectives: The study aims to assess the predictor and prevalence of depression of geriatric population.

Materials and Methods: A cross-sectional descriptive research design was under taken to conduct the study. The data were collected from 100 samples from the residence of various slums of Bhubaneswar. A standardized questionnaire Geriatric Depression Scale short form (GDS) was used to collect the data.

Results: The findings of the study shows that 20% were perceived themselves healthy, 57% were fairly healthy & 23% were not at all perceived themselves, samples according to activities of daily living depicts that 97% were independent & 3% were dependent and according to level of depression shows that 9% were having no sign depression, 40% were suggestive sign of depression & 51% were having the sign of indicative depression. 34% of male are more satisfied with their life compare to female and mostly female are dropped out the interest from activities, more prone to feeling of emptiness and feel worthless than man. Further it was observed that through analysis that occupation, financial independency and chronic co-morbidity are positively correlated with depression as the Pearson's correlation Coefficient. Further there is no Correlation between living style, muscle gripth with depression.

Key words: Prevalence, predictors, geriatric depression, muscle gripth, life satisfaction.

INTRODUCTION

Aging is a normal physiological process of growing old and mature. Every human life passes through different phases. Old age is known as the final phase of life one has to reach. It is otherwise recognize as the second childhood. This indicates how much care and affection that this population need. ^[1]

As per world population the proportion of elderly is going to increase from current 7% to 11% in 2025 and about

20% in 2050 with an estimated number to be 315 million. ^[2] As world is aging, the proportion of old age population is increasing compare to total population. According to WHO the number of people aged 65 or above is projected to grow 524 million in 2010 to nearly 1.5 billion by 2050, the most number of hike will be in developing countries. Percentage of aged population in INDIA is all about 8%, as per the CENSUS, 2011. In almost every country the numbers of population over 60 years

growing faster compare to other age groups, as the consequences of both longer life expectancy and declining fertility rate. The human body is accomplishing with various changes with aging.

As world is aging rapidly, geriatric health problems are emerging as an important public health issues. Today a larger portion of elderly population is living with either physical or psycho-social comorbidity or may be both. Among the various diseases, the most commonly observed problem is depression among old age. [3] According to WHO, the prevalence of geriatric depression varies in between 10% to 20% depending in cultural situations and in INDIA it varies between 10-25%. [4]

Averagely one in five people will experience depression at some point in their life. The outlook of the modern society to the elderly population is as if they are a burden. This attitude has to be changed. Elders can be the assets to any society. [5]

A cross-sectional research in mental health especially in developing countries is carried out by the World Mental Health Survey Initiative, which shows prevalence of depression in a population within an old age home in India was 45.9%. While in rural Bangladesh, it was reported to be 29% and in a urban clinic based study in Uganda, it was reported to be 6.1%. [6] Prevalence of mental illness, in the geriatric age group has increased day by day. Around four million people aged 60 and above are suffering from mental illness. [7] Now depression is known as most prevailing disabling psychiatric conditions in the elderly. By the year 2020 depression is projected to become the leading contributor to the global burden of the disease. [8]

Old age shows the reality to which every human fast approaches breath after breath , yet struggles to evade life flashes from 6 to 60,not leaving an occasion for a rethought and there you are .Burdened with all that life afford , most of which, in most cases, not so pleasing. And there waits the mouth of “DEPRESSION.” [9]

The prevalence and predictors of psychiatric disorders is reported to differ between countries and within countries, across various ethnicities.70% of women and 40% of men in the UK have experienced clinically significant depressive symptoms by age 65. [10] According to the National institute of health, of the 35 million Americans age 65 or older, about 2 million suffer from full-blown depression. Another 5 million suffer from less severe forms of the illness. [11] Approximately 1 in 4 suffers a depressive illness meeting ICD-10 criteria, at sometime in their life. The peak period of onset is between 25 and 50, but it may occur at any age including in children. Earlier Indian studies have reported prevalence rates of depression that vary from 21–83% in old age homes. [12] Sanjay TV et al conducted a study on prevalence and factors influencing depression among elderly reveal that depression was more prevalent among medium standard of living compared to high standard of living group. It also depict that prevalence of depression was 36% and influenced by standard of living, insomnia and co-morbidities. [13] Abrar H A et al conducted a study on Prevalence and Predictors of Depression amongst Elderly and depression was found to be prevalent among 28.71% .They also reported that depression was statistically significant with gender, poor marital relationship, available of elderly care, monthly income. [14]

Aims of the Study

Medical science can help to find out the symptoms and means of cure of depression, but it is a descriptive research which can reflect on the predictors, prevalence of this peculiar psychological state of human. And that is exactly what planned to be carried out under this research project.

The study aims to explore the predictor and prevalence of depression of geriatric population. Therefore, the objectives of the study were to:-

1) Assess the prevalence of depression among geriatric population in urban slum area;

2) Determine the predictors of depression among geriatric population in urban slum area;

3) Identify the relationship between depressive mood and physical and socio-environmental variables of community-dwelling elderly.

MATERIALS & METHODS

Study design and setting: The study was carried out using a Non-experimental descriptive design. A non probability purposive sampling was used to recruit from five urban slum of Bhubaneswar.

Sample: All geriatric population who are permanent residence of those five urban slum and met inclusion criteria (n=100) were approached and invited for participation. Several days of the week according to scheduled survey session were used to make the sample representative of variety of depressive sign' population in Bhubaneswar. The sample consisted of 100 geriatric populations who agreed to take part of the study.

The criteria for inclusion were the following;

- 1) Geriatric population who are living in selected community.
- 2) Both male and female.
- 3) Geriatric population in age group 60-90 year of age.
- 4) Who is present during the period of data collection?
- 5) Willing to participate in the study.
- 6) Able to read and write English and Odia.

Exclusion criteria were

- 1) The people who are less than 60 year and more than 90 years of age.
- 2) Those that is not willing to participate in the study.
- 3) Those who are absent during data collection

Data collection: The researcher explained the purpose of the study and the process of the study and process of self reporting and gave questionnaire to the participants to respond to it. The study received the approval from the ethics committee of the

sum nursing college. Confidentiality & anonymity were ensured.

MEASURES

A self structure questionnaire was constructed for collecting socio-demographic data & to assess the prevalence and predictors of depression that intended set of measures that consist of two parts. The first part include :socio-demographic information regarding Gender, Age in year, Religion, Educational qualification, Present Occupation, Living status, Source of income, Spouse, Chronic co-morbidity, Substance addiction, Perceived health condition, Community participation ,Muscle girth, Activities of daily living, second part include: standardized questionnaire of geriatric depression small scale given by Yesavege et. al has been tested and used and extensively used with older people related to assess the prevalence and predictors of geriatric depression, that content dichotomous questions, each having 2 options(YES/NO).The total score of structured knowledge questionnaire were 15.

Data analysis: Data were collected, coded, and entered to SPSS version 17.0, subjected for statistical analysis. Graphical presentation was carried out by Microsoft excel and it also used for data handling. Data were analyzed by descriptive and inferential statistics. Descriptive statistics were used to analyze, organize and summarize the data and results were represented in form of frequency, percentage, inferential statistics correlation between subjects' baseline data and outcomes and the level of significance at P -value <0.05 .

RESULT

100 samples were considered for this study First part of analysis shows the distribution of prevalence and predictors of geriatric depression according to their demographic variables. The gender wise distribution of geriatric people is (47%) males & (53%) females. In Age wise

percentage distribution of geriatric people shows that highest percentage 49% were in 60-70 years & 40% in 70-80 years and 11% in 80-90 years of age. Within religion, it is observed that 100% of samples were Hindu. Educational qualification depicts that 4% were graduate. 45% were literate and & 51% were illiterate. On the other hand, 54% were pension holder & 21% were employed and 25% were unemployed. Distribution of samples according to their living shows that majority 89% were living with family & 9% were living without family and 2% were living alone. Distribution of geriatric people according to their financial dependency 34% were total dependent and 33% were independent, and 33% were partially dependent, and their spouse within 52%

were living & 48% were dead. Distribution of geriatric people also shows that 77% were suffering & 23% were not suffering from chronic co-morbidity, Distribution of geriatric people according to habit of substance addiction depicts 53% were addicted & 47% were not addicted. Whereas distribution of geriatric people according to perceived health condition shows that 20% were good, 57% were fairly good & 23% were poor, people according to activities of daily living depicts that 97% were independent & 3% were dependent, and of geriatric people and at last, according to level of depression shows that 9% were having no depression, 40% were suggestive of depression & 51% were almost always of indicative depression.

Table 1: Item wise distribution of subjects according to level of depression in geriatric group

ITEM NO	ITEMS	MALE				FEMALE			
		YES		NO		YES		NO	
		F	%	f	%	f	%	f	%
1.	Basic satisfaction of life	13	13	34	34	15	15	37	37
2.	Drop out from activities and interest	37	37	10	10	39	39	14	14
3.	Feelings of emptiness in life	25	25	22	22	28	28	25	25
4.	Boredom from life	30	30	17	17	31	31	22	22
5.	Feelings of good spirit	22	22	25	25	22	22	31	31
6.	Afraid to any consequences	24	24	23	23	19	19	34	34
7.	Feelings of happiness	16	16	31	31	19	19	34	34
8.	Feelings of helplessness	28	28	19	19	31	31	22	22
9.	Homesickness or socialization	16	16	31	31	17	17	36	36
10.	Loss of memory	31	31	16	16	38	38	15	15
11.	Wonderful aliveness	22	22	25	25	27	27	26	26
12.	Feelings of worthlessness	25	25	22	22	22	22	31	31
13.	Feelings of activeness	13	13	34	34	18	18	35	35
14.	Feelings of hopelessness	25	25	22	22	27	27	26	26
15.	Thinking that most people are better than you.	32	32	15	15	35	35	18	18

Section –B: Shows the item wise distribution of sample according to level of depression in which, males are more satisfied with their life (34%), whereas female are dropped out the interest from activities (39%). On the other hand, females are more prone to feeling of emptiness (28%) and males are feeling less happy than female. Women are feeling more worthless than man.

Table 2: Correlation between occupation and depression n=100

Sl no	Item	r- value	Inference
1	Occupation	0.099	Positive correlation
2	Depression		

Section –C: Table 2 shows correlation of depression with occupation, it shows

positive correlation among geriatric group as the value of ($r = 0.099$).

Table 3: Correlation between types of living and depression n=100

Sl no	Item	r- value	Inference
1	Living style	-0.031	Negative correlation
2	Depression		

Table 3 shows the analysis that there is negative correlation between living style and depression among geriatric people as the value of ($r = -0.031$.) It means if the quality of living style will rise, then depression will decrease.

Table 4: Co-relation between financial dependency and depression n=100

Sl no	Item	r- value	Inference
1	Financial dependency	0.145	Positive correlation
2	Depression		

Table 4 shows that there is positive correlation between financial dependency and depression among geriatric population as the (r =0.145).

Table5: Correlation between chronic co-morbidity and depression n=100

Sl no	Item	r- value	Inference
1	Chronic co-morbidity	0.17	Positive correlation
2	Depression		

Table 5 shows that the elderly people having positive correlation between Chronic co-morbidity and depression among geriatric group at the value (r =0.17).

Table 6: Correlation between muscle girth and depression n=100

Sl no	Item	r- value	Inference
1	Muscle girth	-0.101	Negative correlation
2	Depression		

Table 6 shows that there is negative correlation between girth [hand & muscle] and depression among geriatric people as the value of (r= -0.101) It means if the muscle girth will increase then depression will decrease.

DISCUSSION

The present study was conducted to assess the prevalence & predictors of geriatric depression in selected community of Bhubaneswar. Most common mental disorder which characterized by declining mood, loss of motivation, lack of physical energy, inability to feel pleasure, disturbed sleep, feelings of hopelessness, helplessness and worthlessness, and poor concentration in depression.

Age is an independent and important variable that can influence the presentations, symptoms, and the natural course of disease.

Depression can severely affect people aged 60 years and more, and particularly is more common in those who are also afflicted with other general medical conditions. [15] This study findings shows that 47% of the sample are male and 53% of the sample are female , 49% in 60-70 years

& 40% in 70-80 years and 11% in 80-90 years of age, 100% sample were Hindu, 51% of the sample were in the group of illiterate, 54% sample were literate, 4% of the sample are graduate, 21% of the sample are employed, 25% of the sample are unemployed and 54% are pension holder, 2% of 77% of the sample having chronic co-morbidity and 23% having no such type chronic co morbidity.

According Jengu Kim, Old people who were depressed were likely to have other co-morbid physical and psychiatric pathology, namely general anxiety, phobic anxiety, physical disability, somatic symptoms, sleep disturbance and subjective memory impairment. [16]

The sample were living alone, 89% of the sample are with family and 9% of the sample are living without family, 33% of the sample are financially independent, 33% were partially dependent, 34% were total dependent, from the geriatric group 52% spouse were living 48% spouse were dead, 53% of the sample were substance addicted and 47% were not substance addicted, 20% of the sample were in good perceived health condition, 57% were fairly good and 23% were poor, 100% of the sample were maintaining social interaction, 3% of the sample were having normal girth and 96% were weak, 3% of the sample were dependent in their activities of daily living, and 97% of the sample were independent.

Sreejith S. Nair, S.G. Hiremath, Ramesh, Pooja, Sreekanth S. Nair. (2013) stated that 182 participants aged over 60 from an urban area, Ashapur, Raichur were interviewed to assess their psychiatric morbidity and associated factors using geriatric depression scale. The cross sectional epidemiological study was conducted in urban slums of Ashapur, Raichur Dist. The study area has a population of 25486 with a geriatric population of 2536. A sample size of 182 was estimated using Random Sampling Technique. This study revealed that 32.4% of individuals were suffering from depression. It was concluded that prevalence

of depression in geriatrics is significantly high. It is mainly associated with substance abuse, unemployment, disrupted mental status, illiteracy and poor economic status. [17]

The analysis shows that there is positive correlation between occupation, financial dependency, and chronic comorbidity and depression among geriatric group, and negative correlation between living status and girth with depression is found.

CONCLUSION

On the basis of findings of the study the following conclusion were done: The nurse should develop proper understanding about the cause of depression and developmental aspect of mental status. Nursing personal can do focused group discussion teaching whenever it is necessary.

Regular health check-up and comprehensive follow up care should be done for the geriatric people.

IMPLICATION FOR NURSING PRACTICE

The present study emphasizes the need of assessing the prevalence and predictor of geriatric depression among the geriatric group in selected urban community, Bhubaneswar.

The study implies the importance of assessing the depression level of the geriatric group in the urban community. All nurses including public health nurse, community mental health nurse should spend their time for creating awareness about improvement of mental status among geriatric group, their family members, and community people.

REFERENCES

1. Ajay Kumar Singh, T. B. Singh, Sanjay Gupta, Jay Singh Yadav. Association of Depression and gender with mortality in old age. *Br J Psychiatry*. 2011; 177:336-42.
2. Chong MY, Copeland JR, Beekman AT. Depression among older people. *World Psychiatry*. 2010; 3:45-9.
3. Almeida, O. P., Burton, E. J., Ferrier N., McKeith, L G., & O'Brien, J. T. (2005) Depression with late onset is associated with right frontal lobe atrophy. *Psychological*
4. American Psychiatric Association (1994) *Diagnostic and Statistical Manual of Mental Disorders*. (4th edn) American Psychiatric Assoc, Washington DC.
5. Ankur Barua, Nandi DN, Ajmany S, Ganguli H. The Incidence of mental disorders in one year in a rural community in West Bengal. *Indian J Psychiatry*. 2008; 18:79-87.
6. Delano-Wood, L., Abeles, N. (2005). Late-life depression: detection, risk reduction, and somatic intervention. *Clinical Psychology: Science and Practice*, 12(3), 207- 217.
7. Sundru M, Goru K. Epidemiological study of depression among population above 60 years in Visakhapatnam, India, *Int journal of medical sc & public health*.2013;2(3):695-702.
8. Radhakrishnan S, Nayeem A. Prevalence of depression among geriatric population in a rural area in Tamilnadu. *Int journal of nutrition, pharmacology, neurological diseases*. 2013;3(2), 309-12.
9. Cole MG, Dendukuri N. Risk factors for depression among elderly community subjects: A systematic review and meta analysis. *Am J Psychiatry*, 2003 160(6):1147-1156.
10. Mehta R. Helpage India NEPA, Understanding. elderly abuse, mental wellbeing of older people: making an economical case. *Int J Nurs Stud* 2005; 42:841-2.
11. Majdi MR, Shakeri MT, Mokhber N. Prevalence of depression in an elderly population: A population-based study in Iran. *Iranian Journal of Psychiatry and Behavioral Sciences* 2011; 5(1): 17-21.
12. Itrat A, Taqui AM, Qazi F, Qidwai W .Family systems: perceptions of elderly patients and their attendants presenting at a university hospital in Karachi, Pakistan. *J Pak Med Assoc*, 2009,57: 106-110.
13. Sanjay TV, Jahanvi R, Gangaboraiah B, Lakshmi P, Jayanti S. Prevalence & factor influencing depression among elderly living in the urban poor locality of Bengaluru city, *Int journal of health & allied sci*,2014;3(2),105-109.

14. Barua A, Kay DW, Henderson AS, Scott R, Wilson Jet al. Dementia and depression among the elderly living in the community: The effect of the diagnostic criteria on the prevalence rates. Psychol Med. 2009; 15:771–88.
15. Jain RK, Aras RY. Depression in geriatric population in urban slums of Mumbai. Indian J Pub Health. 2007; 51:112–3.
16. Jeung-Im Kim, Myoung-Ae, Young Ran Chae, Prevalence and Predictors of Geriatric Depression in Community-Dwelling Elderly. Indian Journal of Psychiatry. 2011; 7(3):13-32.
17. Nair SS, Hiremath S. Depression among Geriatrics: Prevalence And Associated Factors. IJCRR. 2013, 5(8): 110-112.

How to cite this article: Mohanty S, Pradhan S, Patra R et. al. Depression in old age: prevalence and predictors. Int J Health Sci Res. 2016; 6(3):206-212.

International Journal of Health Sciences & Research (IJHSR)

Publish your work in this journal

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website (www.ijhsr.org).

Submit your manuscript by email: editor.ijhsr@gmail.com OR editor.ijhsr@yahoo.com