

Prevalence of Depression among Residents of old age homes in Eastern Nepal

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Abstract

Introduction: Geriatric depression is emerging mental disorder with old age. The present study was carried out to estimate the prevalence of depression among residents of elderly homes in Eastern Nepal and to measure the severity of the symptoms of depressive disorders.

Material And Method: This study involved residents of old age homes in four different districts of Eastern Nepal, the participants were heterogeneous with diverse cultural background and ethnicity. All elderly people of age 60 years and above living in the old age homes were at first informed about the rationale of our study, we took the informed verbal (as most of the subjects were illiterate) or written consent before going through our questionnaire which was translated into Nepali language by a panel of translators using repeated "forward backward procedure." General Health questionnaire was applied to all subjects. Geriatric Depression scale (GDS) was then applied to those subjects whose score on GHQ-12 was ≥ 6 and the categorization of the subjects as normal, mild depressives or severe depressives was done.

Results: A total of 62 elderly people of 60 years and above from aforementioned old age homes were enrolled in our study, out of which, 48.38% of the respondents belong to age group of 60-69 years, 27.4% belong to the age group 70-79 and 24.2% were 80 years and above. Out of total respondents, 56.46% showed normal mental status on our GHQ scale while 43.54% were screened to have some sorts of psychological problems. The GDS detected them with mild and severe depressive symptoms. Out of which, 81.48% had mild depressive symptoms while 18.52% were severe depressive symptoms. Prevalence of depression was found to be significantly related to family history of mental illness.

Conclusion: Most of the people living in the old age home in Eastern Nepal are found to have depressive symptoms among which majority have mild depressive symptoms and few have severe depressive symptoms. It depicts the miserable mental health of the elderly people in old age home.

Keywords: Depression, GDS, GHQ-12, Old Age Home

INTRODUCTION

Geriatric psychiatry, also known as geropsychiatry, psycho geriatrics or psychiatry of old age, is a subspecialty of psychiatry dealing with the study, prevention and treatment of mental disorders in humans with old age.¹ The world is greying hence the number of elderly people living in the community is exponentially increasing which is evident in National census findings of the respective country.² Nepal is also witnessing the expansion

of life span and hence an enhancement in the population of the elderly. Elderly population in Nepal (age 60 years and above) is growing more than the general population. In 2001, there were 1.5 million older people in Nepal; this population has increased in 2011 to 2.7 million, accounting for about 9% of Nepal's population. The 2011 census² has revealed that the rate of general population growth is 2.1% and 3.4% in the elderly. If the growth continues to increase at this rate, the population of senior citizens

would become 3,779,772 by 2021. In the next ten years, over 1.3 million elderly populations will be added.² This would not only have great social implications but also on the health sector. This shift in the elderly cohort directly reflects to the increment in the health care issues of the elderly.

From 2001 to 2003, the World Health Organization (WHO) conducted a series of household surveys across 14 countries to estimate the prevalence, severity, and unmet need for treatment of mental disorders, the World Mental Health Surveys. Most prevalent lifetime disorders were major depression (10.6 percent), specific phobia (7.5 percent), social phobia (6.6 percent), and alcohol abuse (6.2 percent). A total of 26.1 percent of the respondents age 60 or older had one or more lifetime psychiatric disorders.³

World Health Organization recently concluded that depression produces a greater decrement in health than angina, arthritis, asthma, and diabetes, based on finding the worst health scores of all the disease states among depressed individuals. Despite the availability of efficacious and safe treatments, geriatric depression is under diagnosed. Reasons for failing to recognize geriatric depression include the clinical complexity of the syndrome, social bias, and barriers of the settings in which most depressed elderly patients are treated. Depressive symptoms are common among older adults and are associated with functional impairment and decline, mortality, increased service utilization, and decreased quality of life.³

According to the World Health Organization, unipolar depression alone is responsible for more than 1 in 10 years lived with disability worldwide. Depression is among the 10 diseases that increase disability-adjusted life-years (DALY) the most. DALY is a measure of years of life lost to premature death and years lived with a disability. Expressed differently, 1 DALY is 1 lost year of healthy life. Depression was ranked among the strongest contributors to disability in a review.³

Depression increases the risk of suicide across ages. Depression is the most common psychiatric diagnosis in elderly suicide victims, unlike younger adults, in whom substance

abuse alone or with co-morbid mood disorders is the most frequent diagnosis. Major depression was identified in 80 percent of suicide victims older than 74 years of age, whereas its frequency ranged from 3.1 to 29.4 percent in younger victims. More elderly suicide victims have lost a spouse and fewer are single, separated, or divorced compared with younger adults. Violent methods of suicide are more common in the elderly and alcohol use and psychiatric histories appear to be less frequent.³

MATERIAL AND METHOD

Ethical clearance and approval of the protocol from BPKIHS before visiting old age homes was obtained. The permission from the respective old age home management committee was taken to conduct this study. A descriptive cross sectional study for one month was carried out where elderly people of age 60 years and above living in the old age homes in four districts of Eastern Nepal i.e. Sunsari (Shriram Shanti Nikunja Helpless Women Service Ashram ChataraDham), Morang (Birateswor Briddhaasram, Biratnagar), Jhapa (Ratna Old age homes, Damak) and Dhankuta (Bisranti Briddhaasram) districts, heterogeneous with diverse cultural background and ethnicity were enrolled in the study. Though a minimum of 50 subjects were assumed but during the study we had been able to enroll 62 subjects. Inclusion criteria were elderly people of age 60 years and above living in the old age homes in Eastern Nepal and those who had given informed written or verbal consent to participate in the study. Exclusion criteria were elderly people who were unable to speak, hear, complete the interview process and who didn't understand Nepali language. They were at first informed about the rationale of our study and after answering their queries, we took the informed verbal (as most of the subjects were illiterate) or written consent before going through our questionnaire. Epidemiological profiles (age, sex, ethnicity, occupation, education and geographical areas, etc) were noted down using a semi-structure Proforma developed by the department of Psychiatry, BPKIHS. Both the tools, General Health questionnaire (GHQ-12) and Geriatric Depression scale (GDS) was translated into

Nepali language by a panel of translators using "forward backward procedure" and GHQ-12 was applied to all subjects. Geriatric Depression scale (GDS) was then applied to those subjects whose score ≥ 6 on GHQ-12 and the categorization of the subjects as normal and having mild or severe depressive symptoms was done. After completion of data entry, tabulation and statistical analysis were carried out using SPSS 16. Appropriate suggestion for referral was given to the people identified with severe depression.

RESULT

A total of 62 geriatric people from aforementioned old age homes were enrolled in our study, out of which, 56.46% showed normal mental status on the GHQ-12 scale while 43.54% were screened to have some sorts of psychological problems. The GDS detected them having mild and severe depressive symptoms. It was found that 81.48% (i.e. 35.48% of total) had mild depressive symptoms while 18.52% (8.06% of total) had severe depressive symptoms. (Table 1)

Socio-demographic Variables

Regarding socio demographic variables, male constituted 41.93% of total population while 58.06% of total population were female. Similarly, 48.38% of the respondents belong to age group of 60-69 years, 27.4% belong to the age group 70-79 and 24.2 % were 80 years and above. (Table 2)

Among the participants 88.7% of the respondents followed Hinduism. Similarly 6.45% were Buddhists, 1.6% were Christian and 3.2% were Kirant. Among them, 40.32% were Brahmin, 27.4% were Chettri, 6.45% were Limbu, 4.8% were Tamang, 4.8% were Rai whereas 19.3% of the respondents were from other different castes. Regarding marital status majority of them, (40.32%), were widow, 33.8% were married, 16.1% were single and 9.67% were separated.

Similarly, majority of them (48.3%) were uneducated, 12.9% had received formal education while the rest could just read and write.

Of the total respondents, 35.48% were housewives, 33.8% unemployed, 12.9% were farmer, 8.1% were labourer , 4.8% did business

while 6.4% were involved in other means of livelihood during their lifetime. Similarly, our findings showed that 85.48% were from lower socio economic status while the rest belonged to the middle socio economic status. We also found that majority of them (72.58%) didn't have any financial support however 82.3% had got psychological support from either their own family members or the friends in the old age homes.

It was also found that 61.29% had been there on their self decision, while 35.48% had been due to lack of caretaker. (Table 3)

Regarding family history of mental illness 85.5% of the respondents didn't give any such history while the remaining 14.51% of the respondents admitted having their relatives with some psychiatric problems. (Table 4)

DISCUSSION:

Depression is one of the major psychological problems which jeopardize the quality of life, and when occurred in the elderly population it simply adds on to more misery. The primary purpose of our research was to find out the prevalence of depression in the old age homes in Eastern Nepal where four districts were selected on random basis as the site of study.

In this study the prevalence of depression in the studied population in old age home was found to be 43.54% among the elderly people of age 60 years and above. This finding is consistent with the study conducted by Tiwari SC et al⁴ and Jariwala V et al⁵; they have observed Depression 37.7% and 39.04% respectively. They have conducted study in Northern part (Lucknow) and Western part (Surat) of India. It shows that the prevalence of Depression in elders residing in old age home is higher than the general population residing in the community across the geographical regions. Some of the studies done in Nepal and neighbouring countries still shows higher prevalence of Depression. In the study conducted by Chalise H et al⁶ and Ranjan S et al⁷ in different settings have noted slightly higher prevalence of Depression. They have observed the prevalence of depression 57.8% and 47.33% respectively. Similarly in an another study conducted on the prevalence of depression among the institutionalized elders in Colombo showed 56% had depression⁸.

Table 1: Prevalence Of Depression & Its Categorization of severity (n=62)

	Prevalence of depression(n=62)			Degree of depression(n=27)		
	Normal	depression	total	mild	severe	Total
Frequency	35	27	62	22	5	27
Percent	56.46%	43.54%	100%	81.48%	18.52%	100%

Table 2: Distribution Of Severity of Depression According to Age/Sex

Socio demographic variables	Normal	Mild depression	Severe depression	Total Depression (n=27)	TOTAL (N)	P-value
GENDER					62	0.07
Male	14	12	0	12		
Female	21	10	5	15		
AGE GROUP(YEARS)					62	0.187
60-69	16	14	0	14		
70-79	10	5	2	7		
≥80	9	3	3	6		

Table 3: Distribution Of Severity of Depression Based on their reasons to stay in Old Age Homes

Socio demographic variables	Normal	Mild depression	Severe depression	Total Depression (n=27)	TOTAL (N)	P-value
REASON OF STAY					62	0.053
Self-decision	22	12	4	16		
Lack of care taker	13	8	1	9		
Others	0	2	0	2		

Table 4: Family History Of Mental Illness

Socio demographic variables	Normal	Mild depression	Severe depression	Total Depression (n=27)	TOTAL (N)	P-value
FAMILY HISTORY OF MENTAL ILLNESS					62	0.004
Yes	2	7	0	7		
No	33	15	5	20		

Similarly another study conducted by Maktha S et al⁹ in old age home in Hyderabad, India found mean depression score 21.64 and 48% had moderate depression. This slight variation in the prevalence might be due to different methods, tools used and questionnaires based assessment rather than diagnostic modalities of assessment. As stated earlier the community based study has lesser prevalence than prevalence done at old age homes. In the study conducted by Barua A et al¹⁰ the prevalence of depression in elderly population was determined to be 21.7% (95% CI = 18.4 - 24.9). The Indian version of WHO-five well-being index (1998 version) showed a sensitivity of 97.0%, specificity of 86.4%, positive predictive value of 66.3% and an overall accuracy of 0.89. Despite, the prevalence rate varying by the narrow margin in different studies including community studies; the higher prevalence of Depression is one of the major health issues in elderly which has been revealed in a study conducted by Tiwari S C et al¹¹; the prevalence of psychiatric morbidity was found to be much higher in the geriatric group (43.32%) than in the nongeriatric group (4.66%). Nandi PS, Banerjee G et al¹² conducted a door to door field-survey in two villages by a team of psychiatrists with the aim of assessing the mental morbidity of the population. They restricted the assessment to the mental morbidity of the elderly population aged 60 years and above. The total sample comprised 183 persons (male 85, female 98). Sixty one percent of the elderly population was mentally ill. Women had a higher rate of morbidity than men (77.6% and 42.4% repetitively). The overwhelming majority of the affected persons were depressives.

We also found that out of the persons with depression, 81.48% had mild depressive symptoms while 18.52% had severe depressive symptoms. This is in consistent to other studies which also showed that higher percentage of the elderly people had mild depressive symptoms than severe on using GDS^{6,9}.

On relating the socio demographic variable with the prevalence of depression, we found the prevalence of depression to be significantly related with the family history of mental illness. The respondents who had any of their kith and kin suffering from any sort of psychological

illness were found to be more prone to depression at present. This finding is in consistent with the research done by Ranjan et al⁷. In our study, no significant association was found with other socio- demographic variables like age, sex, religion, caste, social status, marital status, educational status, occupation, number of children, financial and psychological support, etc., and these findings are similar to the research done in old age home in Kathmandu city⁷. However, some of the studies¹³, show depression in elderly to be significantly associated with gender, low financial support, illiteracy and marital status. Depression was found to be more among the females and illiterate participants. Depression was more among those who were unemployed and who belonged to class V socio - economic status.

CONCLUSION:

Most of the people living in the old age home in Eastern Nepal are found to have depressive symptoms among which majority had mild depressive symptoms and few had severe depressive symptoms. Depression was mainly associated to the family history of mental illness. Most of them are at old age homes either due to the lack of caretaker or on their self-decision, especially at the old age homes at the religious site at Chhatara Dham and Bistranti Mandir in Sunsari and Dhankuta districts respectively, where being religiously inspired, they decided to live their remaining days.

Similar researches in wide scale needs to be carried out in different regions of Nepal, so as to find the prevalence rate of depression among the elderly people living in old age home, and this sector should be prioritized as the subject of national interest such that effective programmes are launched at the national level for the early diagnosis and effective control of the problem for the better rehabilitation and happiness of the marginalized group of senior citizens of Nepal.

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CONFLICT OF INTEREST: None

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