Level of Anxiety among the Elderly Adults at Western Regional Hospital, Pokhara, Nepal

[1]Rasmita Poudel, [1]Jenny Ojha

[1]School of Health and Allied Sciences, Pokhara University

ABSTRACT

Anxiety disorders are abnormal states in which most striking features are mental and physical symptoms of anxiety, which are not caused by organic brain disease or any other psychiatric disorder. This study aimed at exploring the level of anxiety among the elderly adults in inpatient and outpatient departments of western regional hospital, Pokhara, Nepal.This is a hospital based cross-sectional study conducted in the outpatient as well as inpatient departments, medical and geriatric ward of western regional hospital, Pokhara. We interviewed 318 respondents purposively using structured interview schedule. Geriatric Anxiety Scale (GAS) – Version 2.0 was used to assess anxiety symptoms. It was found an overall 68% had anxiety. The highest frequency 209 (65.7%) respondents had moderate anxiety whereas only 7(2.2%) had high anxiety. Sex, religion and monthly family income were significantlyassociated with level of anxiety ($p<0.05$). The burden of anxiety among elderly patients visiting tertiary level health care suggestsfocusing on evidence-based interventions by health authority.

Key words : Anxiety, Elderly, Magnitude, Nepal

Corresponding address **:** Jenny Ojha, School of Health and Allied Sciences, Pokhara University.
E-mail: joyfuljenny01@gmail.com

INTRODUCTION

Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat.[1]

Excessive anxiety that causes distress or that interferes with daily activities is not a normal part of aging, and can lead to a variety of health problems and decreased functioning in everyday life. Between 3% and 14% of older adults meet the criteria for a diagnosable anxiety disorder, and a recent study from the International Journal of Geriatric Psychiatry found that more than 27% of older adults under the care of an aging service provider have symptoms of anxiety that may not amount to diagnosis of a disorder, but significantly impact their functioning.[2]

The Senior Citizens Acts 2063, Nepal defines the senior citizens (elderly population) as "people who are 60 years and above". In Nepal, there were 1.5 million in 2001 and 2.1 million in 2011, elderly inhabitants, which constitute 6.5 percent and 8.1% of the total population in the country. During the years 1991-2001, the annual elderly population growth rate was 3.39 percent, higher than the annual population growth rate of 2.3 percent. Growing numbers of elderly people are suffering problems in different aspect, but there are limited studies in relation to general morbidities as well as specific in this group of people.[3] A study conducted in England showed clinical depression and anxiety were common in older patients admitted in intermediate care. Out of 173 patients 65 patients (38%) were identified with depressive symptoms, 29 (17%) with clinical depression, 73 (43%) with anxiety symptoms, and 43 (25%) with clinical anxiety.[4]

This study focused to assess the level of anxietyamong the elderly population.

METHODS

A hospital based cross-sectional study was conducted to assess the level of anxiety among elderly attending western regional hospital, Nepal. Geriatric Anxiety Scale (GAS) – Version 2.0 was used for research purpose after taking permission from creator, Daniel L. Segal. Geriatric anxiety scale includes statement regarding symptoms of anxiety. It consists of 25 scoring statements. The total score was 75. Level of Anxietyscore were categorized as; no anxiety, moderate anxiety and high anxiety.

The study was conducted in Out-patient department as well as medical and geriatric ward of Western Regional Hospital Ramghat-10, Pokhara. According to the prevalence of anxiety among geriatric population was 76.1%[5] which was prob-

ability of proportion and tolerable error of 5%, the desired sample was calculated and determined to be 318. Semi-structured Interview Schedule was used. The standard scale in English language was translated in Nepali language and back translation was done.

The collected data was coded and entered in Microsoft Excel with validated command. SPSS (Statistical Package for Social Sciences) Program version 16.0 was used for entering and tabulating data. Frequency and Percentage was used to analyze socio-demographic characteristics. Descriptive statistics as mean, standard deviation and mean percentage was used to assess the level of anxiety.

The association of level of anxiety with their selected demographic variables (Age, Sex, Religion, Ethnicity, Type of family, Residence, Educational status, Family monthly income) was analyzed by using Chi-square test.

Study was conducted after getting ethical clearance from Institutional review committee (IRC) of Pokhara University. Written permission was taken from hospital administration of Western Regional Hospital. Written and verbal consents were taken from each respondents. Respondent's privacy, confidentiality and anonymity were maintained during the study.

RESULTS

The highest score was 62 whereas lowest score is 3 out of 75. The mean of the total score was 32.75 with the standard deviation of 12.1. Similarly the median score was 35. Sex, religion and monthly family income was statistically significant (i.e. p-value <0.05) to the level of anxiety. Other demographic variables like age, type of family, religion, residence and educational status were not statistically significant. So anxiety was found to be present to 68 % of the respondents.

Table 1: Socio-demographic characteristics of respondents **n=318**

Characteristics	Frequency	Percentage
Age		
≤ 68years	155	48.7
>68 years	163	51.3
Sex		
Male	170	53.5
Female	148	46.5
Ethnicity		
Dalit	086	27.0
Disadvantaged Janajati	034	10.7
Disadvantaged non-dalitTerai caste group	010	03.1
Religious minorities	014	04.4
Relatively advantaged janajati	041	12.9
Upper caste group	133	41.8
Religion		
Hinduism	268	84.5
Buddhism	037	11.6
Christianity	008	02.5
Islam	005	01.6
Type of family		
Nuclear	090	28.3
Joint	228	71.7
Educational status		
Illiterate	160	50.3
Informal schooling	068	21.4
Primary (1-5) Secondary (6-10) Higher secondary (11-12) Bachelor or above	039	12.3
Monthly family income in Rs		
≤ Rs. 33,000	036	11.3
>Rs. 33,000	013	04.1
Residence		
Rural	002	00.6
Urban	175	55.0

Table 2 : Anxiety scores of the respondents **n=318**

Anxiety levels	Frequency	Percentage
No anxiety	102	32.1
Moderate anxiety	209	65.7
High anxiety	7	2.2

Table 3: Association of selected demographic variables with anxiety levels **n=318**

Variables	Anxiety levels		Chi square	Df	p-value
	≤35	>35			
Sex					
Male	88(51.8%)	82(48.2%)	00.963	1	.002*
Female	77(52.0%)	71(48.0%)			
Age(in years)					
Less than or equal to 68	84(54.2%)	71(45.8%)	00.645	1	.422
More than 68	81(49.7%)	82(50.3%)			
Religion					
Hindu	148(55.2%)	120(44.8%)	07.603	1	.006*
Others	17(34.0%)	33(66.0%)			
Ethnicity					
Upper caste group	73(54.9%)	60(45.1%)	00.824	1	.364
Others	92(49.7%)	93(50.3%)			
Educational status					
Illiterate	83(51.9%)	77(48.1%)	00.000	1	.997
Others	82(51.9%)	76(48.1%)			
Monthly Family Income (Rs.)					
Less than or equal to 33,000	111(63.4%)	64(36.6%)	20.766	1	.000*
More than 33,000	54(37.8%)	89(62.2%)			
Residence					
Urban	88(48.1%)	95(51.9%)	02.493	1	.114
Rural	77(57%)	58(43%)			
Family type					
Nuclear	47(52.2%)	43(47.8%)	00.006	1	.940
Joint	118(51.8%)	110(48.2%)			

DISCUSSION

In this study majority of the respondent had anxiety 216(67.9%), whereas only 102(32.1%) respondents had no anxiety. The results was supported by a cross sectional analytical study done among 42 Geriatric inpatients of Tribhuvan University Teaching Hospital, significant anxiety symptoms were present in 76.1% (N=32).[5]

Also supported by a study conducted among community-dwelling U.S. Chinese older adults. Subjects were interviewed in personusing the Hospital Anxiety and Depression Scale-Anxiety (HADS-A) where 65.0% reported having anxiety symptoms.[6]

Findings of this study showed higher prevalence of anxiety in males 82(48.2%) than females 71(48%) which is supported by a Controlled cross-sectional study to examine the prevalence of anxiety symptoms in geriatric population. Anxiety measured as a current by Spielberger's State-Trait

Anxiety Inventory (STAI) where 41% of the female and 47% of the male geriatric patients suspected of suffering from significant anxiety symptoms.[7]

In this study majority 95(51.9%) of urban population had anxiety in contrast to 58(43%) from rural. This findings are supported by a cross sectional survey done to find the Prevalence of anxiety and its correlates among older adults in 11 catchment sites in 7 countries (China, India, Cuba, Dominican Republic, Venezuela, Mexico and Peru) which showed rural China remained with the lowest prevalence of anxiety (0.1%), whereas urban Peru had the highest with 9.6%.[8]

Similarly highest percentage (41.8%) of the respondents was of upper caste group. Hinduism (84.5%) was the most followed religion by the respondents and Islam was the lowest (1.6%). Majority (71.1%) of the respondents had Joint family and 28.3% belonged to Nuclear family. Majority were illiterate where (21.4%) of the respondents had informal schooling 12.3% having primary level qualification , 11.3 % with secondary level qualification, 4.1% of higher secondary and rest of bachelor and above. With regards to monthly family income (Rs/months), Rs 33,000 was the mean income of the respondents. Most (55.0%) of the respondents had family income of less than or equal to Rs 33,000 whereas 45.0% of the respondents had family income greater than Rs 33,000. However no any association of anxiety were found with family type, income, caste and educational background.

CONCLUSION

More than half of the respondents had moderate anxiety where as very few had high anxiety. Sex, religion and monthly family income were found to be significantly associated with the development of anxiety in elderly population. Presence of these psychiatric morbidities can further exacerbate the physical illness and adversely affecting a wide range of outcomes. Such a high amount of psychiatric morbidity in this population needs to be addressed by appropriate mental health interventions. This article will provide baseline information for conducting further research in similar settings and aspects.

REFERENCES

1. Sreevani R, A guide to mental health and psychiatric nursing, 3rd edition, Jaypee brothers medical publishers (P)ltd 2010 page no:176-180
2. Ritchie K, Artero S, Beluche I, Ancelin ML, Mann A, Dupuy AM, Malafosse A, Boulenger JP. Prevalence of DSM—IV psychiatric disorder in the French elderly population. The British Journal of Psychiatry. 2004 Feb 1;184(2):147-52.
3. Shrestha L, Geriatric health in Nepal: Concerns and Experience Available from http://nmcth.edu/images/gallery/Review%20Article/oVWgaL%20Shrestha.pdfcited on Nov. 2018.
4. Yohannes AM, Baldwin RC, Connolly MJ. Prevalence of depression and anxiety symptoms in elderly patients admitted in post□acute intermediate care May 2008 Available from https://onlinelibrary.wiley.com/doi/pdf/10.1002/gps.2041 cited on june 2016
5. Kumar A, Sharma SR, Timalsina S, Giri S, Yadav V. High prevalence of depression and anxiety symptoms among hospitalized geriatric medical inpatients: A study from a tertiary level hospital in Nepal. University of Toronto Medical Journal. 2010 Nov 30;88(1):32-5.
6. Dong X, Chen R, Simon MA. Anxiety among community-dwelling US Chinese older adults. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences. 2014 Nov 1;69(Suppl 2):S61-7. Available from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4453753/#CIT0026April cited on :2016 June
7. Kvaal K, Macijauskiene J, Engedal K, Laake K. High prevalence of anxiety symptoms in hospitalized geriatric patients. International Journal of Geriatric Psychiatry. 2001 Jul 1;16(7):690-3. Available from https://www.ncbi.nlm.nih.gov/pubmed/11466747 April cited on :2016 June
8. Prina AM, Ferri CP, Guerra M, Brayne C, Prince M. Prevalence of anxiety and its correlates among older adults in Latin America, India and China: cross-cultural study. The British Journal of Psychiatry. 2011 Oct 15:bjp-p.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3227807/ April cited on :2016 June