A Study on Screening for Depressive Disorders in the Geriatric Population of Jowai, Meghalaya

Arkierupaia Shadap[*]**, Esukhaphi M Pyrtuh**
Sikkim Manipal College of Nursing, Sikkim

* Corresponding Author

Abstract

A cross sectional study was conducted to determine the prevalence of depressive disorders among the elderly people of Jowai, Meghalaya. It also studied the socio-demographic and comorbid chronic conditions and other factors associated to their living condition. The sample size was 77 and non-probability purposive sampling technique was used. The data were collected by interviewing the subjects using a three part questionnaire's which consists of a personal details and general household schedule which were developed by Dr. Ankur Burau consisting of 20 items questions, which were used for our study with his kind permission. UDAI PAREKHS socio-economic status scale which consists of 10 items and WHO Well-Being Index consisting of five items was used for the study. The findings showed that the prevalence of depressive disorders was 33% among individuals. It was more prevalent in the females (40%) as against the males (25%). The study also revealed that depressive disorders were high among the individuals belonging to low socio-economic status (47.4%). The study showed high prevalence of depressive disorders

among those elderly individuals who had 3-4 comorbid conditions (41%).

Keywords: screening, prevalence, depressive disorder, and geriatrics.

Introduction

Mental health is an integral component of health that helps a person to realize his or her own relational abilities using the psychomotor, affective and cognitive domains. A person is said to be mentally healthy "when there is a balance between the individual and surrounding world, a state of harmony between oneself and others, a coexistence of realities between self and people in the environment". A significant number of elderly people are likely to have physical and mental problems besides psychological ones. Depression is found to be a commonest problem observed in the community especially among elderly.[1]

It is estimated that there are 416 million old people (above 60 years) around the globe and by 2020 world's 11.9% population will be above 60years and 21% by 2050, which was 6.8% in 1991.[2] According to WHO the overall prevalence varies between 10% and 20% depending on cultural situations.[3]

In India the trend shows that 7.5% of the population is above 60 years of age and the trend is gradually increasing.[4] By 2020, India will harbor about 158 million elderly and may well be an era of ageing population. The elderly population, being the fastest section of the population, needs due consideration. In India the community based mental health study revealed that the prevalence of depressive disorders among elderly population was high varies from 13% - 25%. [5]

Depression is a highly prevalent disorder. It can occur as a single episode in a life time or as many episodes or as an alteration with mania. The cultural background is likely to determine whether depression will be experienced and expressed in psychological and emotional terms.[6] Depression affects about 121 million people worldwide. World Health Organization (WHO) states that depression is the leading cause of disability as measured by Years Lived with Disability (YLDs) and the fourth leading contributor to the global burden of disease. By the year 2020, depression is projected to reach second place in the ranking of Disability Adjusted Life Years (DALY) calculated for all ages.[7]

The WHO collaborative study on assessment of depressive disorders (Sartorius et al)

conducted in Basle, Montreal, Nagasaki, Tehran and Tokyo reported the most common symptoms (75%) of the cases are sadness, anxiety, tension, lack of energy, worthlessness and ranges from 70% in Montreal and Nagasaki to 41% in Tokyo. Considering this background very few studies have been conducted to understand this problem. A community based study was undertaken in the rural area of Jowai, Meghalaya to determine the prevalence of depressive disorders among elderly and its socio-demographic correlates.

The objectives of the study

1. To determine the prevalence of depressive disorders in the geriatric population in the rural area of Jowai.
2. To study the socio-demographic correlates of the depressive disorders and the associated comorbid chronic conditions among the elderly in this population.

Research methodology

- Research design: Cross-sectional study design
- Setting of the study: Jowai Jaintia Hills District Meghalaya.
- Sample size: 77 (have included those samples available during the study period, 2005)
- Sampling technique: Non-propability purposive sampling technique.
- Inclusion criteria:
  - i. All people in the age group of 60 years and above were considered eligible for the study.
  - ii. She/He should be a member of the household
- Development of instrument:
  - i. Personal details and household schedule: a fact sheet containing of information regarding the household of the respondent.
  - ii. Schedule for assessment of socio-economic status: a semi-structured proforma containing information regarding socio-economic status of the individual (MODIFIED UDAI PAREKH SES SCALE)
  - iii. World Health Organization 5 (five) well-being index.

  Ethical consideration: Before conducting the study, permission was obtained from the Dean SMIMS, Principal/Consultant college of Nursing, head of the village and consent from the

participants.

Validity and reliability of the instrument: The WHO 5(five) well-being index is a brief questionnaire with five items. These five items reflect the presence or absence of positive well-being related to quality of life. Lack of positive well-being is an indication of possible depression. It can be used to screen all people for depression. It is regarded as a valid instrument to detect depression and had been used in previous research study for a screening of depression among elderly.

Procedure for data collection

The data were collected through structured questionnaire by interviewing the subjects individually. A total number of 77 subjects were interviewed within a period of three weeks. The researchers visited each designated household of the respondent and answers were recorded directly.

Results

The study revealed that among the participants 41.6% were males while 58.4% were females. Majority 58.4% belonged to the age group of 60 -69 years. The literacy rate among the subjects was 70.1%. Majority 61% were married and stayed with their spouses, 39% were widowed/separated/unmarried and 6.4% were staying alone, while none of them were divorced. 100% of the respondents belonged to Christianity. 31.2% belonged to the middle socio-economic status while only 19.5% belonged to high socio-economic status. The prevalence of smoking (32.5%) and alcohol (10.4%) was less, while the common habits are of pan and tobacco chewing was high (83.1%) among the geriatric population surveyed.

Table 1: Prevalence of depressive disorders in the geriatric population

Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)
77	26	33.8

Table 2: Prevalence of depressive disorders according to sex

SEX	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Male	32	8	25.0			
Female	45	18	40.0	1.881	1	0.170
Total	**77**	**26**	**33.8**			

Table 3: Distribution of individuals with depressive disorders according to the severity of depression disorders

SEX	Number of individuals with depressive disorders	Severity of depressive disorders		
		Mild depressive episode N (%)	Moderate depressive episode N (%)	Severe depressive episode with or without psychotic symptoms N (%)
Male	8	3 (37.5%)	5 (62.5%)	0 (0.0%)
Female	18	9 (50.0%)	6 (33.3%)	3 (16.6%)
Total	**26**	**12 (46.15)**	**11 (42.3%**	**3 (11.5%)**

Table 4: Prevalence of depressive disorders according to age

AGE GROUP (YEARS)	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
60 – 69	45	11	24.4			
70 - 79	20	08	40.0	5.334	2	0.069
≥80	12	07	58.3			
Total	**77**	**26**	**33.8**			

122

Table 5: Prevalence of depressive disorders according to socio-economic status

SOCIO-ECONOMIC STATUS	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X²)	df	pv
Low	38	18	47.4			
Middle	24	05	20.8	6.210	2	0.045*
High	15	03	20.0			
Total	**77**	**26**	**33.8**			

*statistically significant

Table 6: Prevalence of depressive disorders according to financial dependence

FINANCIAL DEPENDENCE	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X²)	df	pv
Total dependent	23	12	52.17			
Partially dependent	23	12	52.17	17.31	2	0.0001*
Independent	31	02	6.4			
Total	**77**	**26**	**33.8**			

*statistically significant

Table 7: Prevalence of depressive disorders according to the marital status

MARITAL STATUS	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X²)	df	pv
Married	47	14	29.8			
Unmarried/Widowed/Separated	30	12	40.0	0.854	1	0.355
Total	**77**	**26**	**33.8**			

Table 8: Prevalence of depressive disorders according to living arrangement in the household

LIVING ARRANGEMENT IN THE HOUSEHOLD	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Living with spouse	47	14	29.8			
Living only with children/relatives	25	10	40.0	0.854	2	0.652
Living Alone	05	03	60.0			
Total	**77**	**26**	**33.8**			

Table 9: Prevalence of depressive disorders according to literacy status

LITERACY STATUS	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Illiterate	23	14	60.9			
Literate	54	12	22.2	10.772	1	0.001*
Total	**77**	**26**	**33.8**			

*statistically significant

Table 10: Prevalence of depressive disorders according to the previous occupation

PREVIOUS OCCUPATION	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Unskilled	15	5	33.3			
Housewife	27	11	40.0			
Skilled	33	10	30.3	1.789	3	0.618
Professional	02	0	0.0%			
Total	**77**	**26**	**33.8**			

Table 11: Prevalence of depressive disorders according to different types of habits

HABITS		Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Smoking	Yes	25	8	32.0	0.516	1	0.82
	No	52	18	34.6			
Alcohol consumption	Yes	8	4	50.0	0.334	1	0.36
	No	69	32	31.9			

Table 12: Prevalence of depressive disorders according to the number of comorbid chronic conditions

NUMBER OF COMORBID CHRONIC CONDITIONS	Number of subjects interviewed	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
(0-2) chronic conditions	43	12	27.9			
(3-4) chronic conditions	34	14	41.2	1.495	1	0.221
(>4) chronic conditions	0.0	0.0	**0.0**			
Total	**77**	**26**	**33.8**			

Conclusion

A cross-sectional study was conducted among 77 elderly individuals of 60 years and above in the area of Jowai, Meghalaya. The prevalence of depressive disorders was found to be 33%, of which 80years and above has the highest prevalence rate (58.3%) against those with 70-79years (40%) and 60- 69years (24.4%). The prevalence of depressive disorder was found to be highest among those in the low socioeconomic status (47.4%). The prevalence of depressive disorders was found to be highest among those individual with 3-4 co-morbid condition (42.2%) and found to be highest among the illiterates (60.9%) against literates (22.2%). The prevalence of depressive disorder among the elderly according to their financial dependence was high & similar among those who were totally and partially dependent (52.17%) and lowest those who are financially independent. Study shows that there is statistically significant between depressive

Table 13: Prevalence of depressive disorders according to the comorbid chronic conditions

COMORBID CHRONIC CONDITIONS	Number of subjects interviewed with comorbid chronic conditions	Number of individuals with depressive disorders	Prevalence of depressive disorders (%)	Chi-square (X^2)	df	pv
Diabetes	7	4	57.14	0.169	1	0.17
Hypertension	12	5	41.6	0.375	1	0.53
Cardiac disorders	3	1	33.3	0.738	1	0.99
Arthritis	63	22	35	0.453	1	0.65
Bronchial asthma/COPD	17	8	47.0	0.153	1	0.19
Gastrointestinal	29	9	31.0	0.155	1	0.69

disorders among the elderly people with the selected variables viz; socioeconomic status, financial dependent and literacy status.

Conclusion

The present study concluded that as age increases, majority of the elderly population faced with the depression problem. It is observed that depression is found to be a commonest problem in the community especially among elderly. It is estimated that there are 416 million old people (above 60 years) around the globe and by 2020 world's 11.9% population will be above 60years and 21% by 2050, which was 6.8% in 1991. According to WHO the overall prevalence varies between 10% and 20% depending on cultural situations. In India the trend shows that 7.5% of the population is above 60 years of age and the trend is gradually increasing.[8] The elderly population, being the fastest section of the population, needs due consideration. Depression is a highly prevalent disorder. It can occur as a single episode in a life time or as many episodes or as an alteration with mania.[9] Studies also show that depressed elderly were higher in Asia. Studies from the developing countries like India had reported a high prevalence rate of depression.[10,11,12]

So, the author concluded that integration of understanding, support, care and bonding from loved ones, family, stress- free life style, regular health check-up and treatment may lesser the prevalence rates of depression among the elderly.

 References

[1] Crawford M.J. (2004) Depression: International Intervention for global burden. BJP.   184, 379

[2] Ustan T.B, Ayuso J.L, Catterji.S, Msthew. C and Murray C.J.L(2002) Global burden of depressive disorders. BJP.

[3] The World Health Organization (1999)The World Health Report; Geneva

[4] Burua Ankur (2002) A study on prevalence of depressive disorder among elderly people at Udupi, Karnataka.

[5] Barau Ankur, Ghosh Mihir Kumar, Kar Nilamadhab, Basilod Mary Anne (2011). Annals of Social Medicine. 31(6), 620-624

[6] Bhugra Dinesh, Mastrogianni Anastasia (2003) Globalisation and mental disorders Overview with relation to depression. The British Journal of Psychiatry. 184 (1) 10-20

[7] Reddy M.S (2010) Depression : The disorder and the burden. Indian Journal of Psychological Medicine. 32 (1), 1-2

[8] Sharma K.L etal (2006) Indian Journal of Gerontology. 20 (3)

[9] Cuellar AK, Johnson Sheril L, Winters Ray (2005) Distinctions between bipolar and unipolar depression. Clinical Psychology Review. 25(3), 307-339

[10] Rangaswamy Sm (2001). World health Report: Mental Health : new understanding New Hope. The world health Organization; Geneva, Switzerland.

[11] Wig NN (2001) World Health day. Indian journal of Psychiatry. 43(1): 1-4.

[12] Ramachandran V, Menon sarada M, Arunagiri S. (1982). Soicio-cultural factors in late onset Depression. Indian Journal of Psychiatry. 24(3), 268-73.

Authors Column

Arkierupaia Shadap, MSc (N) is presently working as a Lecturer at Sikkim Manipal College of Nursing, Sikkim Manipal University, Sikkim. She has more than nine years teaching experience.

She has interest in nursing education and research, published many articles both in national and international indexed journals.

She has attended and presented papers both in national and international conferences.