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Prevalence and Determinents of Psychiatric Morbidityamong Adult Women of Kanpur

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Abstract

Background:

The who Global burden of disease study estimates that mental and addictive disorders are among the most common cause of morbidity and in the world. Psychiatry morbidity accounts for about 12% of the global burden of diseases. By 2020 it is likely to increase to 15%.s

Objectives:

1.To study the prevalence of psychiatric morbidity among study subjects.2. To study the determinants of psychiatric morbidity in the study subjects.

Material and Methods:

A cross sectional study was conducted among women aged >20 years in the rural area served by RHTC, Kalyanpur, Kanpur. Taking prevalence of psychiatric morbidities as 24.4%, absolute error as 5% and at 5% level of confidence, sample size was calculated to be 283. A predesigned and pretested questionnaire and Depression-Anxiety and Stress Scale-42 (DASS-42) was used to assess psychiatric morbidity .Line listing of all households in the selected village was done and systematic random sampling was used to select the study subjects. The data was analyzed using SPSS. Chi square test and multiple logistic regression were used for analysis of data.

Results:

Mean age of study subjects was 35±2yrs. Prevalence of psychiatric disorder among adult women was 65.01%. Of these, it was observed that the26.14%,18,37% and 12.36% of study subjects were suffering from depression, anxiety and stress respectively. Prevalence of psychiatric morbidity maximum among 41-50 yrs of age i.e.44.54%.Around 52% of adult women suffering from psychiatric morbidity were widowed/divorced followed by married. 81% ,57% and 43%of the adult women who had psychiatric morbidity were illiterate, belongs to nuclear family and were homemaker respectively.

CONCLUSION: The study highlights that psychiatric morbidity common among adult women. Prevalence of psychiatric morbidity was maximum between 41-50 yrs of age, divorced and among illiterates. Factors like education and occupation can be preventable through counselling.

KEYWORDS: Psychiatric morbidity,Depression,Anxiety,Stress,DASS-42

Introduction:

Mental health is one of the most important public health issues because of its major contribution in increasing the global burden of disease. The simplest way to conceptualize a psychiatric disorder is a disturbance of Cognition (i.e. thought), Conation (i.e. Action), or Affect (i.e. Feeling), or any disequilibrium between the three domains. Another way to define a psychiatric disorder or mental disorder is as a clinically significant psychological or behavioural syndrome that causes significan (subjective) distress, (objective) disability, or loss of freedom and which is not merely a socially deviant behavior or an expected response to a stressful life event[1]. The mental and behavioral disorders account for about 12% of the global burden of diseases. By 2020 it is likely to increase to 15%. WHO states that the burden of psychiatric morbidity especially depression is 50% higher among females than males and Indians are reported to be among the world's most depressed[2]. According to an epidemiological study done in south indian rural population in year 2014,24.4% of the study subjects suffering from one or more diagnosable psychiatric disorder[3].Thus, there was a need to carry out general population survey that estimate the prevalence of psychiatric morbidity and also to

assess the determinants that leading to psychiatric morbidity in the community.

OBJECTIVES: 1.To study the prevalence of psychiatric morbidity among adult women of Kanpur. 2. To study the determinants of psychiatric morbidity in the adult women of Kanpur. MATERIAL AND METHODS: A cross sectional study was conducted among women aged >20 years in the rural area served by Rural Health Training Centre, Kalyanpur, Kanpur(U.P.).Duration of study from Sept'2015 to Jan'2016.Taking prevalence of psychiatric morbidities as 24.4%, absolute error as 5% and at 5% level of confidence, sample size was calculated to be 283. Line listing of all households in the selected village (Naubasta,Khera,Bairi1 and Bairi2)was done. Taking the population of each village around 1500.The total population of all the four villages came out to be 6000.Assuming the family size of 5 in each family,the population of adult women came out to be 1200. Systematic random sampling was used to select the study subjects and every 4^{th} house was included in the study to fulfill the sample size. A predesigned and pretested questionnaire and Depression-Anxiety and Stress Scale-42 (DASS-42) was used to assess psychiatric morbidity . The questionnaire consisted of biosocial factors of study subjects and her family members. DASS scale is a quantitative measure of distress along the 3 axes of depression, anxiety and stress.All females were informed about the purpose of study and consent was taken for the same. The data was analyzed using SPSS version16. Chi square test and multiple logistic regression were used for analysis of data.

Results:

Majority of the study subjects comes under normal category in each criteria i.e. depression (51.6%), anxiety (30.6%) and stress (36.4%). Followed by moderate category (20.2%) in depression, severe category(29.3%) in anxiety and moderate category(21.8%) in stress. Of these, it was observed that the26.14%,18,37% and 12.36% of study subjects were suffering from depression, anxiety and stress respectively**.(TABLE1)**

Prevalence of psychiatric morbidity maximum among >60 yrs of age i.e.31.6%.Around 65.2% of adult women suffering from psychiatric morbidity were widowed/divorced followed by married (29.2%). 57.7%of the adult women who had psychiatric morbidity were illiterate, 63.3%belongs to nuclear family followed by 29.8% in joint family who suffers from psychiatric morbidity.34.8% of the study subjects who had psychiatric morbidity were unemployed/homemaker followed by professionals(25.5%). **(TABLE2)**

In this table, dependent variable is psychiatric morbidity and independent variables are age, maritalstatus, education, type of family, occupation. Taking the reference category normal, prevalence of psychiatric morbidity increases 2.6 times as the age increases and increases 2.7 times from married to widowed/divorced ,which is relatively significant (pvalue<0.05). Prevalence of psychiatric morbidity, decreases as we went from nuclear family to three generation family, which is also relatively significant. Similarly, psychiatric morbidity prevalence decreases from illiterate to literate and increases about 13 times from home maker to professionals, which is relatively not significant. **TABLE1**: Prevalence of Depression, Anxiety and Stress among Adult Women (N=283)

	DEPRESSION	ANXIETY	STRESS
NORMAL	79(51.6%)	23(30.6%)	20(36.4%)
MILD	16(10.5%)	8(10.6%)	10(18.2%)
MODERATE	31(20.2%)	19(25.3%)	12(21.8%)
SEVERE	17(11.1%)	22(29.3%)	09(16.3%)
EXTREMELY	10(6.5%)	03(4%)	04(7.2%)

SEVERE			

TABLE2: Demographic characteristics of study subjects(N=283)

Co-variates	**Normal(N=122)**	**Psychiatric morbidity(N=161)**
1.AGE(in yrs)		
a)21-30	48(39.3%)	10(6.2%)
b)31-40	31(25.4%)	18(11.2%)
c)41-50	19(15.6%)	34(21.1%)
d)51-60	13(10.6%)	48(29.8%)
e)>60	11(9%)	51(31.6%)
2.MARITAL STATUS		
a)Married	56(45.9%)	9(5.6%)
b)Unmarried	42(34.4%)	47(29.2%)
c)Widowed/divorced	24(19.6%)	105(65.2%)
3.EDUCATION		
a)Illiterate	28(22.9%)	93(57.7%)
b)Literate	94(77.1%)	68(42.2%)
4.TYPE OF FAMILY		
a)Nuclear	25(20.5%)	102(63.3%)
b)Joint	41(33.6%)	48(29.8%)
c)Three generation	56(45.9%)	11(6.8%)
5.OCCUPATION		
a)Unemployed/Homemaker	13(10.6%)	56(34.8%)
b)Unskilled worker	28(22.9%)	34(21.1%)
c)Skilled worker	33(27%)	30(18.6%)
d)Professional	48(39.3%)	41(25.5%)

Table3: Multinominal Logistic Regression Analysis of Determinants of Psychiatric Morbidity

Determinants	**P value**	**Oddsratio**	**Lower limit Of oddsratio**	**Upper limit of oddsratio**
1.AGE	0.041	2.604	1.235	3.764
2.MARITALSTATUS(1=Married,2=Unmarried,3=Widowed/divorced)	0.028	2.70	0.623	4.478
3.EDUCATIO N(1=Illiterate, 2=Literate)	0.245	0.076	0.001	5.838
4.TYPE OF FAMILY(1=Nuclear,2= Joint,3=Three generation)	0.036	0.137	0.002	10.003
5.OCCUPATION(1=Homemaker,2=unskilled,3=skilled,4=professional)	0.117	13.803	0.520	366.55

Discussion:

In this present study prevalence of psychiatric morbidity was 65.01% among adult women. T. S. Sathayanarayan Rao[3] et al showed in their study conducted among 18 to 40 years in South Indian Rural population observed that 24.40%of the subjects were suffering from one or more diagnosable psychiatric disorder. Similarly Suresh Bada Math et al[16]conducted an epidemiological study in NIMHANS and observed that the prevalence of psychiatric disorder varied from 9.5 to 370/1000 in the Indian population and almost 20% of the adult population was affected.

In our study prevalence of psychiatric morbidity maximum among >60 yrs of age i.e.31.6% but You sefzadeh et al[17]in his study showed that highest frequency of psychiatric disorders was observed in the age group 26 -40 years of age. K. C. Premaranjan et al[12] in his study to assess the prevalence of psychiatric morbidity in an urban community of Pondicherry observed that the highest rate of psychiatric morbidity (242.9/1000) was found in the 41-50 years.. .

In the present study prevalence of psychiatric morbidity increase as the age increases, more among the widowed/divorced(65.2%)and among nuclear families(63.3%)Similarly A. Barua et al[4]has reported in a study on psychiatric morbidity

among adult population in Karnataka that the prevalence of psychiatric disorder increases with progression of age, among widowed or divorced(61.6%). M. Venkataswamy Reddy et al[13] conducted a study to assess the mental and behavioural disorders in India among rural and urban population in West Bengal found that higher prevalence for females,widowers/divorced,low socioeconomic status and nuclear families.

Conclusion:

The problem of depression, anxiety and stress were high amongadult women in our study. These results may help to better understanding of the phenomena ofstress, anxiety and depression among adult women.Prevalence of psychiatric morbidity was increased as the age increases and maximum among the divorced/widowed,illiterates and in nuclear family.Factors like education and occupation can be preventable through counselling.

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