

Assessing Prevalence of Depression Among General Population of Selected Rural Community- A Descriptive Survey Design

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Abstract

Background and objectives: Depression is an illness that affects both the mind and the body and is a leading cause of disability, absenteeism, decreased productivity and high suicide rates. The study aims to assess the prevalence of depression among rural population of selected village of Kashmir, India.

Methods and findings: A community based survey of depressive symptoms was carried out on a purposive sample of 276 subjects in the age group of 20-80 years, who volunteered to participate in the study were recruited. The research design adopted for the study was descriptive survey design. The Depression was assessed by using the Radloff LS (1977) Centre for Epidemiologic Studies Depression scale: This scale was developed to measure symptoms of depression in rural population.

Results: Out of total 276 recruited subjects, 66.3% were females, 68.1% were married, 63.4% belong to nuclear family and 48.2% had low socioeconomic status (low income). Maximum representations (40.9%) of selected subjects were house workers (housewives). Analysis of information on gender, education, marital status, family income, occupation obtained from this sample of 276 subjects suggested that the overall prevalence of depressive symptoms was slightly higher in males than in females, $p > 0.002$ in males, illiterates, $p > 0.019$; married, $p > 0.002$. Low family income and nuclear family has strongest association with depression. 21-40 years of age also found to be significantly associated with depression.

Conclusion: The study concludes that prevalence of depressive symptoms among the rural population is common especially in males, married, illiterates, low family income and nuclear families.

Keywords: Prevalence; Depression; Rural population

Introduction

Among different psychiatric disorders, depression is the leading disorder in general practice and about one in ten patients seen in the primary care setting suffer from some form of depression [1]. It represents a potential public health problem in the elderly population associated with significant mortality and morbidity [2]. According to WHO conducted study, the most common diagnosis in primary care setting was depression [3]. As per recent reports, by the year 2020, depression will be a supreme benefactor in terms of the global burden of diseases among elderly population [4]. In a cross-sectional study no urban-rural difference in depression was observed among elderly population. However, considering high prevalence of depression among females above 80 years low socio economic and physically in active people [5], the national co-morbidity survey, conducted between 1990 and 1992, estimated the 30-day prevalence of a major depression episode at 4.95% across the US population between the ages of 15-54 years, with no differences by residence [6]. Majority of rural countries are whole or partial mental health professional shortage areas [7], rural residents with mental health problems may less likely to receive service than persons with better access, 340 million people above the age of 18 suffer from depressive disorders that contribute to a high suicide rate [8]. In one of the large sample epidemiological study from urban South Indian population, the prevalence of depression was 15.1%, age, female gender and lower socio-economic status in this population were significantly associated with depression [2]. A number of studies from Kashmiri population are available regarding depression but results are inconsistent [9-12]. Therefore, the aim of the present descriptive study was to assess the prevalence of depressive symptoms among the population of some selected villages of Kashmir.

Material and Methods

The study was carried out with approval from concerned ethics committee (Sheri Kashmir Institute of Medical Science, Institutional Ethics Committee). A survey was conducted in the village of Zalpura, Sumbal, Bandipora (in the State of J&K) India. A total of 276 subjects of village were selected through purposive sample technique. All houses of the village were visited. After taking a proper (verbal and written) consent from the participants, 14-80 years subjects were interviewed by researcher after obtaining consent. Information on demographic characteristics (age, sex, education, marital status, family status, income, occupation) was collected through interviewer- administered and well-designed questionnaire. The depressive symptoms were assessed by using the Radloff LS (1977) centre for Epidemiologic Studies Depression (CES-D) scale [13].

Results

A total of 276 subjects were recruited in the current study. There were no adverse events during the course of the study and all

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participants assessed provided complete data. Minimum age of subjects was 14 years and maximum age was 93 years. Prevalence of depression was found to be more common among females (66.3) as compared to males (33.7%). majority of subjects (75.4%) were illiterate, 68.1% were married and 31.9% unmarried, 63.4% belong to nuclear family, 34.8 joint family, 1.8% belong to single family, 48.2% have low family income, 36.2% belong to average family, 40.9% were housewives (Table 1). The association of depressive symptoms with selected demographic variables identified were more in males 10.49, illiterates 9.83, married 10.01, and was significant in low income and single family, P value 0.040 (Table 1). Maximum representation of subjects with depression was shown by the age group of 21-40 years (38.40%) followed by 20% of 41-60 years age group (Table 2).

Discussion

The current study assesses the prevalence of depression among general population of rural community. We observed that depression was more common among females, illiterate, married people, people living as nuclear families, low income families and among housewives. Similarly, increased prevalence was seen in subjects with age group of

21-40 years.

In our study women had higher prevalence of depression which is consistent with earlier published reports [5,14,15]. Our results are in agreement with previously published reports [16]. Chandran and Tharayan conducted an epidemiological study which reports women are roughly twice as likely as men to experience or report depression [10]. However, it is of interest that another study done in India among young adults attending college, males were found to have more depression than females [17]. The depressed symptoms were high among the age related decline in central serotonergic function which might make older individuals more vulnerable to depression.

Education is having a great impact on the mental setup of an individual [18]. The higher prevalence of depression among illiterate people in the current study is in compliance with previous reports [3,19]. It is possible that India being a developing country and there being an association between depression and lower-socio economic status. Studies have reported a strong association of socioeconomic status and depression [15,20,21]. Most of the studies have observed a higher trend in depression related disorders among people with low income people [21,22]. In India, the joint family system was in vogue till recently this provided social security to younger individuals. Recent studies have reported that the lifetime prevention of a major depressive disorder in the United States was 16.2% [23] whereas the life time prevalence in Europe was 14% [24]. In 1992 Illinois in USA showed that depression was rise in later life (60 years) which reflected life cycle gains and losses related to marriage, employment and economic well-being [22]. Interestingly, more number of depressive subjects at younger age in our study reflects the "life in conflict" - the Kashmiri people are living since few decades [9]. However, maximum reports have shown an increasing trend in depression with an advancement of age [20,25-30]. The other plausible reason could be due to breakdown of the joint family and the emergence of the nuclear family at younger ages due to reduced family support [2].

The results of this study should be viewed in light of a few potential limitations. First, the data was self-reported which may have led to socially desirable responses from majorly illiterate population. Second, this was an observational study wherein cause and effect relationships could not be established. Third, the sample size was limited representing a small portion of population and thus results cannot be generalized to the entire population of Kashmir.

Considering our observations and keeping in view few potential limitations, we could not strongly propose any preventive or interventional actions with the study population. However, there are general suggestions one could hypothesize for the population under depression. Social interaction is frequently reported as a protective factor against a range of negative outcomes, it results in reduction of affective and physiological responses to the stressful event which, in turn, may alter potentially maladaptive behavioural responses. Since, increasing age, illiterate subjects, nuclear families and subjects with low socioeconomic status were with highest representation in current study. Thus, educating people regarding importance of social interaction and generating ways to strengthen their economic status could help in reducing the burden of depression among study population. Subjects should also be routinely monitored for common metabolic disorders like hypertension, diabetes, Obesity, Asthma etc. during their treatment. Implementing gender sensitive and specific programs to target and advance literacy levels may be key to ultimately reducing depression [31]. Depression and anxiety were negatively correlated with physical activity and thus may require additional attention. Such technology-

Variable	Frequency	percentage	P value
Gender			
Male	93	33.7	0.002
Female	183	66.3	
Education			
Illiterate	208	75.4	0.019
Literate	68	24.6	
Marital status			
Married	188	68.1	0.002
Unmarried	88	31.9	
Family status			
Joint	96	34.8	0.040
Nuclear	175	63.4	
Single	5	1.8	
Family income			
Average	100	36.2	0.023
Good	9	3.3	
Low	133	48.2	
Middle	29	10.5	
Moderate	5	1.8	
Occupation			
Carpet weaver	25	9.0	0.033
Farmer	48	17.3	
Housewives	113	40.9	
Laborer	42	15.2	
Shawl weaver	10	3.6	
Student	22	7.9	
Tailor	4	1.44	

Table 1: General characteristics of study subjects (n=276).

Scale	N (%age)	P value
Age		
≥ 20	49 (17.74)	0.002
21-40	106 (38.40)	
41-60	57 (20.65)	
61-80	31 (11.23)	
>81	33 (11.95)	
Total	276 (100.0)	

Table 2: Age distribution of recruited depression subjects.

supported strategies have great potential to reach underserved populations and address physical activity-related health disparities in study population [32].

Conclusion

In light of the greater prevalence of depression among rural populations, rural shortages of mental health personnel should be addressed. Rural safety net programs should cooperate with each other and with the community to provide access to mental health services.

Competing Interest

The authors declare no competing interests.

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