# Socio-Demographic and Clinical Profile of Patients Suffering from Severe Depressive Disorders in Kashmir Valley

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## **ABSTRACT**

**Introduction:** There is a heavy burden of depressive disorders in the present day world. This was a study that addressed the sociodemographic and clinical profile various severe depressive disorders in the valley of Kashmir (Southeast-Asia) as well as their association with the socio-demographic factors.

Material and methods: We conducted a cross-sectional study among the patients visiting Institute of Mental Health and Neurosciences (IMHANS), Srinagar, India. A standard questionnaire to know the socio-demographic and clinical profile of depressive disorders was provided to study volunteers. In order to obtain the means and proportions, descriptive statistics were performed.

**Results:** The mean age of the study sample was 39.6 (±11.76) years. The age group 41-50 years (28.6%), followed by 31-40 years (26.8%) had the maximum number of patients. Males constituted 51.8% of the total patients and the rest were females (48.2%). Most of the patients had unipolar depression (53.6%) followed by those with Bipolar affective disorder in mania (19.7). 66.1% and 33.9% patients were rural and urban dwellers, respectively. 53.6% patients were married, while 33.9% patients were unmarried, 10.7% patients were widowed and 1.8% patients were divorced. The highest number (50%) of patients had income between Rs. 5000-15000. 41% of the studied population were illiterate followed by 26.8% graduates. Most of the patients (48.2%) patients belonged to socioeconomic class 2. Conclusion: The depressive disorders are not uncommon in Kashmir Valley. These can have an early onset as well as are highly co-morbid. Priority should be given to the prevention, early detection and treatment of the depressive disorders.

**Keywords:** Depression, Socio-demographic profile, clinical profile, Kashmir

# INTRODUCTION

The mental health of inhabitants of a conflict and violence affected region is highly likely to be deteriorated. The last 20 years in the Valley of Kashmir (India) have seen around 20,000 deaths and 4,000 disappearances. Psychiatric morbidity has increased since then as a result of continuous violence, ups and downs of politics and reign of terror. Depression in inhabitants of a grief stricken place, among many other psychiatric illnesses, usually follows these continuous traumatic events. Not only is depression one of the most common types of mental ailments in the developed world, but it is also highly prevalent in developing country like India. The estimated prevalence of depression in India in the community is from 1.7 to 74 per thousand populations. It is estimated that the depression is most likely to become second cause for disability all over the world, right after ischemic heart disease at the top.<sup>3</sup>

In this paper, we present the details of our study findings on the sociodemographics and clinical profile of severe depressive disorders in Kashmir valley.

# MATERIAL AND METHODS

## Study design and sample

We conducted this cross-sectional study among the people visiting IMHANS Srinagar, a public tertiary care center, associated with Government Medical College (GMC) Srinagar, India. The study participants were randomly sampled from the outpatient clinics of the GMC Srinagar. The patients from intensive care unit (ICU), the emergency room, and the inpatients wards were not included as a part of the sampling frame. People associated with health care including the doctors, nursing staff and even the medical students were excluded from the sample. Patients who had experienced death of some close one within the last three months were excluded in order to avoid false positives resulting from grief reaction. Thus, a total of 56 patients were included.

We conducted the study in conformity with the "Ethical principles for medical research involving human subjects". It was taken from the famous Helsinki Declaration.

**Setting**: The study was conducted in Mood disorder clinic, IMHANS, Srinagar, Kashmir (India), which is the lone tertiary neuroscience center in Kashmir and caters to the majority of Kashmiri patients with brain and mind issues.<sup>2,3</sup>

**MDD Diagnosis**: The diagnoses of major depression and anxiety disorder were formed on the basis of DSM IV TR criteria (Diagnostic and Statistical Manual of Mental Disorder).<sup>4</sup> Bipolarity was excluded on the basis of clinical history as well as in-depth mental status examination of the patients. Two of our consultant psychiatrists confirmed the diagnosis independently.

## **Criteria for Inclusion**

- Persons suffering from depressive as well as anxiety disorders.
- 2. Age above 18 years.
- Patients volunteering to take part in the study, via an informed consent.

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## Criteria for Exclusion

- 1. Age below 18 years.
- The ones having some underlying medical condition as a cause of depressive disorders and due to psycho-active substances use, and exclusions were done before selection of patients.

#### Measurements

Data obtained was meticulously recorded on a specially designed Performa. Observer rating scales like Hamilton anxiety rating scale (HAM-A) and Hamilton rating scale for depression (HAM-D) were administered to anxiety and depression patients. The two scales are both reliable and valid.<sup>5,6</sup>

**HAM-A:** HAM-A is a scale of 14 items, employed for the assessment of severity of patient's anxiety. Patient is labelled to have mild, moderate or severe anxiety when he/she gets a score of less than or equal to 17, 18-24, or over 24, respectively, on HAM-A.<sup>5</sup>

**HAM-D:** It is a 17 item scale used to assess severity of depression. It has good validity and reliability. While a 0-7 score is known to be a normal finding, a score of over 19 significantly indicates moderate or severe level of depression.<sup>6</sup>

#### STATISTICAL ANALYSIS

The data was analysed using SPSS (Statistical Package for Social Sciences) 20.0 and descriptive statistics were performed (for obtaining the proportions and mean scores).

# RESULTS

Table 1 illustrates the distribution of age of our patients. It must be noted that most of the patients were of 41 to 50 years of age (28.6%). This was followed by the age group 31 to 40 years accounting for around 26.8%. One quarter of the patients was in 21-30 years age group. The least number of patients were in 51 to 60, and above 60 year age groups with 17.8% and 1.8% patients, respectively. It was seen that the mean age of our sample was just 39.6 (±11.76) years. While percentage of males was 51.8%, the females were also having nearly same percentage in number (48.2%) out of the total sample. Most of the patients belonged to unipolar depression group (53.6%). This was followed by the ones suffering from bipolar affective disorder in mania (19.7%). The patients having BPAD in depression were only 17.8%. The least of all were the ones having OCD (8.9%).

Table 2 shows the other socio-demographic parameters of the patients. 37 (66.1%) patients live in rural areas whereas the proportion of these patients who reside in the urban zones is 33.9% (19 patients). While 53.6% of the total patients were in a marital relationship, there were about one third of the patients who were unmarried. One tenth of the patients belonged to the widowed and only 1 patient (1.8%) was a divorcee.

Exactly half of the participants earned between Rs. 5000 to 15000 per month. This was followed by 28.6% of the participants who were having income less than Rs. 5000. Moreover, 21.4% of the patients earned way above Rs. 15000.

Table 2 also reveals the status of educational level of the study participants. While 41% of them were completely illiterate, the graduates were almost a quarter of the whole (26.8%). The lowest of them were higher secondary (17.9%) and secondary pass (14.3%).

	Number of patients	Percentage (%)	
Age (years)			
21-30	14	25	
31-40	15	26.80	
41-50	16	28.60	
51-60	10	17.80	
60+	1	1.80	
Mean (± SD)	39.6 (± 11.76)		
Sex			
Males	29	51.80	
Females	27	48.20	
Clinical diagnosis			
Unipolar depression	30	53.60	
BPAD in mania	11	19.70	
BPAD in depression	10	17.80	
OCD	5	8.90	
Table-1: Age, sex and clinical diagnosis of patients			

	Number of patients	Percentage (%)	
Dwelling			
Rural	37	66.10	
Urban	19	33.90	
Marital Status			
Married	30	53.60	
Unmarried	19	33.90	
Divorced	1	1.80	
Widowed	6	10.70	
Income (INR)			
< 5000	16	28.60	
5000-15000	28	50	
>15000	12	21.40	
Educational Status			
Illiterates	23	41.07	
Secondary pass	8	14.28	
Higher Secondary pass	10	17.85	
Graduates and above	15	26.78	
Socioeconomic class			
1	1	1.80	
2	27	48.20	
3	10	17.80	
4	17	30.40	
5	1	1.80	
Religion			
Islam	56	100	
Rest	0	0	
Table-2: Socio-demographic parameters of patients			

Table 2 also depicts the socioeconomic status of our study participants. (Kuppuswamy's socioeconomic scale -2007 - this scale talks about the education, occupation and family income per month). After studying these variables of the patients, we found that 27 (48.2%) patients belong to socioeconomic class 2, 17 (30.4%) patients belong to socioeconomic class 4, 10 (17.8%) patient is from socioeconomic class 3. Only 1 patient was from socioeconomic class 5 and 1. All of the studied participants were Muslims (100%).

# **DISCUSSION**

There is an undue rise in the incidence of depression, laying a profound effect on both the working as well as the social lives of

all afflicted individuals. In India, the results of a meta-analysis of 13 psychiatric epidemiological studies (n=33,572) revealed that an estimated prevalence rate of depression was 5.8%.7 In our study, males constituted 51.8% patients out of the total patient size and female constituted 48.2% of the total size. 66.1% such patients live in rural areas whereas 33.9% patient live in urban areas. This finding may be so because of the fact that our hospital is the only major tertiary care center in the whole of Kashmir valley for brain and mind issues and gets referrals from whole of the valley including the Ladakh region. This finding of our study is in agreement with the results of Bharadwaj et al. (2012) who reported that 61.2% such patients were from rural background while only 38.8% patients were from the urban setup.8 In a study conducted by Dr Syed Amin and Dr A.W. Khan in Kashmir in 2009, a gender difference with regards to depression by locality was found - in men from rural areas it was found to be higher than women from the urban areas9 Back then in 2009, they also found that the number of women who suffered from depression was more (60%) in comparison to men (51.34%).9 In our study, the age group 41-50 years (28.6%) was most affected by depressive disorders. This followed by 31-40 years (26.8%) and 21-30 years (25%), however with not much difference. This indicates that these disorders are common in individuals of working age groups. Then the age groups 51-60 years (17.8%) and more than 60 years (1.8%) followed. The less number of individuals in elderly group could be explained by the fact that the hospital reporting of elderly for depression is very low in Kashmir due to little knowledge. Otherwise, studies done in India and other countries have determined the prevalence as 22.0%<sup>10</sup> and 13.5%<sup>11</sup>, respectively. It was observed that 39.6  $(\pm 11.76)$  years was the mean age of our study sample.

In our study most of the patients 53.6% were married followed by unmarried 33.9% followed by widowed 10.7% and 1.8% (just 1 patient) who was divorced. The reason might be that larger part of our studied population is between 30-50 years and most individuals in this part of world are married by the age 30 years. It was Bharadwaj et al. (2012)<sup>8</sup> who reported that 55.2% of their patients, who received ECT, had relationship status as married. We found a similar findings about the same in studies conducted earlier.<sup>12</sup> The literacy status of the majority of the studied patients was literate (58.9%), while rest were illiterate (41.1%). This might be due to the reason that the state of J and K, amongst many states of India, has experienced a significant rise in the literacy rates (presently, literacy rate = 67.16%).<sup>13</sup>

The majority (50%) of the studied patients had their family income in the range of 5000-15000 rupees. The percentage of patients that belonged to socioeconomic class 2 were 48.2%, 30.4% patients belong to class 4, 17.8% patients belong class 3 and 1.8% patient each belong to class 1 and 5. There is enough scientific evidence that the depression is 1.5 - 2 times more likely to be prevalent among the low income groups of a population. Poverty could be thus labelled as a significant contributor to mental disorders, and vice versa. The two are sort of linked in a vicious cycle, and these affect several dimensions of social as well as individual development. Further, there is a two times likelihood that the employed people who have lost their jobs are depressed enough to be labelled as patients of clinical depression. There are studies that have revealed a significant relationship between low education levels and the

prevalence of common ailments of the human mind. 16-18

The Kashmir Valley is considered as the "Heaven on earth" since time immemorial, mostly because of its charming natural beauty. Over the last two decades, this valley has seen many ups and downs, mostly downs, due to continuous political turmoil, violence and reign of terror. The last 20 years have seen a rise of patients of moderate to severe psychiatric disorders flocking into the mental health OPDs in Kashmir as well as to our tertiary care center. The increase of severe treatment resistant depressive disorders in Kashmir (India) is primarily due to continual political and social turmoil, undue elevated stress in daily life and some genetic factors. <sup>19</sup> There is a need for psychological first aid in Kashmir as well as set up of better screening methods in far off places for stress levels so that this evil of depression can be curbed right in the bud.

It is a well known fact that medical causes, like low back pain, are leading causes of absenteeism leading to a loss of trillions of dollars annually.<sup>20</sup> However, it is also argued that a fine line, or a rather blurry line, exists between the medical and psychological causation of absenteeism. This is supported by the fact that there are links between depression and absenteeism due to any cause.<sup>21</sup>

# **CONCLUSION**

we need a globalized strategy to curb this menace so that the workforce and human potential is substantially increased.

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