#### ORIGINAL RESEARCH

# A Study on the Types of Anxiety Disorders and their Socio Clinical Profile –A Study from Kashmir

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#### **ABSTRACT**

**Introduction:** There is a heavy burden of anxiety disorders in the present day world. This is a pilotstudy that addresses the clinical correlates as well as the prevalence of various anxiety disorders in Kashmir.

Material and Methods: We conducted a cross-sectional study among the patients visitingthe postgraduate department of psychiatry, GovernmentMedical College, Srinagar, India. The diagnosis of patients were done in accordance with Diagnostic and statistical manual IV TR. The point prevalence of anxiety using the Hospital Anxiety and Depression Rating Scale (HADS) in the sample population. The anxiety and depression scores were calculated by Hamilton rating scale for depression (HAM-D) and Hamilton Anxiety scale(HAM-A). For obtaining the proportions and means, we performed the descriptive statistics.

**Results:** Generalized Anxiety disorders were the most common class of mental disorders with one in seven (62.7%) people experiencing anxiety disorders in the 12 months prior to interview. Panic disorder (55%) and Obsessive compulsive disorder (28%) were the most common types of anxiety disorders.

**Conclusion:** The anxiety disorders was more common in females, compared to males. Generalized anxiety disorder was the most common anxiety disorder in males as well as females, followed by Panic and obsessive compulsive disorders. Priority should be given to the prevention, early detection and treatment of the anxiety disorders.

**Keywords:** Anxiety disorders, Obsessive compulsive disorders, Generalized anxiety disorders.

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#### **INTRODUCTION**

Anxiety disorders are the most prevalent psychiatric disorders in the world. They are frequently seen in almost all countries and are amongst the important causes of functional impairment around the world. Anxiety disorders have sustained feeling of impending threat with disturbed autonomic system (ANS) functions. According to National Comorbidity Survey Replication (NCS-R) done in America, the life time prevalence of major depressive disorders is 16.6% and of anxiety disorders is 28.8% respectively.<sup>2</sup>

Panic disorder, Post traumatic disorder(PTSD),Generalized anxiety disorder(GAD),Obsessive compulsive disorder(OCD) and Phobic anxiety disorders are the various subtypes of anxiety disorders(1).A significant level of financial burden is exerted on the economy of the world by virtue of anxiety disorders.<sup>2</sup> Although there is no accurate knowledge about the exact prevalence ofthe anxiety disorders in India,various studieshave reported the prevalence of depression and anxiety together, with variable figures. On comparing the prevalence estimates of the developing countries with those of the developed countries, the estimates of the former are considerably higher.<sup>3</sup>

The main objective behind conducting such a study was to get an estimate of the point prevalence of the various anxiety disorders in the people visiting our hospital.

#### MATERIALS AND METHOD

The study was conducted in Department of Psychiatry, Government Medical College, Srinagar, Kashmir.

#### Sample size

A total of 206 unrelated individuals were enrolled in the study from March 2012 to July 2013 in Department of Psychiatry, Government Medical College, Srinagar, Kashmir.

The diagnoses of anxiety disorders were made based

on Diagnostic and Statistical Manual of Mental Disorder (DSM IV TR) criteria.4

#### **Inclusion criteria**

- 1. The inclusion criteria included persons suffering from anxiety disorders.
- 2. Patients above 18 years of age.
- 3. Patients willing to participate in the study, by means of informed consent.

#### **Exclusion criteria**

The exclusion criteria included

- 1. Patients below 18 years of age.
- 2. All anxiety disorders due to general medical conditions and due to psycho-active substances use and exclusion was done before selection of patients.

#### Measurements

Data obtained was meticulously recorded on a specially designed proforma. Observer rating scales like Hamilton anxiety rating scale (HAM-A anxiety patients.)

#### HAM-A

It is a 14 item scale, which is used to assess the severity of anxiety. A score of 17 or less indicates mild anxiety and a score of 18 to 24 indicates moderate anxiety. Score above 25 indicates severe anxiety.5

#### HAM-D

HAM-D is a 17 item scale used to assess severity of depressionIt has good validity and reliability. Score of 0 to 7 is considered to be normal. Score of 20 or above indicates moderate or severe depression.5

The point prevalence of anxiety using the Hospital Anxiety and Depression Rating Scale (HADS) in the sample population was assessed.4 Several questions assessing the sociodemographics were also done.

Various studies and settings have extensively made use of the HADS.In aliterature reviewof above studies, it was concluded that this scale performed well in primary patient care and general population as well, although it was originally designed for only the hospital practice. 5 There are 7 items in HADS for anxiety(HADS-A) scored on a 4-point scalefrom 0 (=not present) to 3 (=considerable). After adding the itemscores,the subscale scores obtained on the HADS-Arange from 0 to 21. In our study, we defined the valid scores of HADS-A scale as having all 7 items on the HADS for anxiety answered. The items of anxiety in HADS-A are mainly focussed on general anxiety. 5 of these items arevery nearto criteria fordiagnosis of the GAD.

It is established that by using the cut-off score of greater

than or equal to 8 on HADS-A, the Generalized Anxiety Disorderisdetected to have a specificity of 0.75 and a sensitivity of 0.89.

The study was conducted after taking permission from the ethical committee of Government medical college, Srinagar.

#### STATISTICAL ANALYSIS

We double entered the data and analyzed it in Statistical Packagefor Social Sciences 14.0. We then performed the descriptive statistics for calculating the mean scores and proportions.

#### **RESULTS**

Of 206 study participants 128 (62%) were male and 78(38%) were female. The mean age of the study participants was  $38.22 \pm 13.54$  years. Table 1 gives the demographic characteristics of the study population.

Table 1 shows the proportion of people with anxiety disorders. Table 2 shows the percentage of population in different groups with respect to gender, employment status, marital status, physical illness and income along with the associated odds ratios. The population in each category was compared with respect to the anxiety status, which was defined as normal (anxiety score≤ 7) and abnormal (borderline/abnormal: anxiety score  $\geq 8$ ) in accordance with HADS classification. The prevalence of anxiety for females was 32.7% compared to 18.4 % for males (p = 0.01). Females were twice as likely than males to be anxious.

### Prevalence of anxiety disorders in the Kashmiri population

Generalized Anxiety disorders were the most common class of mental disorders with one in seven (62.7%) people experiencing anxiety disorders in the 12 months prior to interview. Panic disorder (55%) and Obsessive compulsive disorder (28%) were the most common types of anxiety disorders (Table 1).

	Males	Females	
	%	%	
Panic disorder	30	55	
Agoraphobia	12	32	
Social Phobia	15	22	
Generalized Anxiety Disorder	40	62	
Posttraumatic stress disorder	3	8	
Obsessive-Compulsive Disorder	13	28	
Any Anxiety Disorder	14	22	
Table 1. Prayalance of 12 month anxioty disorders (type			

**Table-1:** Prevalence of 12-month anxiety disorders (type

## Prevalence of anxiety disorders in different population sub-groups

#### Sex and age

Females experienced a much higher rate of anxiety disorders compared to males (32.7% and 18.8% respectively). (Table 2).

The prevalence of anxiety disorders was related to age, however, this relationship was different for males and females (Table 2). For females aged 16-30 years the prevalence was very similar, with around one in five females experiencing anxiety disorders. The prevalence then declined for females 45 years and over. For males, the prevalence peaked in the 35-44 year age group (14.9%) and then declined with increasing age.

The prevalence of anxiety disorders was highest in people who were widowed, separated or divorced (19.0%) and lowest in those who were married or in de facto relationships (13.3%). One in five (20.9%) people not in the labour force had anxiety disorders, compared to 13.0% of people in employment and 17.3% of people who were unemployed. The prevalence of anxiety disorders was associated with level of education, being highest in those who did not complete school (18.9%) and lowest among people with post-school qualifications (13.3%). There was no association between country of birth and anxiety disorders. However, there was a trend for people from non-English speaking countries to have a lower prevalence of anxiety disorder (9.9%) compared to those born in Australia (15.4%) or other English-speaking countries (14.0%) (Table 2).

HAM -A scores and HAM-D scores were high in both the groups.HAM-A scores in males was 22.52 and in females, it was 26.88(p≤0.0001\*). On the other hand, HAM-D scores in males and females were 25.2 and 20.75 respectively.

#### DISCUSSION

Kashmir has been regarded as heaven by many on earth because of its splendid beauty. Over the last eighteen years, Kashmir valley has seen many downfalls, due to continuous violence, political turmoil, and periods of insurgency. The last two decades have seen rise of psychological and psychiatric disorders in Kashmir. There have been around 20,000 deaths and 4,000 disappearances in Kashmir (India) over the last twenty years. The life time prevalence of any trauma in Kashmir in 2006 was 59.50 percent for males and 57.39 percent for females. <sup>2,3,4,6,7</sup> The increase of depressive disorders in Kashmir (India) is primarily due to continuing conflict,

	Males	Females
	%	%
Marital status		
Married	52	55
Separated/Divorced/Widowed	28	20
Never Married	20	25
Labour force status		
Employed	42	60
Unemployed	58	40
Education		
Post-school qualification	26	40
School qualification only	42	42
Did not complete school	32	18
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Significant at p < 0.05. Values within parenthesis are percentages

**Table-2:** Prevalence of anxiety disorders by sex, marital status, labour force status, education and country of birth

	Males	Females	
HAM-A	22.52(5.61)	26.88(2.49)	≤0.0001*
HAM-D	25.2(5.58)	20.75(2.45)	≤0.0001*

**Table-3:** Showing HAM A and HAM D scores in males and females patients

elevated stress in daily life and genetic factors.<sup>7,8,9</sup> This is the pilot study from India that uses a validated instrument tomeasure the prevalence estimate of anxiety. The medical literature contains three meta-analyses of the prevalence of psychiatric disorders in India. These three studies have reported the prevalence of anxiety disorders to be 20.7%, 16.5 per thousand and 18.5 per thousand, respectively. 7,8,9 However, most of the epidemiological studies that have been done in India have neglected the anxiety disorders. Also, poor sensitive screening instruments use, systematic under-reporting and single informant adds to the discrepancy in the prevalence rate. It is therefore evident that we should consider the prevalence of mental disorders that have been reported in the epidemiological surveys to be of lower estimates rather than being the accurate reflections of the actual prevalence in the Indian population.10,11

In one cross sectional study conducted across the Latin America, India and China, in comparison to men of the same area, the women folk were seen to have a two-fold increase in anxiety prevalence. 12 It has been proposed that there might be genetic and biological factors responsible for this variation, relating to hormones, social and psychological factors. 13 Furthermore, one possibility is that women, usuallyin the developing countries, experience greater amount of stress, due to

their societal role and they might have a less chance to avoid, escape or modify a stressful environment.<sup>12</sup> In our study too, the more number of women suffered from anxiety disorders as compared to men.

Most of the frequent users of medical resources do have the symptomsof depression and/or anxiety.Patients, who suffer from a single anxiety disorder, have a 56% more chance to be a frequent user of medical services than thepatients devoid of any anxiety disorder. Also, patients having co-morbid anxiety and other mental disorders were een to have greater than three times chanceof being a frequent user. 13,14,15,16 Due to the currently scarce healthcare resources and a limited spending on health care in the developing countries, the anxiety disorders act as a backbreaking burden on health service structure that is already dilapidated. On account of the anxietydisorders being associated with a major economical burden, they should be regarded as an emerging threat to the public health, especially in a country of low-income likeIndia. 13,14

The people need to be educated regarding the proper response to the psychosocial factors that are linked to anxiety on account of this increased prevalence of anxiety disorders that our study reports. Moreover, people should be provided knowledge about the various means of coping up with this highly morbid disease. The point to be highlighted here is the role of health planners, who need to come up with an efficient strategy to manage these disorders on a community scale and in an effective manner.

#### CONCLUSION

The anxiety disorders was more common in females, compared to males. Generalized anxiety disorder was the most common anxiety disorder in males as well as females, followed by Panic and obsessive compulsive disorders. Priority should be given to the prevention, early detection and treatment of the anxiety disorders.

#### **Competing interests**

The authors declare that they have no competing interests.

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