

PATTERN OF SOMATIC SYMPTOMS IN ANXIETY AND DEPRESSION

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ABSTRACT

Objective: To determine the pattern of somatic symptoms in anxiety and depressive disorders.

Design: Cross Sectional Comparative study

Place of Study: Department of Psychiatry Military Hospital Rawalpindi.

Duration of Study: From May to November 2002.

Patients and Methods: Patients divided in Group I anxiety and group II of depression. Fifty patients considered in each group by convenience sampling. The organic basis of their symptoms was ruled out. The patterns of their somatic symptoms and other information like educational and economic status were recorded on semi Structured Performa. The patient's diagnosis was made on schedule based ICD-10 research criteria. The severity of anxiety and depression was assessed by using HARS and HDRS respectively. The pattern of somatic symptoms in both groups was then analyzed by the Urdu version of Bradford Somatic Inventory. Patterns of somatic complaints were then analyzed by chi square test.

Results: N = 100, 50 each in group I (anxiety) and group II (Depression). Males were higher in Depression whereas females were higher in Anxiety Disorder. P value for headache was 0.017 while in rest of the somatic symptoms it was insignificant ranging from 0.4 to 1.

Conclusion: In light of the results obtained in our study we have found that the patterns of somatic symptoms are present in both the groups of anxiety and depression like symptoms related to musculoskeletal and gastrointestinal system is commonly observed in cases of depression whereas symptoms related to autonomic nervous system and cardiovascular system is more significantly somatized in patients of anxiety. A larger sample is required for further studies to get better results.

Keywords: Anxiety, Depression, somatic, Bradford somatic Inventory, Hamilton Rating Scale.

INTRODUCTION

In the western culture it has been observed that somatization tends to be more prevalent in lower socioeconomic groups of the society¹. These disorders may range from a stress induced reaction to major psychiatric illness like Depression, Anxiety disorders and psychotic illness e.g Menninger defined "Somatization reactions" as "visceral expression of anxiety, which is hereby, prevented from being conscious"². A more descriptive definition given by Lipowski³ states that somatization is a tendency to experience and communicate somatic distress and symptoms unaccounted for by pathological findings, to attribute them to physical illness, and to seek medical help for them. Although somatic symptoms may be florid among patients with depression, they have considerably less weight than core depressive symptoms in the diagnosis

of depression⁴. A study conducted by Stewart et al⁵ found that about 20% of primary care patients using health care services in a given year have diagnosable psychiatric disorders, most often depressive, or anxiety disorders and over one-half of them present with somatic rather than psychological symptoms. Another study conducted by MC Farland in 1985;⁶ his population accounted for 31% of the total doctor office visits (DOVs), 35% of the hospital admissions, and 30% of the outpatient surgical services for long-term members. Comparative studies conducted in western societies and developing countries have asserted that somatic symptoms are more commonly seen in developing countries. Somatic symptoms play more central role in anxiety and depressive disorders in the non-western societies⁷. Hamilton in 1989 reported that a number of indigenous British patients who present to doctors complaining of depression and anxiety also described a variety of somatic symptoms⁸. There is a comprehensive inventory of somatic

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Received: 24 Dec 2008; Accepted: 09 April 2010

symptoms. These symptoms are commonly seen in patients of Pakistani origin in Britain who are suffering from anxiety, depression and other neurotic disorders⁹. After selecting a sample having low and high BSI scores they were interviewed by psychiatrists and diagnosed for various psychiatric disorders based on ICD-10. The disorders that were diagnosed included, GAD, Panic disorder, Agoraphobia, Specific Phobias, Depressive episode, Dysthymia and somatisation disorder¹⁰.

Self-reported mood and symptom concern were more strongly associated with functional physical symptoms than anxiety or stress. We suggest that one reason patients with functional somatic symptoms reject psychosomatic explanations is because they do not experience sufficient correlation between symptoms and psychological states¹¹.

In primary care setting the most common presentation of patients' with depression is with multiple somatic symptoms. This premise is based on the comparative studies carried out by Mumford et al looking specifically at the somatic manifestation of psychological symptoms in the context of Pakistan. The sample population was group of people in Lahore, Pakistan and Leeds, U.K¹².

The prevalence of previously undiagnosed depression among women visiting GPs' drop in clinic was high. Clues for depression were identified in the depressed women's symptom presentation; they often mention mental symptoms when they visit the GP for somatic reasons¹³.

The mean age of participants was 51 years (SD 13.2) and ranged from 30 to 90 years. 32.1% of the respondents were 60 or more years of age. Overall, 63% of the participants were females and 94.3% of the participants were "married". Of those participants who reported their income, 65.5% belonged to the lower income stratum. The overall education level of the participants was poor; 41.4% of the participants were without any education. Whereas 32.2% reported only primary or secondary education. 82.3% of participants

reported more than 4 family members compared to 16.9% who reported families composed of 1-3 members only¹⁴.

In our country no study has been conducted so far to compare the somatic symptoms of anxiety and depression. It was thus considered appropriate to carry out a study at Department of Psychiatry MH Rawalpindi to find out the relative frequency of various somatic symptoms in both anxiety and depression.

PATIENTS AND METHOD

This study was conducted at the Department of Psychiatry, Military Hospital Rawalpindi from May 2002 to Nov 2002. Department of Psychiatry Military Hospital Rawalpindi is a tertiary care centre that receives referrals from all the military hospitals of Pakistan. The patients were divided into two groups, Group I consisted of 50 patients suffering from anxiety and Group II consisted of 50 patients suffering from depression. Patients in both groups were collected by convenience sampling. Both indoor and outdoor patients were included. No discretion as regards ages and sex was made. All patients had some somatic complaints. List of all observations of any organic disease was established by history, physical examination and relevant laboratory examination. If there was any doubt regarding organic pathology patient was referred to respective specialist. Diagnosis was, therefore, made by using on ICD - 10 research criteria. The severity of anxiety and depression was assessed by using Hamilton Anxiety Rating Scale and Hamilton Depression Rating Scale respectively. Pattern of their somatic symptoms and their demographic data were recorded.

The Semi structured Performa was filled by each patient after having understood the nature of study. Instruments used in the study were Semi Structured Performa, History taking Performa, Bradford somatic Inventory, Hamilton Anxiety Rating Scale and Hamilton Depression Scale.

Statistical analysis had been carried out using spss version 10. Descriptive statistics had been used to describe the data. Chi-square test

was used to compare somatic symptoms in the two groups. P value<0.05 was considered as significant.

RESULTS

The study population comprised of 50 patients of anxiety disorder and 50 patients of mild to moderate depressive episode each. Ages of these patients ranged from 20 to 60 years. The average age for anxiety groups was 29.78 years (SD=5.25). In depression group the mean age was 31.16 years (SD=5.50). Males were more in number as compared to females i.e 28:22 in Anxiety group whereas females were more in Depression group 23:27. Both the groups were comparable with respect to age ($p=0.753$) and gender ($p=0.317$). Description of education ($p=0.265$) and social status ($p=0.013$) was given in fig 1 and fig 2 respectively. Past medical and psychiatric history was given in table-1. The common somatic symptoms are mentioned in table-2. The only somatic symptom that differ significantly in both the groups was headache with significantly higher frequency in depressive illness ($p=0.017$). All other symptoms have same frequency in both the illnesses.

DISCUSSION

Aim of the study was to investigate and highlight the different modes of presentation of anxiety and depression in our society. It was further aimed to find out any specific pattern of somatic symptoms if it so exists.

In my study 29 (58%) of the cases were of the age range of 20-30 years, suffered from anxiety and depression equally where as the study conducted by Dr Salman Karim 82% of the patients were between the ages of 18 and 50 years suffered from anxiety Disorders.(15). Furthermore 21(42%) of patients of age range 30-40 years belonged to Depression and 18(36%) of same age range belonged to Anxiety Disorder. Also 3(6%) cases older than 40 years also belonged to Anxiety Disorder.

In our study out of 50 cases studied, 27(54%) patients were males, belonging to Depression while 22(44%) males belonged to group of Anxiety Disorder. On the other hand 23(46%) female were belonging to group of

Depression while 28(56%) female patients belonged to Anxiety group. This study showed higher number of males in Depression and higher number of females' patients in Anxiety Disorder which is consistent with the study conducted by Haug et al in which women reported more somatic symptoms than men (mean number of symptoms women/men: 3.8/2.9). There was a strong association between anxiety, depression, and functional somatic symptoms. The association was equally strong for anxiety and depression, and a somewhat stronger association was observed for co morbid anxiety and depression¹⁶.

There was a strong association between education levels, Anxiety and Depressive Disorders. It was seen in my study that there was a higher percentage of patients who present with somatic symptoms have higher education as compared to patients with less education which may be the reason that patients mostly reported had education level matric and above, and it was found that there were 41 cases of Depression and 34 cases of Anxiety who belonged to this group. This study was compared with the study conducted by David Bardwell Mumford et al in 2000 in which higher levels of education were associated with lower risk of common mental disorders, especially in younger women. Emotional distress was negatively correlated with socio-economic variables among women¹⁷.

In study conducted by Dr Salman Karim on Anxiety Disorders 56% of the patients belonged to the low earning class and other 20.2% from lower middle class¹⁵. This shows that in our studies of patients belonging to Depression group, 5(10%) patients belonged to social class I, 10(20%) belonged to social class II and 35(70%) were from social class III which is quite high ratio, whereas in case of Anxiety Disorder 14(28%) patients belonged to social class I, 15(30%) cases were from class II and 21(42%) belonged to class III. This finding is in consistent with Kirmayer who observed that somatization appears to be particularly prevalent in cultures in which expression of emotional distress in psychological terms is traditionally inhibited¹⁸. On the other hand study

carried out by Dr Saleem Jahangir 92% of the patients were from social class III, IV and V¹⁹.

In our study, out of 50 patients in group I 45(90%) were married and 5(10%) were unmarried whereas in case of group II, 41(82%) were married and 9 (18%) were unmarried. This is in comparison with study of Dr Saleem Jahangir which showed that 46 cases (92%) were married and 4 cases (8%) were unmarried¹⁹.

Female gender predicted the frequency of 12 out of 21 symptoms and was associated with the total score at the BSI-21. BSI-21 scores were significantly higher in married subjects. Differences were found among the four groups, only Caucasian and South/Central American women and Caucasian married subjects having a significantly increased risk for somatization. Significant ethnic differences were also found in the number and kind of reported symptoms²⁰.

In our study 25(50%) cases were from group I and 20(40%) cases were from group II had a comorbid psychiatric illness. In the study carried out by Dr Salman Karim about 40% cases had a positive history of comorbid psychiatric illness¹⁵. An anxiety or depressive disorder during adolescence confers a strong risk for recurrent anxiety or depressive disorders during early adulthood. Most anxiety and depressive disorders in young adults may be preceded by anxiety or depression in adolescence²¹.

Many of the somatic symptoms that the patients presented with such as pain, weakness, and fatigue remain unexplained by identifiable disease even after extensive medical assessment²². Across all sites, anxiety and depressive symptoms showed roughly the same association with somatic symptom counts, and specific somatic symptoms or symptom clusters did not show differential association with anxiety or depression²³. In our study almost a similar association was found and in our patients only headache was found to be significantly increased in frequency in patients of depression. Rest all symptoms were similar in both the illnesses. A comparison in this regards is made in table 2. Approximately two

thirds of patients with depression in primary care present with somatic symptoms. These patients are difficult to diagnose, feel an increased burden of disease, rely heavily on health care services and are harder to treat²⁴.

In our study regarding group I 40 (80%) cases belonged to Punjab province, 4(8%) cases were from NWFP, 6(12%) cases from Azad Kashmir and 0% cases from Sindh and Balochistan, whereas in case of group II 39(76%) cases belong to Punjab, 1(2%) belong to Sindh 6(12%) belong to NWFP 4(8%) to Azad Kashmir. The geographical distribution indicating that the majority (52.8%) of Punjabi population is probably due to the study being conducted in Punjab province (Rwp).

Factors positively associated with anxiety and depressive disorders were female sex, middle age, low level of education, financial difficulty, being a housewife, and relationship problems. Arguments with husbands and relational problems with in-laws were positively associated in 3/11 studies. Those who had close confiding relationships were less likely to have anxiety and depressive disorders. Mean overall prevalence of anxiety and depressive disorders in the community population was 34% (range 29-66% for women and 10-33% for men)²⁵.

Strengths of the study. We have achieved pattern of somatic symptoms in both groups which was the main objective of the study. Also the regular follow-up of patients in army set up and use of Bradford Somatic Inventory which was standardized and validated in Urdu was strength of the study.

Limitations of the study. Considering the limitations of our study we have found that most of the population sample belonged to people working in army environment including their families. Also majority of people were from Punjab province and the size of the sample was very small. Another limitation of the study was sampling technique i.e. convenience sampling due to which there was significant difference between males and females in both the groups, due to which older age sample was lesser as compared to younger group.

CONCLUSION

In light of the results obtained in our study we have found that the patterns of somatic symptoms are present in both the groups of anxiety and depression like symptoms related to musculoskeletal and gastrointestinal system is commonly observed in cases of depression whereas symptoms related to autonomic nervous system and cardiovascular system which is more significantly somatized in patients of anxiety. A larger sample is required for further studies to get better results.

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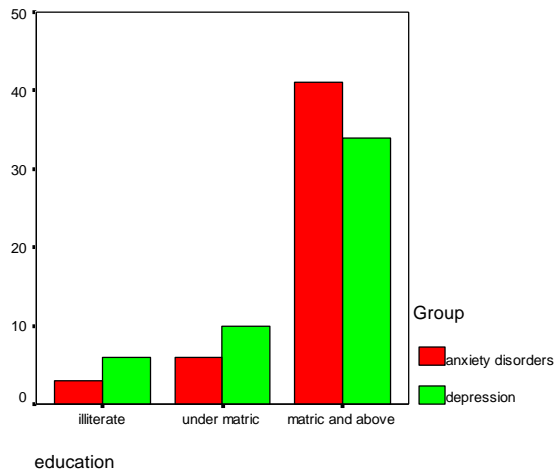


Fig 1: Description of Anxiety and Depressive Disorder with education.

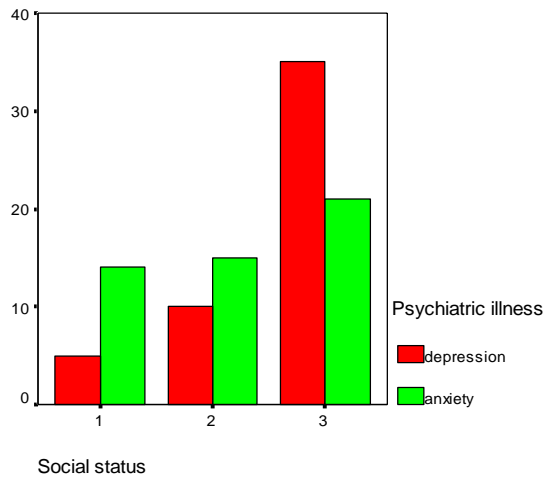


Fig 2: Description of Anxiety and Depression with social classes.

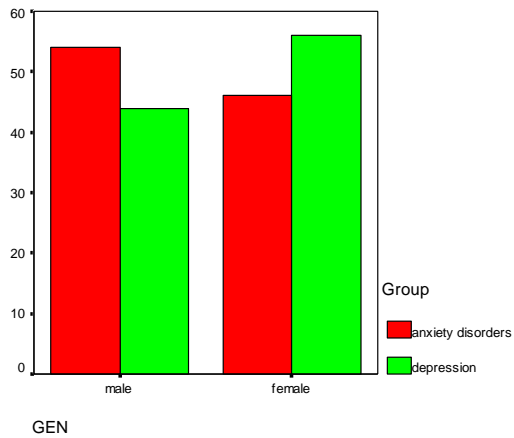


Fig 3: _____

Table No. 1 Comparison of past medical and psychiatric history, (P=0.084)

Groups	No Illness	Major medical illness	Psychiatric illness
Anxiety	28	09	13
Depression	27	03	20

Table No. 2: Comparison of patterns of somatic symptoms in anxiety and depression

	Anxiety		Depression		P value
	Yes	No	Yes	No	
Head ache	10	40	21	29	0.017
Flatulence	10	40	9	41	0.8
Heaviness on neck and shoulder	11	39	11	39	1
Burning all over body	8	42	6	44	0.56
Heaviness on head	9	41	10	40	0.8
Pain chest	10	40	9	41	0.8
Dryness of mouth	11	39	10	40	0.8
Darkness before the eyes	9	41	10	40	0.8
Heart burns	9	41	9	41	1
Physical weakness in body	11	39	11	39	1
burning in head	9	41	9	41	1
Sweating	9	41	8	42	0.7
Heaviness in chest	9	41	8	42	0.8
Pain abdomen	9	41	7	43	0.6
Choking	9	41	6	44	0.4
Pins and Needles	9	41	8	42	0.8
Body aches	10	40	9	41	0.8
Palpitations	10	40	9	41	0.8
Burning in eyes	10	40	9	41	0.8
Indigestion	8	42	6	44	0.56
Tremors	10	40	7	43	0.42
Frequency of micturition	9	41	9	41	1
Backache	8	42	7	43	0.78
Distension of abdomen	15	35	18	32	0.52
Fatigueability	10	40	12	38	0.63
Pain in legs	9	41	9	41	1
Pressure over head	10	40	11	39	0.8
Difficulty in breathing	7	43	7	43	1
Constipation	6	44	7	43	0.77
Increase frequency of defecation	4	46	4	46	1
Sweating in palms	9	41	6	44	0.4
Difficulty in swallowing	6	44	4	46	0.5
Postural giddiness	9	41	10	40	0.8