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PATTERN OF SOMATIC SYMPTOMS IN ANXIETY AND DEPRESSION

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 were divided in Group I of 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 Proforma. 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: Out of 100 patients we placed 50 each in group I (anxiety) and group II (Depression). Males were higher in depression whereas females were higher in anxiety disorder group. P-value for headache was 0.017 while in rest of the somatic symptoms it was insignificant ranging from 0.4 to 1.
Conclusion: We 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 were 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.

Article

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 Farland in 1985;6 showed that 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 presented to doctors complaining of depression and anxiety also described a variety of somatic symptoms8. There is a comprehensive inventory of somatic 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.
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 a group of people in Lahore, Pakistan and Leeds, U.K11-12.
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 mentioned mental symptoms when they visited the GP for somatic reasons13.
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 regarding age and gender 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 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 Proforma 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 was carried out using SPSS version 10. Descriptive statistics were 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 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±5.25 years. In depression group the mean age was 31.16±5.5 years. Males were more in number as compared to females (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.

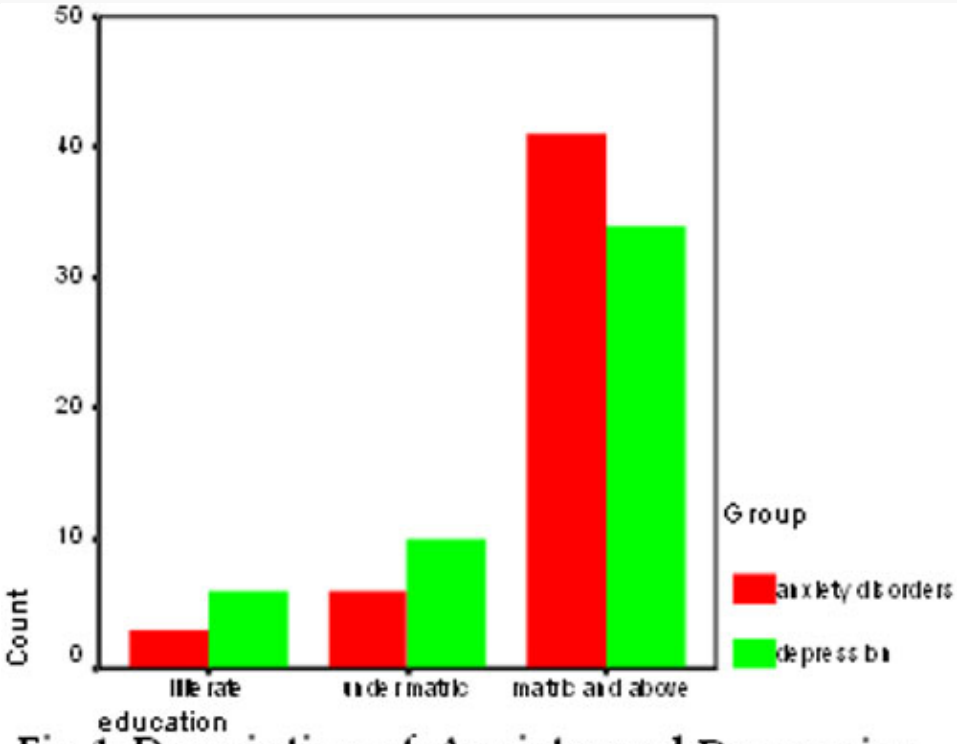

Fig 1: Description of Anxiety and Depressive Disorder with education.

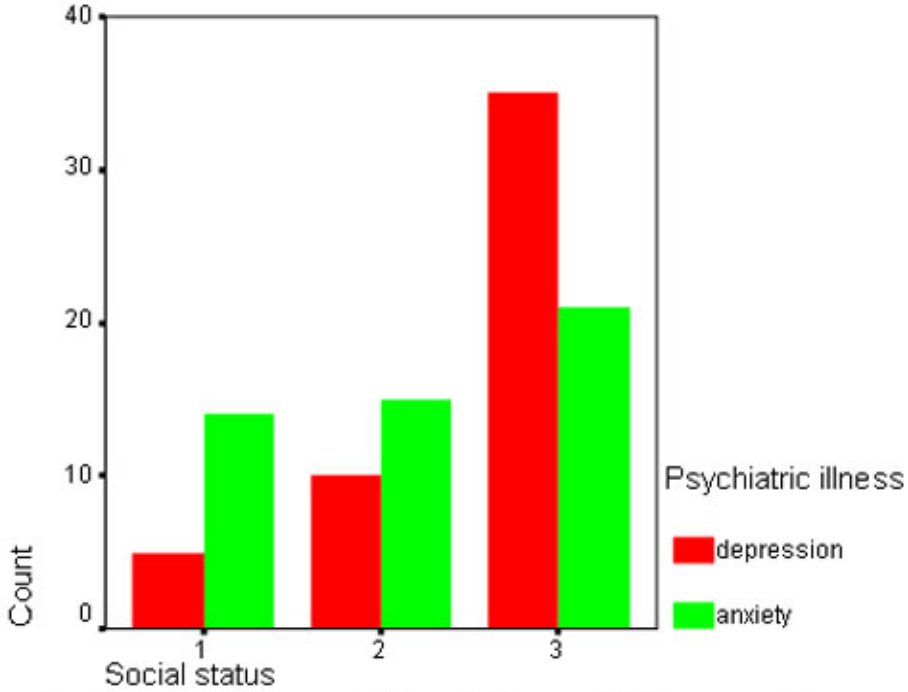

Fig 2: Description of Anxiety and Depression withsocial classes.

Past medical and psychiatric history was given in table-1.

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

The common somatic symptoms are mentioned in table-2.

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

	Anxiety		Depression		
	Yes	No	Yes	No	P value
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

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 hadsame frequency in both the illnesses.

DISCUSSION

The 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 this study 29 (58%) subjects aged between 20 to 30 years suffered from anixity and depression where as the study conducted by Karim showed that 82% subject aged between 18-50 years suffered from anixity disorders15. Furthermore 21 (42%) of patients of age range 30-40 years belonged to depression group and 18 (36%) of same age range belonged to Anxiety disorder group. Also 3 (6%) cases older than 40 years also belonged to anxiety disorder groups.

In this study out of 50 cases studied, 27(54%) patients were males, belonging to depression group while 22 (44%) males belonged to group of anxiety disorder group. On the other hand 23(46%) females were belonged to depression group 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 with 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 comorbid anxiety and depression16.

There was a strong association between education levels, anxiety and depressive disorders. It was seen in this study that there was a higher percentage of patients presentsing with somatic symptoms have higher education as compared to patients with lower education which may be the reason that patients mostly reported had education level matric and further more 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 r
isk of common mental disorders, especially in younger women. Emotional distress was negatively correlated with socio-economic variables among women17.

In a study conducted by 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 tradionally inhibited18. On the other hand a study carried out by 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 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 Karim about 40% cases had a positive history of comorbid psychiatric illness15.

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.

In our study regarding group I 40 (80%) cases belonged to Punjab province, 4 (8%) cases were from Khyber Pakhtunkhua, 6 (12%) cases from Azad Kashmir and no case from Sindh and Balochistan, where as in case of group II 39 (76%) cases belong to Punjab, 1 (2%) belong to sindh 6 (12%) belong to Khyber Pakhtunkhua 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 Rawalpindi.

Factors positively associated with anxiety and depressive disorders were female gender, 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 three 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.

The strengths of the study are that 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. Limitations of the study were 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, and older age sample was lesser as compared to younger group.

CONCLUSION

In the light of the results obtained we have found that the patterns of somatic symptoms are present in both the groups of anxiety and depression 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 are more significantly somatized in patients of anxiety. A larger sample is required for further studies to get better results.

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