

Research Article

Analysis of gastrointestinal somatization in Pakistani local population with psychological disorders

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ABSTRACT

Introduction: Functional medical disorders, by definition, lack objective physical, metabolic, or neurological explanations for their symptom presentations. Diagnosis of these disorders, like diagnosis of psychiatric disorders, is based entirely on subjective complaints. **Aims and objectives:** The basic aim of the study is to analyze the gastrointestinal somatization in Pakistani local population with depressive disorder. **Material and methods:** This study was conducted at King Abdullah teaching hospital, Mansehra, Pakistan during 2018 with the permission of ethical committee. **Data collection:** 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. **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). **Conclusion:** It is concluded that the patterns of somatic symptoms are present in both the groups of anxiety and depression.

Keywords: gastrointestinal somatization, anxiety and depression

INTRODUCTION

Functional medical disorders, by definition, lack objective physical, metabolic, or neurological explanations for their symptom presentations. Diagnosis of these disorders, like diagnosis of psychiatric disorders, is based entirely on

subjective complaints. This may have contributed to longstanding conceptualizations of functional disorders as fundamentally psychiatric or psychological in origin, cloaking this class of disorders with a negative stigma¹. Although

irritable bowel syndrome (IBS) may be considered an archetype among the functional gastrointestinal disorders, a wide variety of medical syndromes and disorders in many medical subspecialties are also characterized by lack of objective indicators and subjective determination of diagnosis. Non-ulcer dyspepsia, premenstrual syndrome, chronic pain syndromes, tension headaches, fibromyalgia, chronic fatigue syndrome, interstitial cystitis, reflex sympathetic dystrophy, temporomandibular joint syndrome, and various chemical and food sensitivities are examples of functional disorders in many organ systems².

Somatic symptoms have been reported as being a core component of the depressive syndrome. Symptoms including those of the gastrointestinal tract have generally been correlated with various psychiatric disorders including anxiety, panic and depressive disorders³. A lot of work has been done regarding various syndromes related to GIT such as chronic dyspepsia and irritable bowel syndrome, but there is not enough literature when it comes to the frequency of overall GIT somatization in relation to depressive disorder especially among both genders in the local literature⁴.

Aims and objectives

The basic aim of the study is to analyze the gastrointestinal somatization in Pakistani local population with depressive disorder.

Material and methods

This study was conducted at King Abdullah teaching hospital, Mansehra, Pakistan during 2018 with the permission of ethical committee.

Data collection

The patients were divided into two groups, Group I consisted of 50 patients suffering from anxiety and Group II consisted of 100 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. 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

Student's t-test was performed to evaluate the differences in roughness between group P and S. Two-way ANOVA was performed to study the contributions. All the data was recorded on a pro forma and analyzed using SPSS-12.

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). The common somatic symptoms are mentioned in table 02.

Table 01: General values of Control group and diseased group

Variable	Diseases Group	Control Group	t Value	p Value
Age (Year)	56.56±8.46	53.64±8.36	1.716	0.081
BMI (kg/m ²)	24.31±2.26	23.37±2.09	2.195	0.031
SBP (mmHg)	140.36±15.70	116.53±13.46	8.248	0.000

DBP (mmHg)	87.94±10.69	75.81±9.94	5.967	0.000
PP (mmHg)	52.42±12.87	40.72±8.74	5.426	0.000
FBG (mmol/)	5.12±0.65	5.06±0.49	1.764	0.081
TG (mmol/L)	1.74±0.75	1.69±0.86	1.838	0.071
TC (mmol/L)	4.95±0.76	4.88±0.82	1.712	0.090
HDL-	1.30±0.43	1.31±0.56	1.717	0.089
LDL-C	3.46±0.58	3.38±0.66	1.139	0.266

Table 02: Common somatic disorders in selected participants

Disorder	Male (%)	Female (%)	P-Value
Appetite			
Normal	36.0	23.2	0.001
Increase	2.1	3.3	0.03
Decrease	61.1	41.5	0.001
Abdominal pain	9.2	16.5	0.001
Gas	8.0	6.8	0.42
Indigestion	6.1	3.6	0.10
Nausea	5.3	4.4	0.27
Vomiting	3.2	10.5	0.001
Total	30.2	41.8	
Bowel habits			
Diarrhea	43.1	41.4	
Constipation	56.5	38.6	0.56
Tobacco users	32.4	54.5	0.132

DISCUSSION

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 group⁶. 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 symptoms⁷. The association was equally strong for anxiety and depression, and a somewhat stronger association was observed for comorbid anxiety and depression. 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 presenting 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 furthermore it was found that there were 41 cases of Depression and 34 cases of anxiety who belonged to this group⁸. 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 women⁹.

Studies in the developed countries have shown that despite increased awareness in the detection of depressive disorders, it is difficult to diagnose these disorders in the initial phase and significant numbers of cases are only recognized after several consultations, sometimes taking many years subsequent to the patient's initial visit. Supporting this notion, the study revealed that a total of 50% of the respondents had previously consulted general physicians specially gastroenterologists, with notable investigations including

endoscopies¹⁰. Also a gap of 6-10 years was observed between the development of symptoms and psychiatric consultation in 15.6% of the respondents. Approximately 13.3% of the patients were referred for psychiatric treatment after a gap of 10 years and above. Interestingly about every 4th case had sought alternate mode of treatments including homeopathic treatments, faith healers and/or hakeems (oriental therapy) before psychiatric consultation¹¹. This can be explained on the basis of the prevalent misconception about mental illness in this part of the world which attributes the disease due to the possession or caused by supernatural evil forces¹². Thus a lot has to be done regarding awareness among doctors and the public about physical manifestations in psychiatric diseases. Also, it can be safely stated that psychiatric treatment is still stigmatized in developing countries due to social and cultural factors. This can be attributed to the low literacy rate and there is a dire need to spread awareness to publicize psychiatry in general.

CONCLUSION

It is concluded 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.

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