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ORIGINAL ARTICLE

Mood, panic and somatoform disorders in general Turkish outpatient clinic

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ABSTRACT

Background: This investigation addressed prevalence of mood, panic and somatoform disorders in patients who applied to an internal medicine outpatient clinic with various systemic complaints. Additionally, the goal was to determine differences in the patients whose symptoms which could not be explained medically and those whose symptoms were determined to be of medical etiology.

Methods: The 700 patients included in this study were randomly selected between February 2005 and May 2005. A semi-structured interview form, the Revised Brief Patient Health Questionnaire (Brief PHQ-r) and the Beck Depression Inventory (BDI) were utilized.

Results: The mean age of patients was 46.17 ± 15.93 (18–95) years; 79.4% of the patients were women. Of those who applied to the clinic, 27.1% were unable to be medically diagnosed and thus had unexplained symptoms. A psychiatric diagnosis, according to Brief PHQ-r criteria, was rendered in 31% of the patients. The most frequently occurring psychiatric disorder was depression, seen in 21.4% of the patients. The average BDI score was 11.93 ± 8.41 (0–46). BDI scores of 17 and above occurred at a rate of 23.4%.

Conclusions: The presence of a psychiatric disorder and the BDI score were significantly higher in women, patients having less education and those having unexplained physical complaints.

Introduction

A significant number of patients coming to internal medicine outpatient clinics and primary care units have psychiatric disorders[1-9]. Findings vary according to sampling population and assessment procedures. The frequency of psychiatric disorders in primary care settings ranges from between 1% and 47%, regardless of assessment procedures used[1-4]. When the Primary Care Evaluation of Mental Disorders (PRIME-MD) was employed, threshold/sub-threshold psychiatric disorder was reported to be 35–42.5%[5,6]. In one study, using the General Health Questionnaire (GHQ), the rate of mental disorders was found to be 33.2%[7] while another study using the Patient Health Questionnaire (PHQ) reported an incidence of psychiatric disorders at a rate of 28%[8]. In a study conducted at a general internal medicine polyclinic in Spain, using ICD-9 criteria, psychiatric disorders were found to occur at a rate of 46.9%[9].

Medically unexplained symptoms are a common problem across general medical populations. Presentations of psychiatric disorders are typically associated with anxiety, mood or somatoform disorder. In one study[10], the prevalence of psychiatric disorder in patients whose symptoms can be explained medically was found to be 15%. In patients who have medically unexplained symptoms, this rate has been reported to be as high as 38%.

Medically unexplained symptoms are an important problem in general medicine not only because of their prevalence but also because of the demands they place on the available health service resources. Given the fledging state of primary care and family physician practices in Turkey, compared with that in many Western nations, it is evident that the Turkish healthcare system is as yet ill-prepared to handle any potential additional demands placed on them[11]. Generally, patients who have one or more complaint regarding their health and who live in major cities, tend to seek assistance from general internal medicine polyclinics located at large hospitals. It is known, however, that the psychological problems in patients seeking help at primary care units mostly appear as physical symptoms. Hence, physicians who are not trained in psychiatry lean in the direction of explaining these physical complaints in physical terms rather than psychological ones.

Most physical complaints that cannot be explained are usually termed "functional" and are neither investigated nor treated. Psychiatric disorders in primary care are not sufficiently understood in Turkish clinic populations. In one Turkish study, it was found that as many as 80% of patients seeking medical attention in a primary care setting were suffering from depression and had not received the correct diagnosis[12]. Since psychiatric disorders are most frequently seen in primary health care, the concern for such disorders in such settings becomes clearer.

The current investigation had three main objectives:

- To determine the prevalence of depression, panic and somatoform disorder.
- To assess the level of depression in patients who sought help at an internal medicine outpatient clinic for a variety of physical complaints.
- To determine the proportion of patients at such clinics who had medically unexplained symptoms in order to specify the rate at which a psychiatric diagnosis could be applied to patients in this group.

Methods

This study included patients who visited the General Internal Medicine Polyclinic of the Istanbul Faculty of Medicine at Istanbul University for reasons other than administrative ones. Seven hundred patients who came to the clinic between February 2005 and May 2005, were over 18 years of age, were literate, who agreed to participate in this study after being informed of its intent, did not meet the criteria for mental retardation and/or did not have a diagnosed comorbid psychotic disorder. Patients were randomly selected for inclusion in the study.

The semi-structured interview form (consisting of socio-demographics, a system of presenting physical complaints, medical diagnosis, and evidence of comorbid chronic disease) was used. Internists working at the polyclinic were instructed to specify which of the complaints made by the patients could be explained medically and which complaints could not.

The assessment instruments used were the Revised Brief Patient Health Questionnaire (Brief PHQ-r) and Beck Depression Inventory (BDI). Initially developed by Beck et al.[13], the reliability and validity of Turkish version of BDI was performed by Hisli[14].

The Brief PHQ-r is a recently developed scale. The PHQ[8] was developed by Spitzer et al., who also developed the PRIME-MD[15], which is used for making initial diagnoses in primary care settings. Recently published studies analyzing sensitivity and specificity scores have demonstrated that the brief version of the PHQ is a useful tool for the detection of panic disorder and major/minor depression[16-19]. Taking into consideration the extent to which general physical symptoms stem from psychological factors, four additional questions related to somatoform disorders were utilized. They were designed to determine whether or not the general physical symptoms presented had a basis in organic disease, and they were added to the Brief PHQ scale by Çorapçıoğlu and Özer[20], thus creating the Brief PHQ-r.

The Brief PHQ-r form contains self-rating responses that are evaluated for psychiatric disorders by psychiatrists who use the DSM-IV[21] as a guideline. The diagnostic performance of the scale is as follows:

1. For any diagnosis κ=0.567, sensitivity 79.0%, specificity 82.9%;
2. For major/minor depressive disorder κ=0.536, sensitivity 76%, specificity 85.3%;
3. For panic disorder κ=0.640, sensitivity 74.4%, specificity 98.4%; and
4. For somatoform disorder κ=0.476, sensitivity 61.9% and specificity 92.5%[19].

Results were analyzed using SPSS version 11.0. Independent Samples *t*-test, Chi Square Test and, if required, Fisher's exact test and the Spearman correlation test were used.

Results

The patients who were included in this study had the following demographic characteristics:

1. Mean age was 46.17 ± 15.93 (18–95), 79.4% were women
2. 50% were high school graduates
3. 65.6% were married
4. 43.7% were housewives
5. 86.7 % were of medium income level

The distribution of bodily complaints (Table 1) indicated that 28.3% of the patients had multiple system complaints, 16.3% of which consisted of gastrointestinal complaints. 27.1% did not receive a medical diagnosis and had unexplained symptoms. Patients having unexplained symptoms fell in the 18–29 age group to a degree that was statistically significant ($P<0.001$).

The Brief PHQ provided a psychiatric diagnosis at a rate of 31%. In the distribution of psychiatric diagnoses, the most frequently occurring disorder was mood disorder (13.7% dysthymic disorder and 4.7% major depression), somatoform disorder (5.3%), panic disorder (3.6%), and comorbid psychiatric disorders (3%) (Table 2).

Psychiatric diagnoses varied significantly along gender and educational levels. Psychiatric disorders were found to be greater in women ($P<0.001$) and in those with less education ($P=0.001$). In patients presenting symptoms with physical disease, the prevalence of psychiatric disorder was 25.7 %. In those who presented unexplained medical symptoms, the rate was 45.3 % ($P<0.001$) (Table 3).

The average BDI score was found to be 11.93 ± 8.41 (0–46), with 23.4% having BDI scores of 17 or greater. There was a positive correlation between age and BDI scores ($r=0.077$; $P=0.04$). Those patients whose symptoms were medically unexplained ($t=2.186$; $P=0.02$), women ($t=4.650$; $P<0.001$), and with less education ($F=7.960$; $P<0.001$) showed significantly higher levels of BDI scores (Table 4).

Discussion

There are numerous instruments developed to diagnose the most frequently occurring mental illnesses in primary care[22,23]. The PRIME-MD is the first of these scales to have been developed for this purpose[15]. Reliability and validity studies have been conducted for Turkey[24]. The PRIME-MD is a scale that is evaluated by a clinician and is able to diagnose psychiatric disorder. It poses some difficulties in use, however. It consists of two forms, pre-training is necessary for its use, and moreover, primary care physicians find some of the contents of the diagnosis categories complex. The scale is used frequently in many studies[5,25-27] but can not be used sufficiently in primary care practice.

In our study, the psychiatric diagnosis was made in 31% of the cases. According to Penayo et al. 1990[3], while the prevalence of psychiatric disorder in the general population is 20%, it is 47% in primary care settings. Standardized methods used in other studies put this figure at between 14% and 36%[28,29]. In Turkey, while mental illnesses in the general population occur at a frequency of 17.2%[30], these disorders appear at a rate of 20–30% in primary care settings[31].

In our study, major and minor depression appeared at a rate of 4.7% and 13.7%, respectively, for a total depressive disorder rate of 21.4%. Other studies estimate this number between 22.6%[32] and 29.1%[33]. In a study of the prevalence of depression in primary care in Germany, a profile similar to that found in Turkey emerged, with major depression occurring at 4.2% and minor depression at 11.3%[34]. Still other studies carried out in primary care settings indicate major depression rates of 7.3%[35], 13.5%[32], 13.9%[6], 14.1%[36], and 18.9%[37].

In the current study, incidences of BDI scores of 17 and above (severe depression) stood at 23.4%. In a study of the prevalence and detection of depressive disorders in a Croatian primary setting[38], 48.1% of the subjects investigated (a total of 500) were determined to have mild, moderate or severe depression, as determined by BDI scores. Positive correlations were found among depression and gender, age, marital status, parity and level of education. Similar, significant relationships were found in the current investigation.

The prevalence of other psychiatric disorders was also determined in the current study. For example, a rate of 5.2% was seen in panic disorders. This figure has been reported as 3%[35], 6.2%[36], 8.3% in other studies[37]. Somatoform disorder appeared at a rate of 7.7%. In the literature, such varied rates as 11.1%[39], 18%[6], and 35.9%[40] have been reported.

Table 1. *Distribution of bodily complaints*

Bodily complaints	*n*	%
Cardiovascular	59	8.4
Musculoskeletal	92	13.1
Gastrointestinal	114	16.3
Nephrologic	18	2.5
Endocrine	74	10.6
Neurologic	17	2.4
Respiratory	47	6.7
Infection	28	4
Haematololgic	29	4.1
Dermatology and allergy	24	3.6
Multi system complaints	198	28.3

Table 2. *Distribution of psychiatric diagnosis*

Psychiatric diagnosis	*n*	%
No diagnosis	483	69
Minor depression	96	13.7
Somatoform disorder	37	5.3
Major depression	33	4.7
Panic disorder	25	3.6
Minor depression and somatoform disorder	10	1.4
Major depression and panic disorder	9	1.3
Minor depression and panic disorder	2	0.3

Table 3. *Correlation of psychiatric diagnosis with medical diagnosis, gender and education*

	No psychiatric diagnosis *n* (%)	Psychiatric diagnosis *n* (%)	*P*
Medical diagnosis			<0.001
Negative (unexplained)	104 (54.7)	86 (45.3)	
Positive	379 (74.3)	131 (25.7)	
Gender			<0.001
Women	360 (64.7)	196 (35.3)	
Men	123 (85.4)	21 (14.6)	
Education			0.001
Literate	27 (57.4)	20 (42.6)	
Primary	137 (61.7)	85 (38.3)	
Intermediate level	45 (73.8)	16 (26.2)	
High school	98 (97.1)	48 (32.9)	
University	176 (78.6)	48 (21.4)	

Table 4. *Correlation of depression scores with medical diagnosis, gender and education*

Beck Depression Score	*n*	Mean ± SD	
Medical diagnosis			t=2.186
Negative (unexplained)	190	13.06 ± 8.09	P=0.02
Positive	510	11.50 ± 8.49	
Gender			t=4.650
Women	556	12.67 ± 8.52	P<0.001
Men	144	9.06 ± 7.30	
Education			F=7.960
Literate	47	15.76 ± 10.84	P<0.001
Primary	222	13.08 ± 8.75	
Intermediate level	61	12.96 ± 9.51	
High school	146	11.93 ± 7.78	
University	224	9.70 ± 7.14	

The proportion of unexplained medical symptoms was 27.1% in our study. This figure is 24.4% in general medicine practice in the United States[41], 32% in general medical outpatient care in Pakistan[42], and as much as 52% in the medical outpatient services in Great Britain[43]. In our study, the psychiatric diagnosis and the BDI score in patients having unexplained medical symptoms were significantly high. This is compatible with the literature. In many studies, a psychiatric diagnosis is two times more likely in the presence of unexplained symptoms[10,41,42,44].

Conclusion

This study suggests that a significant proportion of people seeking medical attention at medical outpatient clinics in Turkey, as in other nations, have a psychiatric disorder. It can also be noted that patients comprising up the group having unexplained medical symptoms are at potential risk for having or developing a psychiatric disorder.

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