The Prevalence of Psychiatric Disorders Distribution of Subjects Gender and its Relationship with Psychiatric Help-Seeking

Ruhsal Bozuklukların Yaygınlığı, Cinsiyetlere Göre Dağılımı ve Psikiyatrik Destek Alma ile İlişkisi

Ahmet KESKİN¹, İlhami ÜNLÜOĞLU², Uğur BİLGE², Çınar YENİLMEZ³

¹Çankaya Family Health Center, Ankara, Turkey

²Eskişehir Osmangazi University Faculty of Medicine, Department of Family Medicine, Eskişehir, Turkey

³Eskişehir Osmangazi University Faculty of Medicine, Department of Psychiatry, Eskişehir, Turkey

ABSTRACT

Introduction: The aim of this study was to investigate the prevalence of psychiatric disorders and psychiatric help-seeking behaviours in central Eskişehir according to sociodemographic variables.

Method: In this study, for the purpose of revealing the psychiatric disorder profile of Eskişehir city and evaluating the prevalence of psychiatric disorders according to gender differences and psychiatric help-seeking behaviours; The Primary Care Evaluation of Mental Disorders (PRIME-MD) scale and psychiatric help questionnaire were administered to 1475 subjects who were randomly selected from 24 primary health care centers in Eskişehir.

Results: The prevalence of psychiatric disorders was as follows: at least one mood disorder 37%, anxiety disorders 29%, somatoform disorders - 8.6% and, possible alcohol abuse 7.7%. All diagnoses except possible alcohol abuse were found to be more frequent in women than men. Also It was found that in subjects who were thought to have a psychiatric disorder, 64% of mood disorder patients, 67% of anxiety disorder patients, 70% of somatoform disorder patients and, 61% of possible alcohol abuse patients can receive appropriate treatment.

Discussion: Since psychiatric disorders are common, it is important to direct such patients to appropriate treatment. Therefore, new studies are necessary to find out the prevalence of psychiatric disorders and risky groups as well as to identify the reasons that why such people do not seek for help in different regions of our country. (*Archives of Neuropsychiatry* 2013; 50: 344-351)

Key words: Psychiatric disorders, mood disorders, anxiety disorders, help-seeking, PRIME-MD scale

Conflict of interest: The authors reported no conflict of interest related to this article

ÖZET

Giriş: Bu çalışmanın amacı Eskişehir ili merkezinde ruhsal bozuklukların yaygınlığını ve psikiyatrik destek alma durumlarını sosyodemografik verileri de inceleyerek belirlemektir.

Yöntem: Bu çalışmada Eskişehir ili merkezinde yer alan 24 birinci basamak sağlık kurumuna bağlı mahallelerde kota örnekleme yoluyla seçilen 1475 kişiye PRIME MD ölçeği uygulanarak ruhsal bozuklukların yaygınlığı, cinsiyete göre dağılımı ve psikiyatrik destek alma eğilimlerinin saptanması amaçlanmıştır.

Bulgular: Çalışmamızın sonucunda en az bir duygudurum bozukluğu %37, anksiyete bozukluğu %29, somatoform bozukluklar %18,6 ve olası alkol kullanımı %7,7 oranında bulunmuştur. Olası alkol kötüye kullanımı dışında tüm bozukluklar kadınlarda daha sık bulunmuştur. Ayrıca ruhsal bozukluk tanısı düşünülen kişilerden; duygudurum bozuklukları olanların %64'ünün, anksiyete bozuklukları olanların %67'sinin, somatoform bozuklukları olanların %70'inin, olası alkol kötüye kullanımı olanların %61'inin tedavi alabileceği bulunmuştur.

Sonuç: Ruhsal bozuklukların yaygın görülmesi yanında uygun tedaviye yönlendirilmesi de önemlidir. Bu nedenle ülkemizin farklı bölgelerinde ruhsal bozukluklarla ilgili yaygınlık ve risk gruplarını belirleyen çalışmaların yanında psikiyatrik destek almama nedenlerinin ortaya çıkarılması için yeni çalışmalara ihtiyaç vardır. (*Nöropsikiyatri Arşivi* 2013; 50: 344-351)

Anahtar kelimeler: Ruhsal bozukluklar, duygudurum bozuklukları, anksiyete bozuklukları, yardım arama, PRIME MD ölçeği

Çıkar çatışması: Yazarlar bu makale ile ilgili olarak herhangi bir çıkar çatışması bildirmemişlerdir

Correspondence Address/Yazışma Adresi

Ahmet Keskin MD, Çankaya Family Health Center, Ankara, Turkey

Gsm +90 533 713 70 44 E-mail: keskina74@hotmail.com Received/Geliş tarihi: 11.03.2012 Accepted/Kabul tarihi: 27.04.2012

© Archives of Neuropsychiatry, published by Galenos Publishing. / © Nöropsikiyatri Arşivi Dergisi, Galenos Yayınevi tarafından basılmıştır.

Introduction

Psychological disorders are health problems which are observed commonly in the community. Studies have reported that the prevalence of psychological disorders ranges between 11% and 50% in individuals presenting to primary health care institutions (PHCI) and in the general population (1,2,3,4).

In our country, the number of epidemiological studies related with psychological disorders has gradually increased in recent years. With use of diagnostic scales in these studies it has been emphasized that the prevalence of psychological disorder at a level where the diagnosis can be made exceeds 20% in our country (1,3,5). In the "Turkey Psychological Health Profile" study which is one of the largest epidemiological studies performed in our country, it was reported that 18% of the population in had a psychological disease in a life time (6).

In the Epidemiologic Catchment Area-ECA study which is one of the largest epidemiological studies performed in the world and which was conducted by the "national Psychological Health Institute" in USA, it was found that the one-month prevalence of at least one psychological disorder was 15% in the population. In the same study, it was reported that the most common psychological disorder was anxiety disorders with a prevalence of 7% in the population. When examined according to genders, it was found that anxiety disorder was the most common diagnosis in women and alcohol and substance abuse was the most common diagnosis in men (7).

The fact that psychological disorders are observed commonly and is generally not recognized and thus not treated adequately leads to a high cost for the population (8,9,10). The cost of untreated psychological disorders is undertaken by the community and the distress of morbidity is undertaken by families and healthcare personnel (9).

Studies performed in recent years have shown that psychological disorders lead to a decrease in occupational and social functions of patients and cognitive failure especially in the elderly. According to these studies social and physical disability is observed more frequently in patients who are diagnosed with psychological disorder and these patients hinder their daily activities more frequently and spend more days in bed. Therefore, early diagnosis and treatment of psychological diseases is important and studies addressing the prevalence of psychological diseases gain importance (10,11,12,13).

In seeking psychiatric support, access to treatment, cost, friend and social environment relations, previous experiences related with healthcare, sociodemographic factors including gender, marital status and age may be effective as well as the time and severity of psychological disorders (14). Studies have shown that men seek for psychiatric support with a lower rate. The reasons for this have been reported to include the fact that men seek for support more commonly for their physical problems and express psychosocial problems and stresses with a lower rate. In addition, it has been reported that behaviors, career, social status, lifestyle of men, the fact that they feel more confident compared to women and have a more optimistic point of view are effective in seeking for psychiatric support (15,16,17,18). In addition, the fact that women have a higher tendency to refer to healthcare institutions because

of problems related with family planning, pregnancy and postnatal period and child health may be effective in seeking support (16).

Presence of physical symptoms may complicate the diagnosis of patients with psychological disorders. In one study, it was shown that the ones with painful physical symptoms among patients who were in major depressive episode sought for psychiatric support with a lower rate and postponed seeking help (19).

In addition, the attitude of healthcare workers and lack of confidence in physicians as well as the level of stress, perception of loneliness and levels of showing psychological symptoms are also effective in seeking psychiatric support (20,21).

According to the studies performed, a group of patients with psychological disorders do not receive psychiatric support even though they have severe symptoms. These patients do not seek for support because of disease severity or disability (22) or may find solutions including self-suggestion, getting help from the family or environment or getting support from physicians other than psychiatrists (17,21). Some do not seek for professional help, although they have a psychiatric diagnosis and some do not need such a support. There is an inproportion between use of healthcare service and the behavior of seeking professional support. The fact that these people do not seek for a solution although they are in need or that they cannot find a solution is an important social problem (14,23). Many patients do not continue their therapies and do not comply with follow-up visits (24). In studies performed in our country, the rate of referring to psychiatrists and physicians other than psychiatrists in seeking for a solution in patients with psychological problems was found to range between 32% and 56% (25,26). A portion of the patients tend towards non-medical therapies including traditional-religious methods (25,26).

In this study, it was aimed to detect the prevalence, distribution by gender and the tendencies to receive psychiatric support in psychological disorders using the PRIME MD and by way of quota sampling in districts related with 24 primary care healthcare institutions in the center of the province of Eskişehir.

Method

The study was conducted in primary health care institutions (PHCI) in the center of the province of Eskişehir and individuals aged between 18 and 64 years for whom these institutions were responsible were included in the study. Psychiatric support interrogation questionnaire and Primary Care Evaluation of Mental Disorders (PRIME MD) scale were applied in all patients who accepted to participate in the study after obtaining informed consent. Application stands were established in appropriate districts, coffee houses, schools or park areas in PHCI regions. The individuals who applied were informed about the study and scale and told that their personal data will not be shared by others in any way. Informed consent was obtained from the individuals who accepted application of the scale.

The sample size was kept at a maximum level considering the characteristics of the study, the number of variables to be used in the study and the properties of the analysis to be used and it was targeted to reach 1000-1500 individuals considering the frequent change of the population in PHCI regions and to apply PRIME MD

in these individuals. In this study, "quota sampling" was used as the appropriate sampling technique. Final sampling plan was done according to the number of individuals registered in 24 PCHIs in the center of the province of Eskişehir within the scope of quota sampling and three different age groups (19-24 years, 25-44 years and 45-64 years). Based on the records of Eskişehir Provincial Health Department, 429.287 individuals registered in PHCIs were distributed to PHCIs in a proportional way. Afterwards, the number of individuals found in relation with the districts which are in the scope of each primary health care center was distributed again in proportion with the age groups related with that PHCI and final sampling plan was achieved in the scope of quota sampling.

At the end of application, all individuals who referred to each stand were informed and the PRIME MD scale was applied to all volunteers. Quotas were exceeded in all quotas determined for each stand. Therefore, numbers were given to the forms and random sampling was made with a number equal to the quota found for each stand. 1475 scale forms selected were evaluated and analyses were performed based on this number.

This study was performed according to the approval decision of Eskişehir Osmangazi University Medical Faculty ethics Committee made at the meeting held on October the 4th 2006.

Psychiatric Support Interrogation Questionnaire

This is a questionnaire form which was developed by the investigators and which interrogated the previous status of receiving support and current need for psychiatric support in the individuals who participated in the study.

The Primary Care Evaluation of Mental Disorders Form- (PRIME - MD)

PRIME MD is a fully-structured interview scale designed for the accurate and rapid diagnosis of the most common psychological disorders observed in PCHIs including mood disorders, anxiety disorders, somatoform disorders and probable alcohol abuse (PAA) (27).

This scale is the first interview scale designed for physicians who work in the primary care setting to make a diagnosis of psychological disorder (28). Although it has positive aspects including easy and rapid application, its limitation is the fact that it can detect subthreshold symptoms as morbidity and thus lead to a high prevalence of psychological disorder (27,28,29).

The application was performed by 2 research fellows of family physician, 1 psychiatry fellow and 1 research fellow of statistics. The application was performed in certain districts. Each participant was given leaflets giving information about psychological disorders after application of PRIME MD. Short informing speeches about psychological disorders and treatment opportunities were done. The individuals who were thought to be in need of psychiatric treatment at the end of application were referred to psychiatry outpatient clinics.

Statistics

Analyses of all data were performed using SPSS 11.0 package program. Continuous quantitative data were expressed as n, mean and standard deviation. Qualitative data were expressed as n and percentage values. Chi-square tests were applied to categorical data. A p value of <0.05 was considered significant.

Results

736 (49.9%) of 1475 individuals who participated in the study were female and 739 (50.1%) were male. While 667 (45.2%) of the individuals were married, 668 (45.3%) were single and 140 (9.5%) were widowed. It was found that 57 (3.9%) of the individuals who participated in the study were illiterate.

When the results were examined according to PRIME MD modules, the most common PRIME MD diagnosis was mood disorder. The diagnosis of probable alcohol abuse (PAA) was made with the lowest rate. The distribution of diagnoses at the time of the study in the individuals in whom PRIME MD scale was applied is shown in (Figure 1).

At least one diagnosis of anxiety disorder was observed in 426 (29%) of 1475 individuals who participated in the study. The most common diagnosis among anxiety disorders was anxiety disorder not otherwise specified (ADNOS). It was observed that all diagnoses of anxiety disorders were more prevalent in women. A diagnosis of ADNOS was made in 16.3% of all individuals. When the distribution of the diagnosis of ADNOS was examined according to genders, it was found that this diagnosis was made in 19.6% of the women (nFemale=144) and in 13% of the men (nMale=96). The relation between the diagnosis of anxiety disorder and gender was found to be statistically significant ($\chi^2=42.603$, sd.=5, p<0.001).

In our study, a diagnosis of mood disorder was found in 547 (37.1%) individuals. The diagnosis of major depressive disorder (MDD) was made with the highest rate. This diagnosis was observed in 367 individuals (24.9%). At least one diagnosis of mood disorder was found in 218 (29.5%) of 218 men included in the study and in 329 (44.7%) of 736 women included in the study. The most common diagnosis of mood disorder was MDD for both men and women. When the distribution of diagnoses was examined according to gender, 31.9% of the women (nFemale=235) and 17.8% of the men (nMale=132) were diagnosed with MDD. A statistically significant relation was found between the gender of the individual and the diagnoses of mood disorder ($\chi^2=52.535$, sd.=5, p<0.001).

In our study, at least one diagnosis of somatoform disorder was found in 275 (18.6%) individuals. Among somatoform disorders, somatoform disorder not specified otherwise (SDNOS) was observed with the highest rate in women (13.2%), while the most commonly observed somatoform disorder in men was chronic pain disorder (CPD) (4.2%). The relation between somatoform disorders

Şekil 1. Distribution of diagnoses during working in individuals who were applied PRIME MD scale

and gender was also found to be statistically significant ($\chi^2=66.979$, $sd.=5$, $p<0.001$).

(PAA) was observed in 113 individuals (7.7%) in the sample group. The only diagnosis which was observed more commonly in men compared to women was PAA. This rate is 127% in men ($n_{Male}=94$) and 2.6% ($n_{Female}=19$) in women. A statistically significant relation was found between the diagnosis of PAA and gender ($\chi^2=53.579$, $sd.=1$, $p<0.001$). The diagnoses of PRIME MD modules and their distribution by gender are shown in (Table 1).

In summary, mood disorders, somatoform disorders and anxiety disorders were observed more commonly in women and PAA was observed more commonly in men.

A statistically significant relation was found between the health status defined by the individual himself/herself and the status of referring to a psychiatrist ($\chi^2=74.353$, $sd.=4$, $p<0.001$). The individuals who specified their health status as moderate or poor received psychiatric support with the highest rate. According to the definition of the health status, the group who received psychiatric support with the lowest rate was the group who defined their health status very well and perfect. In Table 2, the relation between the definition of the health status made by the individuals on the question form of the PRIME MD scale and the status of referring to a psychiatrist is shown.

At least one diagnosis of psychological disorder was observed in 201 (53%) of 379 individuals who stated that they had received psychiatric support before, no diagnosis was made in 178 (46%) individuals. Mood disorders were observed in 346 (31.6%) of 1096 individuals who stated that they had not received psychiatric support before, PAA was observed in 69 (6.3%), anxiety disorders were observed in 253 (23%) and somatoform disorders were observed in 150 (13.7%).

129 (63%) of 201 individuals with a diagnosis of mood disorder who had referred to a psychiatrist before were willing to receive treatment again, while 48 (23.5%) individuals were not willing to receive treatment. Two hundred fourteen (64%) of 336 individuals with a diagnosis of mood disorder who had not referred to a psychiatrist before were willing to receive treatment again, while 104 individuals (31%) were not willing to receive treatment.

While 25 (57%) of 44 individuals who were diagnosed with PAA and who had referred to a psychiatrist before were willing to receive treatment again, 15 individuals (34%) were not willing to receive treatment. 42 (60.9%) of 69 individuals who were diagnosed with PAA and who had not referred to a psychiatrist before were willing to receive treatment again, while 244 individuals (34.8%) were not willing to receive treatment.

Table 1. PRIME MD Diagnoses and Their distributions by Gender

Modül	PRIME Diagnoses	MD	Gender		Total n (%)
			Male n (%)	Female n (%)	
***Mood Disorders	No diagnosis		521 (70.5)	407 (55.3)	928 (62.9)
	Major Depressive Disorder		132 (17.9)	235 (31.9)	367 (24.9)
	Minor Depressive Disorder		49 (6.6)	53 (7.2)	102 (6.9)
	Dysrhythmic Disorder		32 (4.3)	23 (3.1)	55 (3.7)
	Major Depressive Disorder- Partial Remission			3 (0.4)	3 (0.2)
	-Recurrence (MDD-PR-R		5 (0.7)	15 (2.0)	20 (1.4)
	Total		739 (100.0)	736 (100.0)	1475 (100.0)
***Probable Alcohol Abuse	No diagnosis		645 (87.3)	717 (97.4)	1362 (92.3)
	Probable Alcohol Abuse		94 (12.7)	19 (2.6)	113 (7.7)
	Total		739 (100.0)	736 (100.0)	1475 (100.0)
***Anxiety Disorders	No diagnosis		581 (78.6)	468 (63.6)	1049 (71.1)
	Anxiety Disorder Not specified Otherwise (NOS)		96 (13.0)	144 (19.6)	240 (16.3)
	Pervasive anxiety disorder (PAD)		33 (4.5)	67 (9.1)	100 (6.8)
	Panic Disorder (PD)		11 (1.5)	19 (2.6)	30 (2.0)
	PD ve PAD		18 (2.4)	38 (5.2)	56 (3.8)
	Total		739 (100.0)	736 (100.0)	1475 (100.0)
***Somatoform Disorders	No diagnosis		657 (88.9)	543 (73.8)	1200 (81.4)
	NOS Somatoform Disorder		26 (3.5)	98 (13.3)	124 (8.4)
	Chronic Pain Disorder		31 (4.2)	54 (7.3)	85 (5.8)
	Multisomatoform Disorder		9 (1.2)	23 (3.1)	32 (2.2)
	Hypochondriasis		10 (1.4)	7 (1.0)	17 (1.2)
	Other		6 (0.8)	11 (1.5)	17 (1.2)
	Total		739 (100.0)	736 (100.0)	1475 (100.0)

*** $p<0.001$, 1 percentages show column percentages.

131 (76%) of 173 individuals who were diagnosed with anxiety disorder and who had referred to a psychiatrist before were willing to receive treatment again, while 34 individuals (20%) were not willing to receive treatment again. 169 (67%) of 253 individuals who were diagnosed with anxiety disorder and who had not referred to a psychiatrist before were willing to receive treatment again, while 64 individuals (25%) were not willing to receive treatment.

Ninety-five (76%) of 125 individuals who were diagnosed with somatoform disorder and who had referred to a psychiatrist before were willing to receive treatment again, while 26 individuals (21%) were not willing to receive treatment. One hundred five (70%) of 150 individuals who were diagnosed with somatoform disorder and who had not referred to a psychiatrist before were willing to receive treatment again, 36 individuals (24%) were not willing to receive treatment.

The relation of PRIME MD diagnoses with the status of referring to a psychiatrist before and the wish to receive psychiatric support is shown in (Table 3).

Discussion

In this study in which we aimed to investigate the prevalence of psychological disorders and the status of willingness to receive psychiatric support, the prevalence of psychological disorders was found to be 43%. Although this rate appears to be higher compared to the studies performed both in the area and PHCIs, it represents similar rates obtained in some studies (1,2,3,4,13,27,29,30,31). It is notable that the same scale (PRIME MD) was used both in our study and in the studies in which similar rates were found. The fact that the scale we used considered subthreshold symptoms as diagnostic might be effective in these slightly high rates (3,27).

In our study, mood disorders were found in 37.1% of the participants. The most common mood disorder was found to be major depressive disorder with a rate of 24.9%. When the epidemiological studies performed in our country and in the world were examined, it was found that the most common disorders among psychological disorders were mood disorders (mainly MDD) in the majority of the studies (2,3,4,29,31). In a study performed in our country, the prevalence of depression was found to be 10% (32). In a study conducted with 2316 individuals in Belgium, PRIME MD scale was used and psychological disorders were found in 42.5% of the participants. The most common diagnosis in this study was reported to be mood disorder. In this study, mood disorders were found with a rate of 31% (13.9% major depression, 12.6% dysthymia), anxiety disorders were found with a rate of 19%, somatoform disorder were found with a rate of 18% and PAA was found with a rate of 10% (27).

Mood disorders were found with a significantly higher rate in women. At least one mood disorder was found in 44.7% of the women and in 29.5% of the men. The most common diagnosis was MDD in both genders. There are many studies in which mood disorders were observed with a higher rate in women (8,31,33,34). In studies which investigated this difference, various factors including neuroendocrin factors and male dominant social structure were emphasized (35,36). One of these factors is the fact that neuroendocrin factors and special conditions including menopause lead to predisposition to these diseases in women (35). In addition, more frequent exposure of women to traumatic events, male dominant social structure and a balance of power in favour of men in this structure appear to lead to a predisposition to psychological disorders including mainly mood disorders in women (36).

The individuals who were diagnosed with at least one anxiety disorder in our study constituted 28.9% of all participants. When the studies performed using the same scale examined, anxiety disorders were found with a rate of 25.2% in a study performed in Turkey (3) and with a rate of 19% in a study performed abroad (27).

All anxiety disorders were found more commonly in women and female gender was found to be a risk factor in terms of anxiety disorders. This result is also compatible with the literature (3,27,29,31). According to the studies performed, the fact that women are exposed to social stressors more frequently, possible problems in reaching health care institutions and especially psychiatry clinics which this group may experience may be related with this high frequency (37,38,39).

Somatoform disorders were found in 18.6% of the individuals who participated in the study. When sociodemographic variables which might be related with the prevalence of somatoform disorders were examined, it was found that gender, age, education level and working status affected this prevalence. Somatoform disorders were also found significantly more frequently in women. These results were also compatible with the literature (40,41). In a study conducted with 2316 individuals in Belgium, somatoform disorders were found with a rate of 18% similar to the results of our study (27). Similarly, somatoform disorders were found with a rate of 18.8% in a study performed in the province of Antalya (3). It is notable that the PRIME MD scale was used also in the studies in which the results were found to be similar to our study. CPD which is a diagnosis of somatoform disorder with a gradually increasing prevalence in developing countries was the second most common diagnosis of somatoform disorder in our study. The fact that somatoform disorders are observed more frequently

Table 2. Relation of referral to a psychiatrist with the individual's definition of his/her health status

	Definition of health status					Total
	Perfect	Very well	Well	Moderate	Poor	
Psikiyatriste Gitme Durumu	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Yes	17 (16.3)	38 (16.2)	114 (20.1)	154 (33.6)	56 (50.0)	379 (25.7)
No	87 (83.7)	196 (83.8)	452 (79.9)	305 (66.4)	56 (50.0)	1096 (74.3)
Total	104 (100.0)	234 (100.0)	566 (100.0)	459 (100.0)	112 (100.0)	1475 (100.0)

***p<0.001, 1 Percentages show column percentages

in women has been related with male dominant social structure and related inequality of women and men, more passive status of women starting from the childhood and poorer educational opportunities for women (38). In addition, it has been emphasized that lack of giving a chance to express emotions in the family leads to increased use of body language and therefore somatoform disorders occur more commonly in women. Again, here, presence of stressful life events with advanced age and the inequal status of women in the community seem to be related with increased somatoform disorders in women in this age group (37,38).

It has been emphasized that all psychological disorders excluding PAA are observed more commonly in women and the higher frequency and prevalence of these diseases have been associated with biological, psychological, social, cultural and sociological causes (36,37). In our study, PAA was found in 7.7% of the participants. When the studies investigating PAA were examined, different rates were observed. For example, the level of PAA was found to be 4.7% (3), 10% (27) and 6% (42) in various studies. PAA was found with a higher rate in men in accordance with the literature information (3,27,42). Depressive disorders have been observed more commonly in women and alcohol consumption has

been observed more commonly in men in studies performed and differences between genders have been noted in terms of seeking help. Depressive female patients try to receive professional help to seek help, while male patients are not willing to seek help and they may have a tendency to substance abuse instead of receiving professional support (43).

Mood disorders were found in 346 (31.6%) of 1096 individuals who stated that they had not received psychiatric support before, PAA was observed in 69 (6.3%), anxiety disorders were observed in 253 (23%) and somatoform disorders were observed in 150 (13.7%).

One of the conclusions of our study was the fact that a portion of the patients who were diagnosed using the PRIME MD scale reported that they were not willing to receive psychiatric support. In individuals who had received help before and who had not received help before, this rate was found to be 23.5% and 31%, respectively in mood disorders, 20% and 25% in anxiety disorders, 21% and 24% in somatoform disorders and 34% and 34.8% in PAA. It has been stated that individuals who need psychiatric support do not always refer to physicians, refer to social support and hide their mood states by external control. In studies performed, the rate of referral to non-physician individuals was found to range between 14.7% and

Table 3. Relation of the status of previous referral to a psychiatrist with PRIME MD Diagnoses

Module	PRIME MD Diagnoses	Status of referral to a psychiatrist before				Willingness to receive psychiatric support			
		Yes		No		Yes		No	
		No n (%)	Undecided n (%)	No n (%)	Total n (%)*	Yes n (%)	Undecided n (%)	No n (%)	Total n (%)**
Mood disorder	Tanı Yok	100 (56.2)	22 (12.3)	56 (31.5)	178 (100)	289 (38.5)	63 (8.4)	398 (53.1)	750 (100)
	MDB	114 (74.5)	7 (4.6)	32 (20.9)	153 (100)	146 (68.2)	14 (6.5)	54 (25.2)	214 (100)
	MinDB	9 (40.9)	1 (4.5)	12 (54.6)	22 (100)	43 (53.8)	7 (8.8)	30 (37.5)	80 (100)
	Distimi	4 (80)		1 (20)	5 (100)	24 (48.0)	7 (14.0)	19 (38.0)	40 (100)
	MDB-KR	1 (100)			1 (100)	1 (50.0)		1 (50.0)	2 (100)
	Bipolar	16 (80)	1 (5.0)	3 (15.0)	20 (100)				0
Probable Alcohol Abuse	Tanı Yok	219 (65.3)	26 (8.1)	89 (26.6)	334 (100)	461 (44.9)	88 (8.6)	478 (46.5)	1027 (100)
	OAKK	25 (56.8)	4 (9.1)	15 (34.1)	44 (100)	42 (60.9)	3 (4.3)	24 (34.8)	69 (100)
Anxiety disorders	Tanı Yok	113 (54.8)	23 (11.2)	70 (34.0)	206 (100)	334 (39.6)	71 (8.4)	438 (52.0)	843 (100)
	BTAAB	57 (67.8)	4 (4.8)	23 (26.4)	84 (100)	99 (63.5)	15 (9.6)	42 (26.9)	156 (100)
	YAB	33 (78.6)	3 (7.1)	6 (14.3)	42 (100)	42 (72.5)	2 (3.4)	14 (24.1)	58 (100)
	PB	11 (84.6)		2 (15.4)	13 (100)	13 (76.5)	1 (5.9)	3 (17.6)	17 (100)
	PB ve YAB	30 (88.2)	1 (3.0)	3 (8.8)	34 (100)	15 (68.2)	2 (9.1)	5 (22.7)	22 (100)
Somatoform disorders	Tanı Yok	149 (58.7)	26 (10.6)	78 (30.7)	254 (100)	398 (42.1)	82 (8.7)	466 (49.2)	946 (100)
	BTASB	45 (83.3)	2 (3.7)	7 (13.0)	54 (100)	51 (72.9)	4 (5.7)	15 (21.4)	70 (100)
	KAB	19 (52.8)	2 (5.6)	15 (41.6)	36 (100)	33 (67.3)	1 (2.0)	15 (30.7)	49 (100)
	MSB	18 (90.0)		2 (10.0)	20 (100)	10 (83.4)	1 (8.3)	1 (8.3)	12 (100)
	Hipo	6 (85.7)		1 (14.3)	7 (100)	8 (80)	2 (20)		10 (100)
	Diğer	7 (87.5)		1 (12.5)	8 (100)	3 (33.3)	1 (11.1)	5 (55.6)	9 (100)

*Sum of the numbers and percentages in the lines of diagnosis in patients who had received psychiatric support before

**Sum of the numbers and percentages in the lines of diagnosis in patients who had not received psychiatric support before

57.5%. It has been reported that patients with minor psychological disorder mostly sought for help by referring to friends, relatives or non-medical individuals. In addition, women seek for help with a higher rate compared to men (17,26,44). In addition, non-medical searches involve religious applications, individuals who are called hoca and places which are believed to be religious in patients who refer to psychiatry outpatient clinics. Feelings of disability and cure-seeking may direct patients to search for different methods and these individuals may deviate to non-medical ways with the fear of labeling (26). In a study performed, it was reported that some patients initiated paranormal activities including magic and tried to get improved by religious methods (44).

In another study, it was stated that younger individuals and men sought for professional help with a lower rate. In the same study, it was concluded that a part of the subjects did not seek for help, although they needed help, since they found professional help expensive and thought that their health insurance would not compensate for this help and treatment would last very long (45). In men, ignoring symptoms related with health, the belief that the disease would pass if ignored and tendency to seek help when a severe disease is in question as well as socioeconomic status and ethnic origin are effective in help-seeking behavior (16). Perception of the disease and handling behavior, expectations related with the disease, type of reaction, fear of being labeled, referral time and place for treatment and treatment time may be affected by cultural factors (25).

In addition, individuals with psychological disorders who seek for non-medical help may have difficulty in expression their emotions. In a study related with this subject, a positive correlation was found between difficulty in verbalizing emotions and referring to non-psychiatry physicians (46).

Psychiatrists are the least frequently preferred option for help because of the thought of being labeled. Psychological disorders are mostly related with social labeling and the person who needs help and his/her family may tend to hide the condition. Therefore, they may direct to other treatment options and non-medical options. Physicians should be sensitive in the subject of why patients avoid medical treatment considering also their religious beliefs (44).

One of the important results of our study was the fact that appropriate treatment could be received when an appropriate diagnosis was made in individuals who had received psychiatric help before and who had not received psychiatric help before with rates of 63% and 64%, respectively for mood disorders, 76% and 67% for anxiety disorders, 76% and 70% for somatoform disorders and 57% and 61% for PAA. It has been reported that the most important factors in referral of patients to a psychiatrist include the patient's own view, recommendations of other physicians, family members and people in the environment. It has been reported that women recognize their problems better compared to men and seek for psychiatric support and benefit from healthcare services with a higher rate (17,21). In a study performed in Turkey, female patients were found to refer for professional help with a 2.6 fold higher rate compared to male patients (25). A part of these patients may be in search for non-psychiatric help. A significant portion of individuals with severe psychological disorder do not seek for professional help and studies are needed to elucidate the reason for this. Although the rates of benefiting from professional help

gradually increase, there is still an unmet need for help and this is a big social problem. PHCs have an important role in detecting the patients who are not willing to receive help, though they need psychiatric support. It is very important that physicians who work in PHCs approach individuals who refer frequently, who had been diagnosed with a psychiatric disorder and received treatment and who experience traumatic events also in a psychiatric point of view.

The limitations of our study: we primarily think that the high prevalences of psychological disorders which were also found in our study might be related with the PRIME MD scale. It has been proposed that the PRIME MD scale puts subthreshold psychological symptoms also in the category of morbidity and therefore high prevalences of psychological disorders are obtained (3,5). The reasons that we used this scale in our study included easy applicability, short application time and being an interview scale structured for the primary health care setting (3,5,28).

In addition, it can be thought that studies related with psychological disorders are still not adequate. In this study, we tried to draw attention to the prevalence of psychological disorders in the province of Eskişehir, distributions of psychological disorders by genders and states of referral to psychiatry. Increasing such studies in our country will facilitate taking precautions related with psychological disorders. Therefore, prevalence studies related with psychological disorders in different regions of our country and new studies to elucidate the reasons of lack of receiving psychiatric support should be performed.

References

1. Küey L, Üstün BT, Güleç C. Türkiye'de ruhsal bozukluklar epidemiyolojisi araştırmaları üzerine bir gözden geçirme çalışması. *Toplum ve Hekim* 1987;44:16-30.
2. Van Hemert AM, Hengeveld MW, Bolk JH, Rooijmans HG, Vandenbroucke JP. Psychiatric disorders in relation to medical illness among patients of a general medical outpatient clinic. *Psychol Med* 1993; 23:167-173.
3. Dönmez L, Dedeoğlu N, Özcan E. Sağlık ocaklarına başvuranlarda ruhsal bozukluklar. *Türk Psikiyatri Derg.* 2000; 11:198-203.
4. Toft T, Fink P, Ornbol E, Christensen K, Frostholm I, Olesen F. Mental disorders in primary care: prevalence and co-morbidity among disorders: Results from the functional illness in primary care (FIP) study. *Psychol Med* 2005; 8:1175-1184.
5. Ayrancı Ü, Yenilmez Ç. Eskişehir ilindeki sağlık ocaklarında konulan ruhsal hastalık tanıları ile sosyoekonomik durum arasındaki ilişki. *Anadolu Psikiyatri Dergisi* 2001; 2:87-98.
6. Erol N, Kılıç C, Ulusoy M. Türkiye Ruh Sağlığı Profili Raporu. Ankara 1998. Eksen Tanıtım Ltd.Şti.
7. Regier DA, Myers JK, Kramer M, Robins LN, Blazer DG, Hough RL, Eaton WW, Locke BZ. The NIMH Epidemiologic Catchment Area program: Historical context, major objectives, and study population characteristics. *Arch Gen Psychiatry* 1984; 41:934-941.
8. Andersen SM, Harthorn BH. The recognition, diagnosis, and treatment of mental disorders by primary care physicians. *Med Care* 1989; 27:869-886.
9. Lyness JM, Caine ED, King DA, Yoediono Z. Psychiatric disorders in older primary care patients. *J Gen Intern Med* 1999; 14:249-254.
10. Ayrancı Ü, Yenilmez Ç. Eskişehir ilinde Birinci Basamak Sağlık Kurumlarında verilen ruh sağlığı hizmetlerinin değerlendirilmesi. *Türk Psikiyatri Derg* 2002; 13:115-124.
11. Joukamaa M, Lehtinen V, Karlsson H, Rouhe E. SCL-25 and recognition of mental disorders reported by primary health care physicians 1994; *Acta Psychiatr Scand* 1994; 89:320-323.
12. Gonzales JJ, Magruder KM, Keith SJ. Mental disorders in primary care

- services: an update. Public Health Rep, 1994; 109:251-258.
13. Banerjee S, Macdonald A. Mental disorder in an elderly home care population: associations with health and social service use. Br J Psychiatry 1996; 168: 750-756.
 14. Roness A, Mykletun A, Dahl AA. Help-seeking behaviour in patients with anxiety disorder and depression. Acta Psychiatr Scand 2005; 111:51-58.
 15. Biddle L, Gunnell D, Sharp D, Donovan JL. Factors influencing help seeking in mentally distressed young adults: a cross-sectional survey. Br J Gen Pract. 2004; Apr; 54:248-253.
 16. Galdas PM, Cheater F, Marshall P. Men and health help-seeking behaviour: literature review. J Adv Nurs 2005; 49:616-623.
 17. Oliver MI, Pearson N, Coe N, Gunnell D. Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. Br J Psychiatry 2005; 186:297-301.
 18. Kayahan M, Sertbaş G. Dahili ve cerrahi kliniklerde yatan hastalarda anksiyete-depresyon düzeyleri ve stresle başa çıkma tarzları arasındaki ilişki. Anadolu Psikiyatri Dergisi 2007; 8:113-120.
 19. Demyttenaere K, Bonnewyn A, Bruffaerts R, Brugha T, De Graaf R, Alonso J. Comorbid painful physical symptoms and depression: prevalence, work loss, and help seeking. J Affect Disord. 2006; 92:185-193.
 20. Azizoğlu S. Psikolojik yardım arama davranışını etkileyen bazı faktörler açısından Kriz merkezine başvuran ve başvurmamayan bireylerin karşılaştırılması. Kriz Dergisi 1993; 1:143-149.
 21. Güleç G, Yenilmez Ç, Ay F. Bir Anadolu şehrinde psikiyatri kliniğine başvuran hastaların Hastalık açıklama ve çare arama davranışları. Klinik Psikiyatri 2011; 14:131-142.
 22. Dalrymple KL, Zimmerman M. Treatment-seeking for social anxiety disorder in a general outpatient psychiatry setting. Psychiatry Res 2011; 187:375-381.
 23. Schomerus G, Matschinger H, Angermeyer MC. The stigma of psychiatric treatment and help-seeking intentions for depression. Eur Arch Psychiatry Clin Neurosci. 2009; 259:298-306.
 24. Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, Borges G, Bromet EJ, Bruffaerts R, de Girolamo G, de Graaf R, Gureje O, Haro JM, Karam EG, Kessler RC, Kovess V, Lane MC, Lee S, Levinson D, Ono Y, Petukhova M, Posada-Villa J, Seedat S, Wells JE. Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys. Lancet 2007; 370:841-850.
 25. Ünal S, Özcan Y, Emul HM, Çekem AB, Elbozan HB, Sezer Ö. Hastalık açıklama modeli ve çare arama davranışı Anadolu Psikiyatri Dergisi 2001; 2:222-229.
 26. Bahar A, Savaş HA, Bahar G. Psikiyatri hastalarında tıp dışı yardım arama davranışının değerlendirilmesi. Yeni Sempozyum Dergisi 2010; 48:216-222.
 27. Anseau M, Dierick M, Buntinkx F, Cnockaert P, De Smedt J, Van Den Haute M, Vander Mijnsbrugge D. High prevalence of mental disorders in primary care. J Affect Disord 2004; 78:49-55.
 28. Spitzer RL, Williams JB, Kroenke K, Linzer M, deGruy FV 3rd, Hahn SR, Brody D, Johnson JG. Utility of a new procedure for diagnosing mental disorders in primary care. The PRIME-MD 1000 study. JAMA 1994; 272:1749-1756.
 29. Dönmez L, Dedeoğlu N. Ahatlı Sağlık Ocağında ruhsal hastalıkların görüntüsü, tanınması, tedavi ve sevk. DEÜ Tıp Fakültesi Dergisi 1996; 10:76-85.
 30. Coyne JC, Fechner-Bates S, Schwenk TL. Prevalence, nature, and comorbidity of depressive disorders in primary care. Gen Hosp Psychiatry 1994; 16:267-276.
 31. Linzer M, Spitzer R, Kroenke K, Williams JB, Hahn S, Brody D, DeGruy F. Gender, quality of life, and mental disorders in primary care: results from the PRIME-MD 1000 study. Am J Med 1996; 101:526-533.
 32. Küey L, Güleç C. Depression in Turkey in the 1980s: Epidemiological and Clinical Approaches. Clin Neuropharmacol 1989; 12:1-12.
 33. Abiodun OA. Knowledge and attitude concerning mental health of primary health care workers in Nigeria. Int J of Soc Psychiatry 1991; 37:113-120.
 34. Mubarak AR. A comparative study on family, social supports and mental health of rural and urban Malay women. Med J Malaysia 1997; 52:274-284.
 35. Rihmer Z, Angst J. Epidemiyoloji. İç: Sadock B, Sadock V, Kaplan & Sadock's Comprehensive Textbook of Psychiatry. 8. Baskı Aydın H, çev editörü. Güneş Kitabevi 2007; s.1575-1581.
 36. Gökalep PG. Stres, Anksiyete ve Kadın. <http://www.sabem.saglik.gov.tr/kaynaklar/3621.pdf>, 27.02.2007.
 37. Önen FR, Kaptanoğlu C, Seber G. Kadınlarda depresyonun yaygınlığı ve risk faktörleriyle ilişkisi. Kriz Dergisi 1995; 3:88-103.
 38. Kaya B. Somatoform Bozuklukların Epidemiyolojisi. İç: Doğan O, editör. Psikiyatrik Epidemiyoloji. Ege Psikiyatri Yayınları 2002; s. 66.
 39. Pazvantoğlu O, Okay T, Dilbaz N, Şengül C, Bayam G. Major Depresyon tanısı alan hastalarda somatik belirtilerin yoğunluğunun intihar düşüncesi, davranışı ve niyetine etkisi. Klinik Psikiyatri 2004; 7:153-160.
 40. Sağduyu A. Sağlık Ocağına başvuran hastalarda somatizasyon. Türk Psikiyatri Dergisi 1995; 6:21-29.
 41. Sağduyu A, Ögel K, Özmen E, Boratav C. Birinci basamak sağlık hizmetlerinde depresyon. Türk Psikiyatri Dergisi 2000; 11:3-16.
 42. Philbrick JT, Connelly JE, Wofford AB. The prevalence of mental disorders in rural office practice. J Gen Inter Med 1996; 11:9-15.
 43. Ünal S, Özcan E. Depresyonda hazırlayıcı, ortaya çıkarıcı ve koruyucu etkenler. Anadolu Psikiyatri Dergisi 2000; 1:41-48.
 44. Salem MO, Saleh B, Yousef S, Sabri S. Help-seeking behaviour of patients attending the psychiatric service in a sample of United Arab Emirates population. The Int J Soc Psychiatry 2009; 55:141-148.
 45. Mojtabei R, Olsson M, Mechanic D. Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. Arch Gen Psychiatry 2002; 59:77-84.
 46. Özkorumak E, Güleç H, Köse S, Borckardt J, Sayar K. Depresyon Hastalarında Tıp Dışı Yardım Arama Davranışı: Aleksitimi Bir Etken Olabilir mi? Klinik Psikiyatri 2006; 9:161-169.