



ISSN 2458-8865

E-ISSN 2459-1505

www.fppc.com.tr**Family Practice and Palliative Care**<https://doi.org/10.22391/fppc.613150>**Research Article****Beliefs and attitudes of psychiatric outpatients toward mental disorders and antidepressants**

Psikiyatri polikliniğine başvuran hastaların ruhsal bozukluk ve antidepressanlara yönelik inanç ve tutumları

Erhan Akinci^a, **Sema Buzrul Sonmez^b**^a Department of Psychiatry, School of Medicine, Canakkale Onsekiz Mart University, Canakkale, Turkey^b Department of Psychiatry, Buca Seyfi Demirsoy State Hospital, Izmir, Turkey.**ABSTRACT****Introduction:** The present study aims to investigate a group of young adult psychiatric outpatients' knowledge of and attitude toward mental disorder and antidepressants, and determine the relevant factors affecting them.**Methods:** The study included 81 patients attending the psychiatric outpatient clinic, diagnosed with adjustment disorders, depression and/or anxiety disorder based on DSM-5 criteria, and met the research requirements. The data were collected through an information form for sociodemographic and clinical characteristics, a form to evaluate the knowledge of and attitudes toward the use of antidepressants, and based on the Beliefs Toward Mental Illness Scale (BMI). Severity of depression and anxiety was evaluated with Beck's Depression Inventory and Beck's Anxiety Inventory.**Results:** Regarding age groups, individuals in the 26-32 age group had higher overall scores. The patients with major depression were found to have higher BMI scores. The linear regression analysis revealed that age, education, depression severity and attitudes toward antidepressants were the factors associated with the overall BMI scores**Conclusions:** This study suggests that some sociodemographic variables, i.e. (age and educational statue), severity of depression and attitudes toward antidepressants are likely influence the beliefs toward mental disorders.**Keywords:** Mental disorders, beliefs, attitudes, antidepressants**ÖZ****Giriş:** Bu çalışmada, genç erişkin psikiyatri hastalarının, ruhsal hastalık ve antidepressan ilaçlara ilişkin bilgi ve tutumlarının araştırılması ve ilişkili etmenlerin belirlenmesi amaçlanmıştır.**Yöntem:** Araştırma, psikiyatri polikliniğine başvuran; DSM-5 kriterlerine göre uyum bozuklukları, depresyon ve/veya anksiyete bozukluğu tanısı alan ve araştırma kriterlerini karşılayan 81 hasta ile yürütülmüştür. Veriler, araştırmacılar tarafından oluşturulan sosyo-demografik ve klinik özelliklerine yönelik bilgi formu, antidepressan ilaç kullanımına ait bilgi ve tutumları değerlendirmeye yönelik form ve Ruhsal Hastalığa Yönelik İnançlar Ölçeği (RHYİÖ) kullanılarak toplandı. Olguların hastalık şiddeti, Beck Depresyon ve Beck Anksiyete Ölçekleri ile değerlendirildi.**Bulgular:** Çalışmamızda yaş gruplarına göre toplam puan ortalamaları 26-32 yaş grubunda daha yüksekti. Ayrıca, daha önce klinik başvurusu olmadan psikotrop ilaca kendi başlama öyküsü bulunan hastaların utanma alt ölçeğinin puan ortalaması daha yüksek bulundu. Majör depresyonu olan hastalarda RHYİÖ puanlarının daha yüksek olduğu saptandı. Doğrusal regresyon analizinde yaş, eğitim, depresyon şiddeti ve antidepressanlara karşı tutumun RHYİÖ puanları ile ilişkili etmenler olduğu görüldü**Sonuç:** Bu çalışmada bazı sosyodemografik değişkenlerin (yaş ve eğitim düzeyi), depresyon şiddetinin ve antidepressanlara karşı tutumun ruhsal hastalıklara yönelik inançlar üzerinde etkili olabileceği görüldü.**Anahtar kelimeler:** Mental hastalıklar, inançlar, tutumlar, antidepressanlar

Received	Accepted	Published Online	Corresponding Author	E-mail
August 29, 2019	November 17, 2019	December 11, 2019	Erhan AKINCI, MD	drerhanakinci@yahoo.com
Correspondence	Dr. Erhan AKINCI, Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Terzioğlu Campus, Canakkale, Turkey			

Introduction

Public attitudes toward psychiatric services are usually negative. There are also negative beliefs and attitudes toward mental disorders and therapies. These negative beliefs and attitudes lead to negative stereotypes and stigmatization of mental disorders [1,2]. Today, the fear of stigmatization faced by individuals that receive psychiatric help is an important barrier for them from getting access to basic mental care services.

Studies on attitudes toward psychiatry and psychiatric treatment demonstrate that individuals with mental disorders are stigmatized regardless of the type of diagnosis. Individuals diagnosed with mental disorder suffer from the fear of discrimination or social rejection. The fear of being stigmatized as 'mad' and exposed to stereotype-based categorization, may stop individuals from seeking treatment seeking for mental disorders [3-5]. It is also reported that people have negative beliefs toward the quality and effectiveness of therapies in treating psychiatric disorders [6]. Such negative attitudes and beliefs pose major impediments to psychiatric referrals and result in delayed treatments [7]. Solutions excluding psychotropic drugs are preferred by patients, even in the psychiatric cases where scientific proofs show that psychopharmacological treatments are indicated [8]. Of non-pharmacological therapies, patients usually choose psychotherapy, which is widely believed to be an effective method of treatment [9,10]. Prejudices against pharmacological treatment of mental disorders may adversely affect the therapeutic relationship between physicians and patients, and their compliance to treatment. However, physician-patient collaboration and patients' motivation for therapy are key to the effective treatment of psychiatric disorders [11].

It is thought that sociodemographic factors might lead to prejudices against psychiatric disorders and treatments and affect patients' attitudes to treatments. Knowing about attitudes and beliefs of people admitted to mental health centers despite the many prejudices in the community can play a decisive part in developing effective mental health policies. In addition, investigating the beliefs and attitudes toward psychiatric services may contribute to the efforts to prevent stigmatization. It is also, necessary that causes of the concerns about the psychiatric treatment, which were frequently reported by young adults admitted to psychiatric outpatient clinic should be investigated. Thus, this study is intended to investigate young adult patients' beliefs and attitudes toward patients with mental disorders and therapies relying on antidepressant drugs.

Methods

Subjects

This is a descriptive and cross-sectional study that was carried out on 81 outpatients, diagnosed with adjustment disorders, depression and/or anxiety disorder based on DSM-5 criteria and thus admitted to a state hospital for the first time. The participants were 18 to 32 years of age and with sufficient mental capacity. The patients with any kind of psychotic disorder, manic episode, cognitive disorder or mental retardation were excluded. This study was approved by the ethical committee of Bozyaka Research and Training Hospital (November 24, 2015; Approval No:2). In addition to approval, the written informed consents were obtained for the purpose of the study.

Measures

Sociodemographic and clinical data collection form: A semi-structured interview form was used to evaluate patients' ages, genders, educational backgrounds, marital statuses, occupations, levels of income, views, and sources of information regarding psychiatric disorders, data on their families and their own psychiatric histories.

Beck's Depression Inventory: BDI is a self-report scale that consists of 21 items with a four-point Likert scale ranging between 0 and 3. It is used to detect depression risk and to measure the severity of depressive symptoms. The total scores range between 0 and 63, and higher total scores indicate more severe degrees of depression. The study on the Turkish validity of the scale was conducted by Hisli [12,13].

Beck's Anxiety Inventory: This is a self-report scale that determines the level and severity of the symptoms of anxiety. The scale consists of 21 items with a four-point Likert scale ranging from 0 to 3. The total score ranges between 0 and 63, and higher total scores indicate more severe degree of anxiety. The study on the Turkish validity of the scale was conducted by Ulusoy et al. [14,15].

Beliefs toward Antidepressants Form (BAF): The researchers developed a research-specific five-point Likert questionnaire form (completely agree: 1, completely disagree: 5) that consists of nine items. The items to investigate the adverse effects of antidepressants are as follows;

1. They cause excessive sleepiness,
2. They cause increased appetite,
3. They lead to suicidal thoughts,
4. They cause addiction,
5. They disrupt attention and perception,
6. They cause sexual dysfunction,
7. They may harm the brain,
8. They may harm the body,
9. They may cause cancer.

Cronbach's alpha was calculated to assess internal consistency of these items and α was calculated to be 0.756, referring to an acceptable internal consistency.

Beliefs toward Mental Illness Scale (BMI): The scale was created by Hirai and Clum and it consists of 21 items [16]. The Turkish validity of the scale was conducted by Bilge and Çam [17]. BMI's subscales include 'dangerousness', 'incurability', 'social and interpersonal skills', and 'shame'. The items measure the negative stereotypical views on mental disorder and individuals with such disorders based on a six-point Likert grading (completely agree: 0, completely disagree: 5). BMI is interpreted in consideration of both the overall score and the subscale scores in a way that higher scores indicate higher levels of negative beliefs toward mental disorder and individuals with such disorders. BMI consists of three subscales:

Dangerousness subscale comprises eight items for perceived danger associated with mental disorders and patients with such disorders. The scores range from 0 to 40. Incurability and poor social and interpersonal skills subscale consists of 11 items regarding the way mental disorders affect interpersonal relations and the associated feeling of incurability. It refers to frustration in the context of interpersonal relations with patients suffering from mental disorders and feeling of incurability. The scores range from 0 to 55. Shame subscale consists of two items that refer to mental disorders as a shameful condition, and the scores range from 0 to 10.

Statistical Analyses

Skewness, obtained with Kurtosis, and variable's distribution of histograms were assessed to determine whether variables are normally distributed or not. For the analysis of the normally distributed data, Student-t test was used to compare two groups, and ANOVA was used to compare more than two groups. Since the data of the "shame" subscale were found to be non-normally distributed, the non-parametric Mann-Whitney U-test was employed to compare two groups, whereas the non-parametric Kruskal Wallis-H test was used to compare multiple groups. The relationship of the depression and anxiety scores with the subscale scores were assessed through the analysis of Spearman's correlation. The internal consistency of the questionnaire form was calculated based on Cronbach's alpha. The linear regression analysis (backward) was performed to investigate the possible factors associated with the overall BMI scores and its subscales (as dependent variables). A logarithmic transformation was applied to the "shame" subscale scores to eliminate skewness. SPSS Statistic 18.0 for Windows, was used for the statistical analysis of obtained data. In all the statistical analyses, $p < 0.05$ was considered to indicate statistical significance.

Results

81 subjects participated in the study, 54 and 27 of whom were female (66.7%) and male (33.3%), respectively. The mean age was 22.7 ± 3.1 years. 91.4% of the patients were single ($n=74$), 8.6% were married ($n=7$). 9.9% of the participants finished a primary school ($n=8$), 27.2% finished a high school ($n=22$), and 63% graduated from university ($n=51$).

67 patients (82.7%) were admitted to the psychiatric services of their own accord, eight through their families' advice (9.9%) and six (7.4%) through friends' advice. 42 (51.9%) had a personal history of psychiatric admission while 39 patients (48.1%) had someone in their family or among relatives who had referred to a psychiatric clinic. 47 patients (58%) had a history of psychiatric medication/ pharmacological treatment. 41 (87.2%) received medication prescribed by a psychiatrist, four (8.5%) by a physician, and two (4.3%) without consulting a psychiatrist or physician. Of the patients who received antidepressant drug therapy, six (12.8%) reported that they benefited from the administered medication to a great extent, 13 (27.7%) to a certain extent, while 15 (31.9%) were neutral, ten (21.3%) reported no benefit, and three (6.4%) regarded it as totally useless. Based on DSM-5 criteria, 12 patients (14.8%) were diagnosed with depression, 21 (25.9%) with anxiety disorder, 41 (50.6%) with both depression and anxiety disorder, and seven (8.6%) with adjustment disorders.

As the replies to the questionnaire items showed, 50 patients (61.7%) reported family and close friends, 44 (54.3%) internet, ten (12.3%) printed media and four (4.9%) visual media as sources of information concerning psychiatric disorders and therapies.

The results of the BMI scale revealed that majority of the subjects completely disagree with the statements of 'I would be embarrassed if people knew that I dated a person who once received psychological treatment or if a person in my family become mentally ill' (Table 1).

It can be understood from the BMI score distribution by age that the 26-32 age group scored significantly higher on overall BMI score ($p=0.002$), and had significantly higher mean scores on all the subscales (dangerousness $p=0.006$; incurability and poor interpersonal relations $p=0.002$; shame $p=0.008$) than the younger group. In terms of educational background, the university graduates (or the subjects with an equivalent degree) achieved significantly lower mean scores than primary and high school graduates in consideration of the overall BMI scores ($p=0.002$), 'dangerousness' ($p=0.009$) and 'incurability and poor interpersonal skills' ($p=0.001$) subscales. Compared with the overall BMI scores, the groups presented no statistically significant difference in the mean subscale scores in terms of history of psychiatric treatment received by them or relatives, benefits from psychiatric treatment, employment and socioeconomic status ($p > 0.05$).

The analysis of the distribution of BMI scores by the way drug therapy started revealed that self-administering patients had significantly higher mean scores on the 'shame' subscale than the others who started receiving pharmacotherapy after psychiatric examination ($p=0.011$). However, the groups presented no statistically significant difference in terms of the BMI scores on the parameter of whether the cases benefited from the drug therapy ($p > 0.05$). The analysis of the patients' BMI scores in view of the depression severity showed that the patients with major depression had significantly higher overall scores in comparison with the ones without depression ($p=0.016$). Furthermore, there was a weak correlation between the BDI and BMI scores ($r=0.287$; $p=0.009$). However, there was no significant correlation between the BAI and BMI scores ($r=0.121$; $p=0.284$).

The linear regression outputs concerning the factors independently affecting the BMI and its subscale scores are presented in Table 2. The linear regression analyses revealed that age, educational status, and BDI and BAF scores were the factors associated with the BMI scores. Educational status had the highest coefficient; having a bachelor's degree decreased the BMI scores, referring to a coefficient of 7.863. BDI, too, had a high coefficient; more specifically, depression severity increased the BMI scores, referring to a coefficient of 4.141. Age, educational status, and the BDI and BAF scores proved statistically significant for different subscales. The linear regression analysis of BMI score revealed that age, education, depression severity and BAF scores were significantly associated variables. Besides, the analysis of the 'dangerousness' subscale revealed that age, education and the BAF scores were significantly associated variables. Age, education and depression severity were significantly associated factors in the event that the 'incurability and poor interpersonal relations' subscale was adopted as a dependent variable (Table 2).

Table 1. Percentages of subjects that completely agree and disagree with the items of the BMI scale*

	Completely agree n (%)	Completely disagree n (%)
A mentally ill person is more likely to harm others than a normal person	22(27.2)	10(12.3)
Mental disorders would require a much longer period of time to be cured than would other general diseases	35(43.2)	3(3.7)
It may be a good idea to stay away from people who have psychological disorder because their behaviour is dangerous	6(7.4)	20(24.7)
The term 'psychological disorder' makes me feel embarrassed	7(8.6)	25(30.9)
A person with psychological disorder should have a job with only minor responsibilities	14(17.3)	18(22.2)
Mentally ill people are more likely to be criminals	10(12.3)	14(17.3)
Psychological disorder is recurrent	11(13.6)	8(9.9)
I am afraid of what my boss, friends and others would think if I were diagnosed as having a psychological disorder	14(17.3)	29(35.8)
Individuals diagnosed as mentally ill suffer from its symptoms throughout their life	4(4.9)	34(42)
People who have once received psychological treatment are likely to need further treatment in the future	10(12.3)	12(14.8)
It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises	6(7.4)	33(40.7)
I would be embarrassed if people knew that I dated a person who once received psychological treatment	4(4.9)	70(86.4)
I am afraid of people who are suffering from psychological disorder because they may harm me	3(3.7)	36(44.4)
A person with psychological disorder is less likely to function well as a parent	9(11.1)	22(27.2)
I would be embarrassed if a person in my family became mentally ill	1(1.2)	65(80.2)
I believe that psychological disorder can never be completely cured	8(9.9)	27(33.3)
Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities	3(3.7)	18(22.2)
Most people would not knowingly be friends with a mentally ill person	9(11.1)	25(30.9)
The behaviour of people who have psychological disorders is unpredictable	9(11.1)	12(14.8)
Psychological disorder is unlikely to be cured regardless of treatment	2(2.5)	45(55.6)
I would not trust the work of a mentally ill person assigned to my work team	3(3.7)	28(34.6)

* Beliefs Toward Mental Illness Scale [16]

Table 2. Linear regression analysis concerning the factors independently affecting the BMI and its subscale scores.

Dependent Variables		B*	β	p	95.0% CI for B	
					Lower	Upper
BMI	Constant	28.563				
	Age	1.468	0.293	0.007	0.406	2.530
	Education	-7.863	-0.246	0.020	-14.453	-1.273
	BDI	4.141	0.272	0.009	1.059	7.223
	BAF	-0.739	-0.223	0.032	-1.414	-0.065
Dangerousness	Constant	27.481				
	Age	0.509	0.227	0.041	0.020	0.997
	Education	-3.622	-0.253	0.020	-6.646	-0.598
	BAF	-0.497	-0.334	0.002	-0.809	-0.185
Incurability and poor interpersonal relations	Constant	1.971				
	Age	0.754	0.254	0.017	0.138	1.371
	Education	-4.461	-0.235	0.026	-8.377	-0.545
	BDI	2.457	0.272	0.009	0.620	4.294
Shame**	Referral decision	4.659	0.192	0.057	-0.141	9.460
	Constant	0.172				
	BDI	0.078	0.332	0.153	-0.032	0.188

*Unstandardized coefficients. **After logarithmic transformation

BMI: Beliefs toward Mental Illness Scale. BAF: Beliefs toward antidepressants form. BDI: Beck Depression Inventory. β : Standardized coefficient.

The data on age, gender, marital status, education, BDI, BAF and referral decision independent variables were analyzed with linear regression (Backward).

Discussion

The general public usually holds negative and stigmatizing views on psychiatric disorders and patients with such disorders. The fear of stigmatization and ostracization may affect individuals' behaviour of seeking help for psychiatric disorders [18]. Moreover, patients are reported to experience difficulties in psychiatric admission and treatment compliance due to negative perception of and beliefs toward psychotropic drugs [19].

The subjects in the present study were largely neutral about ADs, but their expectations of the benefits from these drugs were high. The most frequently reported negative beliefs include excessive sleepiness, perceptual impairment, attention deficit and physical damage. Some studies reported negative views such as potential addiction due to prolonged AD use, repressed feelings and changed personality [19,20]. Although the patients strongly believed that drugs could treat mental disorders, they exhibited neutral or negative opinions toward their ability to ensure a permanent recovery. Furthermore, lower BAF scores that indicate more severe levels of negative beliefs toward antidepressant drugs were associated with the higher overall BMI and 'dangerousness' subscale scores. This finding evidenced the level of beliefs toward antidepressant drugs to be a significant predictor of the beliefs concerning mental disorders and individuals with such disorders. As in many countries, people in Turkey show tendency to considering antidepressant drugs to be harmful and addictive. Thus, individuals taking antidepressants may be perceived

as dangerous by the public. Nonetheless, psychiatric patients have a more positive attitude toward psychotropic drugs compared to the society at large [21-23]. Patients' motivations for treatment and referral to psychiatric outpatient clinics because of mental disorders may be the reason behind this phenomenon. The mainstream view is that drug therapy alone cannot provide permanent recovery for mental disorders. This may be associated with another mainstream belief that an analysis of social and environmental problems would play a role in the effective treatment of psychiatric disorders [23,24].

In the present study, we observed that the attitudes and beliefs toward mental disorders were influenced by some socio-demographic characteristics, such as age and educational background. We found that negative beliefs toward mental disorders increased with age, and individuals within the 26-32 age group had more negative views compared to the younger group. The relevant literature offers a variety of studies conducted on the attitudes and beliefs of different age groups in relation to mental disorders. Some studies reported that younger people have more favourable attitudes toward seeking help with mental and less negative beliefs. One likely explanation of this result is that older adults are less experienced or knowledgeable about mental health services. Despite the controversial results, there are more evidence supporting that older age is associated with more negative attitudes and our results are coherent with these results [25-27]. We hypothesized that higher degrees of education would be associated with less negative beliefs toward mental disorders and the results corroborated this finding. The findings of this study indicated that educational level is the most important socio-demographic factor influencing beliefs about mental disorders. Individuals with a university degree (or an equivalent degree) had less severe negative beliefs toward mental disorders and individuals with such disorders in comparison to non-university graduates. In the majority of the studies which have investigated the effects of socio-demographic characteristics on beliefs about mental disorders, higher educational levels were associated with more positive beliefs [23,28]. Other studies suggest that attitudes and beliefs toward mental disorders are also influenced by gender, marital status, employment and socioeconomic status [29-32]. The present study, however, did not imply such an influence. Apparently, in some respects, this study differs from other studies examining the relationship between beliefs toward mental disorders and sociodemographic characteristics. Such differences may be associated with the subjects' environment, level of knowledge and cultural characteristics [30,33].

In the case of patients with depression, it is reported that negative beliefs pertaining to mental disorders are positively correlated with the severity of depression. Some studies report that there is a strong relationship between the severity of depression and stigma perception tendencies [34], and that depressive episode may have a negative effect on attitudes toward mental diseases [22]. In the present study, greater depression severity was a significant predictors of the level of negative beliefs about mental disorder, and it was observed that patients with major depression hold more severe negative beliefs toward mental disorders in comparison to those with adjustment and anxiety disorders. This might be due to the fact that patients with major depression perceive themselves and their environment from a much more negative perspective than the other groups do and also owing to negative consequences of depressive rumination [35]. As negative beliefs represent one of the factors that delay treatment and exacerbate the disorder, it is greatly important to deal with stigmatization of psychiatric disorders.

Limitations

This study has several limitations worth noting. The most obvious limitation in this research study was the small sample size, including psychiatric patients with limited age range. The results should certainly be investigated on a larger number of samples with a wider age range. Furthermore, a self-stigma scale of mental disorder could be assessed to investigate patients' self-stigmatization. Further research involving a much larger sampling with a control group is needed to confirm the validity of this study's findings.

Conclusion

Our study suggests that some sociodemographic variables including age, educational background, and depression severity might influence beliefs toward mental disorders. Negative beliefs toward psychiatric services is an important risk factor leading to unfavorable mental health outcomes. Because it is responsible for delays in seeking treatment and reduces the likelihood of compliance to treatment in patients with psychiatric disorders. Therefore, ensuring a flow of correct and evidence-based information on psychiatric services may enable positive treatment solutions for mental disorders. New and innovative anti-stigma programs including mental health knowledge through education and media may be helpful in order to reduce negative beliefs and attitudes toward psychiatric services.

Conflict of interest: None

Financial support: None

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