

Beliefs About Depression and Antidepressants: is There a Relationship with Attachment Style or Personality Characteristics?

Antidepressanlar ile İlişkili Mitlerin Bağlanma Stilleri ve Kişilik Özellikleri ile İlişkisi

İmran Gökçen Yılmaz Karaman, Melike Ezerbolat Özates

¹Eskişehir Osmangazi University, Faculty of Medicine, Department of Psychiatry, Eskişehir, Turkey

²Psychiatrist. Private Office, İstanbul, Turkey

Abstract

Attitudinal barriers can be more frequent than structural barriers in depression treatment. Understanding attitudinal barriers are the first step to overcome. We aimed to investigate the relationship between the beliefs about depression, antidepressants with attachment styles, and personality characteristics. A total of 207 participants completed an online survey which consisted of the sociodemographic data form, beliefs about antidepressants and depression questionnaire, Experiences in Close Relationships-Revised, and Ten Item Personality Inventory. False beliefs about depression were related to younger age, lower education level, and male gender ($p<0.05$ each). False beliefs about antidepressants were related to openness to experience personality dimension and anxious attachment style in addition to the male gender and, lower educational level ($p<0.05$ each). Interventions addressing wrong beliefs about depression should provide basic information about the disease. Clinicians aiming to provide proper knowledge about antidepressants should prioritize a trusting relationship.

Keywords: Antidepressant, Depression, Attitude, Stigma, Attachment, Personality

Özet

Depresyon tedavisinde tutum ilişkili engeller yapısal olanlardan daha sık olabilir. Tutum ilişkili engelleri anlamak üstesinden gelmenin ilk adımıdır. Bu çalışma depresyon ve antidepressanlar ile ilgili inançların bağlanma biçimleri ve kişilik özellikleri arasındaki ilişkiyi araştırmayı amaçlamaktadır. Sosyodemografik veri formu, antidepressanlar hakkındaki inançlar ve depresyon anketi, Yakın İlişkilerde Yaşantılar Envanterir-Gözden Geçirilmiş Formu ve On Maddelik Kişilik Envanteri'nden oluşan çevrimiçi anketi toplam 207 katılımcı doldurdu. Depresyonla ilgili yanlış inanışlar, genç yaş, düşük eğitim düzeyi ve erkek cinsiyet ile ilişkiliydi (her biri için $p<0,05$). Antidepressanlarla ilgili yanlış inanışlar, deneyime açıklık kişilik boyutu, kaygılı bağlanma biçimi, erkek cinsiyet ve düşük eğitim düzeyi ile ilişkili bulunmuştur (her biri için $p<0,05$). Depresyonla ilgili yanlış inançları ele alan müdahaleler, hastalık hakkında temel bilgiler sağlamalıdır. Antidepressanlar hakkında doğru bilgi vermeyi amaçlayan klinisyenler, bir güven ilişkisine öncelik vermelidir.

Anahtar Kelimeler: Antidepressan, Depresyon, Tutum, Damgalama, Bağlanma, Kişilik

Correspondence:

İmran Gökçen
YILMAZ KARMAN
Eskişehir Osmangazi University,
Faculty of Medicine, Department
of Psychiatry, Eskişehir, Turkey
e-mail: gokcenylmz@yahoo.com

Received 17.01.2023 Accepted 06.02.2023 Online published 13.02.2023

1. Introduction

Depression is a common mental health disorder that ranked 12th cause of disability-adjusted life years worldwide in 2019 (1). Even though antidepressants are widely used and provided easily, it has repeatedly been shown that depression is an undertreated disorder. According to a Swedish population-based study, among men with self-reported depression, the rate of antidepressant non-users to users is 5.83, while the rate for women is 3.30 (2). The most critical barriers to depression treatment are structural ones like low income and insurance problems. Additionally, patient attitudes about seeking help and attitudes towards antidepressants, concerns about stigma, and resistance to the diagnosis and medication are important factors (3). Sareen and colleagues stated that attitudinal barriers are more frequent than structural barriers regardless of the health care system (4).

Even though there is research regarding the barriers to depression treatment and self-stigma, the lack of evidence about its relationship with psychological factors continues. Negative attitudes towards mental illnesses and their treatments are also conceptualized as self-stigma if the person with the illness has it (5). Attachment types, both anxious and avoidant, were found to be related to self-stigma (6).

The development of attachment theory by Bowlby gave us a new understanding of our perceptions of objects and the world. Secure attachment leads to possessing a positive view of self and a positive view of others. However, the insecure attachment may cause a negative view of self or/and a negative view of others. Adult attachment characteristics also affect the expression of symptoms and patient-physician relationships (7-10). In addition, attachment styles may influence how people think about drugs and medications since greater attachment security is associated with stronger therapeutic alliances (9).

Personality defines individual differences in characteristic thinking, feeling, and behavior patterns. Several studies revealed the association between personality and health-related behaviors, including medication

adherence (11, 12). The five-factor model of general personality structure is widely used to assess dimensions of personality. Consisting of the domains extraversion, agreeableness, conscientiousness, neuroticism, and openness; the five-factor model gives us a comprehensive understanding of personality (13). Cohen et al. investigated the relationship between medication adherence and personality and revealed extraversion as a significant negative predictor of compliance (14).

Several studies have reported negative attitudes toward psychiatric medications (15, 16). Angermeyer and colleagues investigated public attitudes towards psychotropic medication and found that alternative treatment methods such as yoga, meditation, or natural remedies were preferable to psychotropic medications (15).

It is essential to understand the reasons and correlates of wrong beliefs about antidepressant medications since this may lead to not seeking treatment, discontinuing the treatment, and insufficient adherence to medications in affective and anxiety disorders. In the current literature, several studies have reported wrong beliefs and negative attitudes about psychotropic medication, yet, knowledge regarding the reasons for those negative and prejudiced thoughts is limited. Therefore, we hypothesized that wrong beliefs about antidepressants are relevant to insecure attachment style and personality dimensions. In this study, we aimed to investigate the association between misbeliefs, adult attachment style, and personality.

2. Materials and Methods

Inclusion criteria of the present study were being 18 years old or older and being 65 years old or younger, high school graduate or higher education level, and volunteering to participate in the study. Psychiatrists and psychiatric nurses, and psychologists were excluded from the study. Researchers used a simple random sampling method and cross-sectional research design. The online survey link includes the scales used and has been expanded from social media platforms. Data

collection was completed between February 16, 2021, and February 28, 2021. Before the study, approval was obtained from the Non-Invasive Clinical Research Ethics Committee of Eskisehir Osmangazi University. The study was carried out in line with the principles of the World Medical Association Declaration of Helsinki. All participants gave informed consent, and researchers preserved patient anonymity.

Measurements

Sociodemographic data form: Created by the researchers, the form aims to record the sociodemographic variables of the person, such as age, gender, education level; additionally, previous mental illness, and psychiatric treatment.

Beliefs about antidepressants and depression questionnaire: Two researchers with experience in psychiatry outpatient clinics synthesized common biases with the information from these web pages: <https://www.urmc.rochester.edu/behavioral-health-partners/bhp-blog/march-2019/myths-about-antidepressants.aspx> and <https://www.psychologytoday.com/us/blog/nurturing-self-compassion/201802/5-depression-myths-we-need-stop-believing-today>. As can be seen in Table 1, the questionnaire has eight items, and for every item, there are three choices: "True," "False," "I have no idea."

Experiences in Close Relationships-Revised (ECR-R): The scale developed by Fraley et al. (2000) measures the avoidant attachment and anxious attachment sub-dimensions with 18 questions each (17). It presents a 7-point Likert evaluation to the participant. According to the study of Selçuk and colleagues, the scale is valid and reliable in the Turkish sample (18).

Ten Item Personality Inventory: Developed by Gosling and colleagues, the scale measures five essential personality traits: extraversion, agreeableness, conscientiousness, neuroticism/ emotional stability, and openness to experience (19). It is graded with a seven-point Likert type. Turkish validity and reliability study was conducted by Atak (20).

Statistical Analysis

We calculated the sample size using the G Power program. Comparing the answers to the questionnaire questions and the scale/subscale scores, the effect size was received as 0.25, type I error level 0.05, and power level 80%. Consequently, at least 159 participants must be included in the study. SPSS version 22.0 was used for the analysis of the data obtained. Descriptive statistics were used for the analysis of sociodemographic data. The chi-square test was used to analyze categorical data, the difference between the two means was evaluated with an independent samples t-test, and the difference between the means of three independent groups was calculated by one-way analysis of variance (ANOVA).

3. Results

A total of 207 people participated in the study. The age range of the participants was 18-65; the mean age was 38.24 (\pm 11.90). 67.1% (n = 139) of the participants were female and 32.9% (n = 68) were male. 58.0% (n = 120) were married, 42.0% (n = 87) were single, 52.7% (n = 109) had children. Considering participants' educational status, 17.4% (n = 36) of them were high school graduates, 60.9% (n = 126) were university graduates, and 21.7% had a master's degree or more. 33.8% (n = 70) of the participants had jobs in the health sector. 20.8% (n = 43) had a previous mental illness, and 53.6% (n = 111) had a family relative with a previous psychiatric disorder.

There was no statistically significant difference between men and women regarding sociodemographic data such as age, education level, and mean monthly income ($p > 0.05$ for each). In addition, when the scale scores of women and men were compared, no difference was found between the two groups regarding personality traits subscales and attachment traits ($p > 0.05$ each). Finally, there was no statistically significant difference between men and women regarding a previous psychiatric illness ($p > 0.05$).

Age: Those who chose the option "I have no idea" in the item that says "Once you use an antidepressant, you need to continue for life" had older mean age than the others ($F = 3.696$, $p = 0.026$). Those answering "True" to the item "A person must have a reason to be depressed." had older mean age than those answering "False" ($F = 7.989$, $p < 0.001$).

Gender: The proportion of men who believed that antidepressants would cause personality changes was significantly higher than women ($\chi^2 = 8.474$, $p = 0.014$). More men than women believed that strong enough people would not be depressed ($\chi^2 = 26.719$, $p < 0.001$). A higher proportion of men than women thought that a person must have a reason to be depressed ($\chi^2 = 6.223$, $p = 0.045$). A higher rate of men than women believed that depression could be ended by the person when desired ($\chi^2 = 14.296$, $p = 0.001$).

Education: The answers given to the question about the belief that antidepressants will cause personality change were related to the education level ($\chi^2 = 16.139$, $p = 0.003$). High school graduates answered less "False" than those with higher education, and they marked more "I have no idea" than university graduates ($p < 0.05$ for each). There was a significant relationship between believing that a person needs a reason for depression and education level ($\chi^2 = 10.772$, $p = 0.029$). Those with a master's degree and higher education level opposed this claim at a higher rate than high school graduates ($p < 0.05$).

Psychological characteristics: The relationship between the answers to the questionnaire and personality traits and attachment types was analyzed (Table 1). False beliefs about antidepressants were associated with higher openness to experience scores and higher anxious attachment scores.

4. Discussion

As Castaldelli-Maia et al. stated in their review, perceptions of attitudes toward

depression and antidepressants have different dynamics and different consequences (21). Thus, here we would like to discuss our results separately.

Beliefs about depression: In our sample, younger participants were less likely to have stigmatizing beliefs about depression. Sirey et al.'s study showed that among the patients with depression, younger ones had more significant perceived stigma (22). Age may affect depression-related stigma (21).

The present study shows gender differences in terms of beliefs about depression. Men are more likely to have stigmatizing beliefs about depression, like: "strong enough people would not be depressed," "a person must have a reason to be depressed," and "depression could be ended by the person when desired." The findings were consistent with Griffiths et al.'s study, stating that men had a higher stigma associated with depression (23). It may be related to masculinity inhibiting men from engaging in the help-seeking process (24). Likewise, traditional masculinity is associated with male suicide (25).

In terms of education level, participants showed different attitudes toward depression. Higher education level was associated with less stigmatizing beliefs. Griffiths et al. stated that a lower education level was associated with stigmatizing depression (23). Persons with higher education levels may get better information about mental health.

Our findings showed no relation between psychological characteristics and beliefs about depression. However, Castaldelli-Maia et al. stated that it indicates emotional weakness; it may be affected by the culture (21).

Stigma towards psychiatric disorders, in this case, depression, is a severe public health problem even though it seems like it does not harm therapeutic adherence as the stigma against antidepressants (21).

Table 1. Relationship between the beliefs about antidepressants and depression and, psychological characteristics.

Variable	Beliefs about antidepressants and depression questionnaire	Number of participants (%)	Openness to experience	Ten Item Personality Inventory			Agreeableness	Neuroticism	Experiences in Close Relationships-Revised	Attachment-related anxiety scale
				Conscientiousness	Extraversion			avoidance scale		
1. Antidepressants are addictive.	i. True	76 (%36.7)	F=0.358 p=0.700	F=0.135 p=0.874	F=0.096 p=0.909	F=0.895 p=0.410	F=2.572 p=0.079	F=0.159 p=0.853	F=2.200 p=0.113	
			7.00 ± 2.41	8.07 ± 1.74	8.28 ± 2.01	8.73 ± 2.32	8.40 ± 2.33	2.78 ± 0.90	3.49 ± 1.10	
ii. False	79 (%38.2)	52 (%25.1)	6.73 ± 2.01	7.96 ± 1.22	8.18 ± 1.92	8.56 ± 2.11	9.18 ± 1.95	2.82 ± 1.15	3.45 ± 1.15	
			6.73 ± 2.01	7.96 ± 1.22	8.18 ± 1.92	8.56 ± 2.11	9.18 ± 1.95	2.82 ± 1.15	3.45 ± 1.15	
2. Once you start using antidepressants, you need to continue for a lifetime.	i. True	F=3.207 p=0.043	F=2.229 p=0.110	F=0.367	F=2.890	F=1.048 p=0.352	F=1.840 p=0.161	F=0.465 p=0.629	F=4.595 p=0.011	
			7.52 ± 2.06	8.09 ± 1.95	8.15 ± 1.48	8.19 ± 2.44	8.71 ± 2.19	2.72 ± 1.13	3.09 ± 1.09	
ii. False	14 (%6.8)	F=3.880 p=0.022	7.21 ± 2.00	F=0.483	8.35 ± 1.86	9.21 ± 1.92	9.64 ± 3.15	2.92 ± 0.99	i-iii: 0.012	
			7.21 ± 2.00	F=0.483	8.35 ± 1.86	9.21 ± 1.92	9.64 ± 3.15	2.92 ± 0.99	4.03 ± 1.25	
3. Antidepressants cause personality changes.	i. True	F=3.880 p=0.022	8.04 ± 1.08	F=0.293	8.30 ± 1.94	8.56 ± 2.24	8.82 ± 2.13	2.81 ± 1.02	3.41 ± 1.09	
			8.04 ± 1.08	F=0.293	8.30 ± 1.94	8.56 ± 2.24	8.82 ± 2.13	2.81 ± 1.02	3.41 ± 1.09	
ii. False	47 (%22.7)	F=3.880 p=0.022	6.42 ± 2.46	F=0.746	1.55 ± 0.22	8.23 ± 2.47	8.40 ± 1.92	2.66 ± 1.20	3.04 ± 1.12	
			6.42 ± 2.46	F=0.746	1.55 ± 0.22	8.23 ± 2.47	8.40 ± 1.92	2.66 ± 1.20	3.04 ± 1.12	
4. Antidepressants have terrible side effects.	i. True	33 (%15.9)	7.39 ± 2.13	F=0.693	F=2.890	F=0.716	F=1.175	F=0.487	F=4.215	
			7.39 ± 2.13	F=0.693	F=2.890	F=0.716	F=1.175	F=0.487	p=0.615	p=0.016
ii. False	113 (%54.6)	61 (%29.5)	6.81 ± 2.11	8.09 ± 1.20	8.21 ± 1.72	8.45 ± 2.35	8.45 ± 2.11	2.78 ± 1.08	3.16 ± 1.09	
			6.81 ± 2.11	8.09 ± 1.20	8.21 ± 1.72	8.45 ± 2.35	8.45 ± 2.11	2.78 ± 1.08	3.16 ± 1.09	
5. Antidepressants only numb the person, they do not cure.	i. True	F=1.917 p=0.150	F=0.230	F=0.425	F=0.654	F=0.252	F=2.876	F=0.584	F=4.972	
			F=0.230	F=0.425	F=0.654	F=0.252	F=2.876	F=0.584	p=0.559	p=0.008
ii. False	27 (%13.0)	F=1.917 p=0.150	8.18 ± 1.63	8.19 ± 1.71	8.48 ± 2.49	8.37 ± 3.00	8.92 ± 3.16	2.98 ± 1.06	3.97 ± 1.39	
			8.18 ± 1.63	8.19 ± 1.71	8.48 ± 2.49	8.37 ± 3.00	8.92 ± 3.16	2.98 ± 1.06	3.97 ± 1.39	
6. People who are strong enough don't get depressed.	i. True	F=1.917 p=0.150	7.55 ± 2.62	8.00 ± 2.25	8.30 ± 1.82	8.61 ± 2.15	8.97 ± 1.94	2.74 ± 1.09	3.33 ± 1.06	
			7.55 ± 2.62	8.00 ± 2.25	8.30 ± 1.82	8.61 ± 2.15	8.97 ± 1.94	2.74 ± 1.09	3.33 ± 1.06	
ii. False	136 (%65.7)	F=1.917 p=0.150	6.78 ± 2.08	7.99 ± 1.39	8.09 ± 1.70	8.38 ± 2.19	8.09 ± 2.04	2.80 ± 0.95	3.14 ± 1.02	
			6.78 ± 2.08	7.99 ± 1.39	8.09 ± 1.70	8.38 ± 2.19	8.09 ± 2.04	2.80 ± 0.95	3.14 ± 1.02	
7. A person must have a reason to be depressed.	i. True	F=1.917 p=0.150	6.50 ± 2.45	F=0.858	F=1.216	F=0.673	F=0.966	F=1.014	F=2.095	
			6.50 ± 2.45	F=0.858	F=1.216	F=0.673	F=0.966	F=1.014	p=0.365	p=0.126
ii. False	33 (%15.9)	F=1.917 p=0.150	6.90 ± 2.59	F=0.425	8.42 ± 2.04	8.72 ± 2.36	8.90 ± 2.30	2.56 ± 0.84	3.16 ± 1.12	
			6.90 ± 2.59	F=0.425	8.42 ± 2.04	8.72 ± 2.36	8.90 ± 2.30	2.56 ± 0.84	3.16 ± 1.12	
8. Depression is something one can end if when desired.	i. True	F=1.917 p=0.150	6.81 ± 2.18	8.00 ± 1.55	8.24 ± 1.82	8.55 ± 2.23	8.82 ± 2.10	2.81 ± 1.10	3.46 ± 1.14	
			6.81 ± 2.18	8.00 ± 1.55	8.24 ± 1.82	8.55 ± 2.23	8.82 ± 2.10	2.81 ± 1.10	3.46 ± 1.14	
ii. False	158 (%76.3)	F=1.917 p=0.150	6.81 ± 2.34	7.62 ± 0.71	7.56 ± 1.67	7.93 ± 2.59	8.06 ± 2.56	2.96 ± 1.06	2.96 ± 0.85	
			6.81 ± 2.34	7.62 ± 0.71	7.56 ± 1.67	7.93 ± 2.59	8.06 ± 2.56	2.96 ± 1.06	2.96 ± 0.85	
9. I have no idea	i. True	F=0.180 p=0.835	F=0.180	F=0.180	F=1.649	F=0.814	F=1.771	F=1.463	F=0.022	
			F=0.180	F=0.180	F=1.649	F=0.814	F=1.771	F=1.463	p=0.978	p=0.978
ii. False	89 (%43.0)	F=0.180 p=0.835	6.71 ± 2.61	7.97 ± 1.71	8.28 ± 1.90	8.30 ± 2.49	8.98 ± 2.47	2.82 ± 1.10	3.38 ± 1.19	
			6.71 ± 2.61	7.97 ± 1.71	8.28 ± 1.90	8.30 ± 2.49	8.98 ± 2.47	2.82 ± 1.10	3.38 ± 1.19	
10. Depression is something one can end if when desired.	i. True	F=0.180 p=0.835	6.89 ± 1.92	8.00 ± 1.33	8.30 ± 1.89	8.71 ± 2.11	8.76 ± 1.94	2.68 ± 0.97	3.38 ± 1.11	
			6.89 ± 1.92	8.00 ± 1.33	8.30 ± 1.89	8.71 ± 2.11	8.76 ± 1.94	2.68 ± 0.97	3.38 ± 1.11	
ii. False	21 (%10.1)	F=0.180 p=0.835	6.95 ± 2.06	8.19 ± 0.81	7.52 ± 1.28	8.71 ± 2.02	8.00 ± 1.67	3.10 ± 1.24	3.32 ± 0.95	
			6.95 ± 2.06	8.19 ± 0.81	7.52 ± 1.28	8.71 ± 2.02	8.00 ± 1.67	3.10 ± 1.24	3.32 ± 0.95	
11. I have no idea	i. True	F=0.180 p=0.835	F=0.506	F=0.506	F=0.321	F=2.045	F=0.547	F=1.943	F=1.683	
			F=0.506	F=0.506	F=0.321	F=2.045	F=0.547	F=1.943	p=0.188	p=0.188
ii. False	50 (%24.2)	F=0.180 p=0.835	7.94 ± 1.76	7.04 ± 2.67	8.36 ± 2.13	8.64 ± 2.39	8.64 ± 2.63	2.53 ± 0.95	3.19 ± 1.21	
			7.94 ± 1.76	7.04 ± 2.67	8.36 ± 2.13	8.64 ± 2.39	8.64 ± 2.63	2.53 ± 0.95	3.19 ± 1.21	
12. I have no idea	i. True	F=0.180 p=0.835	6.82 ± 2.11	8.08 ± 1.45	8.21 ± 1.87	8.52 ± 2.17	8.91 ± 2.01	2.86 ± 1.10	3.49 ± 1.10	
			6.82 ± 2.11	8.08 ± 1.45	8.21 ± 1.87	8.52 ± 2.17	8.91 ± 2.01	2.86 ± 1.10	3.49 ± 1.10	
ii. False	34 (%16.4)	F=0.180 p=0.835	6.50 ± 2.06	7.82 ± 0.96	8.02 ± 1.26	7.94 ± 2.41	8.52 ± 2.03	2.86 ± 1.01	3.21 ± 1.03	
			6.50 ± 2.06	7.82 ± 0.96	8.02 ± 1.26	7.94 ± 2.41	8.52 ± 2.03	2.86 ± 1.01	3.21 ± 1.03	

Beliefs about antidepressants: Older participants were likelier to choose the option "I have no idea" in the item that says, "Once you use an antidepressant, you need to continue for life ." Kessing et al. also found that age is the main predictor for knowledge that bipolar and depressive patients have about antidepressants (26). Studies conducted on the general population also showed that older people had less correct knowledge about antidepressant medications and were more critical towards depression treatment (27, 28).

Male participants also had more likely to think antidepressants may cause personality changes. We know that gender shapes men's help-seeking attitudes and experiences of depression (29). Stereotypic male role was also significantly related to negative attitudes toward help-seeking (29). Antidepressants are known to fix depressive moods and anxiety. However, decreasing emotional vitality is a disturbing experience related to antidepressant medication patients are bothered. We think that decreased emotional vitality may perceive as a personality change in the general population. Gibson et al. also stated that male participants reported conflict about the sexual and emotional adverse effects of antidepressants and the participants stated that antidepressant use was "robbing them of emotional vitality" in their qualitative study (30).

We found that lower educational-level participants thought antidepressants might cause personality change. It is consistent with the results of the study indicated that participants who had a university degree were less likely to think of antidepressants as harmful (31). Blanc et al. also declared that stigma towards antidepressant medication, even in nursing students, and education improves their representations (32). People with a higher education degree may be able to access the correct information.

Individuals with high openness are known to perceive less dangerousness and delay the emotional judgments of others (33). However, to our findings, openness to experience was associated with stigmatizing thoughts such as "Once you start using antidepressants, you

need to continue for a lifetime" and "antidepressants cause personality change," surprisingly. In contrast, Yuan et al. reported that openness to experience and stigma of mental disorders had a negative relationship, and being open-minded may positively affect thoughts about mental disorders and patients with mental disorders (34). Szeto et al. indicated that different facets of personality traits take discrete roles in perceiving situations (35). Further studies designed with facet-level analyses of personality may solve this conflict.

Anxious attachment style was also associated with stigmatizing beliefs about antidepressants. An anxious attachment style is known to lead to a negative self/world image (36). People with anxious attachment styles may experience antidepressants as dangerous as a result of their non-safe world imagination. In their preliminary study, Riggs et al. reported that insecure adult attachment style was related to self-stigma in HIV + adults (37). A study investigating attachment style and mental health stigma among adolescents also revealed a significant relationship between insecure attachment style and stigma (38).

Our study gives a new perspective on stigma and attachment relationships, yet it has some limitations. Our online data collection method brought some advantages and disadvantages. It allowed us to reach a broader spectrum of the community but also produced a bias that only participants with an internet connection got involved in the study. Additionally, psychiatrists, psychiatric nurses, and psychologists were excluded from the present study. However, a simple random sampling method may have supplied a sample with higher education than the general population. Persons with a background in medicine or pharmacy would have good knowledge of depression and antidepressants. Our results should be evaluated by considering those.

5. Conclusions

Since depression is a psychiatric disorder that tends to become chronic and causes disability, effective treatment of depression is vital.

Insufficient adherence to antidepressant medication is a significant barrier to effective depression treatment and is known to be related to stigmatizing beliefs about depression and antidepressant use. This study reveals the relationship between attachment style, personality traits, and beliefs about antidepressant medication, in addition to correlates of wrong beliefs about depression.

In light of this information, interventions addressing wrong beliefs about depression should provide basic information about the disease. Clinicians aiming to provide proper knowledge about antidepressants should prioritize a trusting relationship.

REFERENCES

1. World Health Organization. Methods and data sources for global burden of disease 2000-2019. Global Health Estimates Technical Paper WHO/DDI/DNA/GHE/2020.3. Geneva: World Health Organization; 2020 Last accessed 02.02.2023 https://www.who.int/docs/default-source/global-health-estimates/GlobalBurden_method_2000_2019.pdf
2. Thunander Sundbom L, Bingefors K, Hedborg K, Isacson D. Are men under-treated and women over-treated with antidepressants? Findings from a cross-sectional survey in Sweden. *BJPsych Bull.* 2017;41:145-150.
3. Burman ME, McCabe S, Pepper CM. Treatment practices and barriers for depression and anxiety by primary care advanced practice nurses in Wyoming. *Journal of the American Academy of Nurse Practitioners.* 2005;17:370-80.
4. Sareen J, Jagdeo A, Cox BJ, Clara I, ten Have M, Belik SL et al. Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatr Serv.* 2007;58:357-364.
5. Manos RC, Rusch LC, Kanter JW, Clifford LM. Depression self-stigma as a mediator of the relationship between depression severity and avoidance. *Journal of Social and Clinical Psychology.* 2009;28:1128-43.
6. Cheng H-L, McDermott RC, Lopez FG. Mental health, self-stigma, and help-seeking intentions among emerging adults: An attachment perspective. *The Counseling Psychologist.* 2015;43:463-87.
7. Adams GC, McWilliams LA, Wrath AJ, Adams S, De Souza D. Relationships between patients' attachment characteristics and views and use of psychiatric treatment. *Psychiatry research.* 2017;256:194-201.
8. Ciechanowski PS, Walker EA, Katon WJ, Russo JE. Attachment theory: a model for health care utilization and somatization. *Psychosomatic medicine.* 2002;64:660-7.
9. Diener MJ & Monroe JM. The relationship between adult attachment style and therapeutic alliance in individual psychotherapy: a meta-analytic review. *Psychotherapy (Chic).* 2011;48:237-248.
10. Eng W, Heimberg RG, Hart TA, Schneier FR, Liebowitz MR. Attachment in individuals with social anxiety disorder: the relationship among adult attachment styles, social anxiety, and depression. *Emotion.* 2001;1:365-380.
11. Bogg T & Roberts BW. Conscientiousness and health-related behaviors: a meta-analysis of the leading behavioral contributors to mortality. *Psychological bulletin.* 2004;130:887.
12. Jerant A, Chapman B, Duberstein P, Robbins J, Franks P. Personality and medication non-adherence among older adults enrolled in a six-year trial. *Br J Health Psychol.* 2011;16:151-169.
13. Widiger TA, Lowe JR. Five-factor model assessment of personality disorder. *J Pers Assess.* 2007;89:16-29.
14. Cohen NL, Ross EC, Bagby RM, Farvolden P, Kennedy SH. The 5-factor model of personality and antidepressant medication compliance. *The Canadian Journal of Psychiatry.* 2004;49:106-13.
15. Angermeyer MC, Däumer R, Matschinger H. Benefits and risks of psychotropic medication in the eyes of the general public: results of a survey in the Federal Republic of Germany. *Pharmacopsychiatry.* 1993;26:114-120.
16. Fischer W, Goerg D, Zbinden E, Guimon J. Determining factors and the effects of attitudes towards psychotropic medication. In: Guimón J, Fischer W, Sartorius N (eds): The image of madness: The public facing mental illness and psychiatric treatment. 162-186. Karger, 1999.
17. Fraley RC, Waller NG, Brennan KA. An item response theory analysis of self-report measures of adult attachment. *J Pers Soc Psychol.* 2000;78:350-365.
18. Selçuk E, Günaydin G, Sümer N, Uysal A. Yetişkin Bağlanma Boyutları İçin Yeni Bir Ölçüm: Yakın İlişkilerde Yaşantılar Envanteri-II'nin Türk Örnekleminde Psikometrik Açısından Değerlendirilmesi [A New Scale Developed to Measure Adult Attachment Dimensions: Experiences in Close Relationships-Revised (ECR-R) - Psychometric Evaluation in a Turkish Sample]. *Türk Psikoloji Yazıları.* 2005.
19. Gosling SD, Rentfrow PJ, Swann Jr WB. A very brief measure of the Big-Five personality domains. *Journal of Research in personality.* 2003;37:504-28.
20. Atak H, Kapçı EG, Çok F. Evaluation of the Turkish version of the multi-measure agentic personality scale. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences.* 2013;26:36.
21. Castaldelli-Maia JM, Scomparini LB, Andrade AG, Bhugra D, de Toledo Ferraz Alves TC, D'Elia G. Perceptions of and attitudes toward antidepressants:

- stigma attached to their use--a review. *J Nerv Ment Dis.* 2011;199:866-871.
22. Sirey JA, Bruce ML, Alexopoulos GS, et al. Perceived stigma as a predictor of treatment discontinuation in young and older outpatients with depression. *Am J Psychiatry.* 2001;158:479-481.
23. Griffiths KM, Christensen H, Jorm AF. Predictors of depression stigma. *BMC Psychiatry.* 2008;8:25.
24. Seidler ZE, Dawes AJ, Rice SM, Oliffe JL, Dhillon HM. The role of masculinity in men's help-seeking for depression: A systematic review. *Clin Psychol Rev.* 2016;49:106-118.
25. Coleman D, Feigelman W, Rosen Z. Association of High Traditional Masculinity and Risk of Suicide Death: Secondary Analysis of the Add Health Study. *JAMA Psychiatry.* 2020;77:435-437.
26. Kessing LV, Hansen HV, Demyttenaere K, Bech P. Depressive and bipolar disorders: patients' attitudes and beliefs towards depression and antidepressants. *Psychol Med.* 2005;35:1205-1213.
27. Fisher LJ & Goldney RD. Differences in community mental health literacy in older and younger Australians. *International journal of geriatric psychiatry.* 2003;18:33-40.
28. Yoder CY, Shute GE, Tryban GM. Community recognition of objective and subjective characteristics of depression. *Am J Community Psychol.* 1990;18:547-566.
29. Good GE, Dell DM, Mintz LB. Male role and gender role conflict: Relations to help seeking in men. *Journal of counseling psychology.* 1989;36:295
30. Gibson K, Cartwright C, Read J. Conflict in men's experiences with antidepressants. *American journal of men's health.* 2018;12:104-16.
31. Jorm AF, Christensen H, Griffiths KM. Belief in the harmfulness of antidepressants: results from a national survey of the Australian public. *J Affect Disord.* 2005;88:47-53.
32. Blanc J-V, Mouchabac S, Nuss P, Malandain L, Lapidus N, Ferreri F. The effects of education in psychiatry on attitudes towards antidepressants in nursing students: A cross-sectional study. *Nurse education in practice.* 2020;45:102781.
33. Brown SA. The contribution of previous contact and personality traits to severe mental illness stigma. *American Journal of Psychiatric Rehabilitation.* 2012;15:274-89.
34. Yuan Q, Seow E, Abidin E, et al. Direct and moderating effects of personality on stigma towards mental illness. *BMC Psychiatry.* 2018;18:358.
35. Szeto AC, O'Neill TA, Dobson KS. The association between personality and individual differences and stigma toward people with mental disorders. *American Journal of Psychiatric Rehabilitation.* 2015;18:303-32.
36. Levy KN, Ellison WD, Scott LN, Bernecker SL. Attachment style. *J Clin Psychol.* 2011;67:193-203.
37. Riggs SA, Vosvick M, Stallings S. Attachment style, stigma and psychological distress among HIV+ adults. *J Health Psychol.* 2007;12:922-936.
38. Zhao W, Young RE, Breslow L, Michel NM, Flett GL, Goldberg JO. Attachment style, relationship factors, and mental health stigma among adolescents. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement.* 2015;47:263.

Ethics

Ethics Committee Approval: This study was approved by the Non-Invasive Clinical Research Ethics Committee of Eskisehir Osmangazi University (Decision no:05, Date: 26.01.2021)

Informed Consent: All participants gave informed consent online.

Authorship Contributions: Conceptualization İGYK; Data curation, İGYK, MEÖ; Funding acquisition, N/A; Investigation, İGYK, MEÖ; Methodology, İGYK; Project administration, İGYK, MEÖ; Supervision, İGYK, MEÖ; Writing-original draft, İGYK, MEÖ, Writing-review & editing, İGYK, MEÖ.

Copyright Transfer Form: Copyright Transfer Form was signed by all authors.

Peer-review: Internally peer-reviewed.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.