

Relationship between Internalized Stigmatization and Treatment Adherence among Syrian Refugees with Mental Disorders

Ruhsal Bozukluğu olan Suriye Uyruklu Göçmenlerde İçselleştirilmiş Damgalanma ve Tedaviye Uyum Arasındaki İlişki

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ABSTRACT

Objective: Syrian refugees in Türkiye face significant mental health challenges, including high rates of disorders such as depression and post-traumatic stress disorder, compounded by internalized stigma and barriers to treatment adherence. Understanding the relationship between internalized stigma and treatment adherence is critical for developing effective mental health interventions for this population. This study aimed to assess the levels of internalized stigma and treatment adherence among Syrian refugees in Türkiye using psychotropic medication and to investigate the relationship between these variables.

Methods: A cross-sectional, correlational study was conducted in Istanbul from January to May 2024, involving 110 Syrian refugees diagnosed with mental disorders and prescribed psychotropic medication. Data were collected using random sampling through the Information Form, the Arabic version of the Internalized Stigma of Mental Illness Scale (ISMI), and the Medication Adherence Reporting Scale (MARS).

Results: No significant correlation was found between internalized stigma (ISMI) and treatment adherence (MARS) ($r = -0.16$, $p = 0.96$). However, gender and having children were significant predictors of internalized stigma ($R^2 = 0.21$, $p < 0.001$), with females and participants with children reporting higher stigma levels. Treatment adherence was moderate, with no significant associations with sociodemographic or mental health-related characteristics.

Conclusion: While internalized stigma did not significantly correlate with treatment adherence, gender and parental status were key determinants of stigma. Mental health professionals should focus on identifying factors affecting treatment adherence and implement targeted interventions to reduce internalized stigma, particularly for female refugees and those with children, to improve mental health outcomes.

Keywords: Treatment adherence, refugees, social stigmatization

ÖZ

Amaç: Türkiye'deki Suriye uyruklu göçmenler, depresyon ve travma sonrası stres bozukluğu gibi yüksek oranda ruhsal bozukluklarla karşı karşıya olup, bu durum içselleştirilmiş damgalanma ve tedaviye uyum engelleriyle daha da karmaşık hale gelmektedir. İçselleştirilmiş damgalanma ile tedaviye uyum arasındaki ilişkinin anlaşılması, bu nüfus için etkili ruhsal sağlık müdahalelerinin geliştirilmesi açısından kritik öneme sahiptir. Bu çalışma, Türkiye'deki psikotrop ilaç kullanan Suriye uyruklu göçmenlerin içselleştirilmiş damgalanma ve tedaviye uyum düzeylerini değerlendirmeyi ve bu iki değişken arasındaki ilişkiyi incelemeyi amaçlamıştır.

Yöntem: Kesitsel ve ilişki arayıcı bir çalışma, Ocak-Mayıs 2024 tarihleri arasında İstanbul'da, ruhsal bozukluk tanısı almış ve psikotrop ilaç kullanan 110 Suriye uyruklu göçmenle gerçekleştirilmiştir. Veriler, gelişigüzel örnekleme yöntemiyle Bilgi Formu, Ruhsal Hastalıkların İçselleştirilmiş Damgalanması Ölçeği (RHİDÖ) Arapça Formu ve İlaç Uyumunu Bildirim Ölçeği (İÜBÖ) kullanılarak toplanmıştır.

Bulgular: İçselleştirilmiş damgalanma (RHİDÖ) ile tedaviye uyum (İÜBÖ) arasında anlamlı bir korelasyon bulunmamıştır ($r = -0.16$, $p = 0.96$). Ancak, cinsiyet ve çocuk sahibi olma durumu, içselleştirilmiş damgalanmanın anlamlı belirleyicileri olarak saptanmıştır ($R^2 = 0.21$, $p < 0.001$); kadınlar ve çocuk sahibi olan katılımcılar daha yüksek damgalanma düzeyleri bildirmiştir. Tedaviye uyum orta düzeyde olup, sosyodemografik veya ruhsal sağlıkla ilgili özelliklerle anlamlı bir ilişki bulunmamıştır.

Sonuç: İçselleştirilmiş damgalanma ile tedaviye uyum arasında anlamlı bir ilişki bulunmamakla birlikte, cinsiyet ve ebeveynlik durumu damgalanmanın temel belirleyicileri olarak öne çıkmıştır. Ruh sağlığı uzmanları, tedaviye uyumu etkileyen faktörleri belirlemeye odaklanmalı ve özellikle kadın göçmenler ile çocuk sahibi olanlar için içselleştirilmiş damgalanmayı azaltmaya yönelik hedefe yönelik müdahaleler uygulamalıdır.

Anahtar sözcükler: Göçmenler, sosyal damgalama, tedaviye uyum

Introduction

According to data from the United Nations High Commissioner for Refugees (UNHCR), by April 2024, approximately 120 million people worldwide were forcibly displaced due to war, violence, human rights abuses, and breakdowns in public order. Türkiye and Iran are the leading host countries for refugees, with Türkiye providing refuge to 3.4 million individuals, predominantly Syrians (UNHCR 2024). Refugees face significantly higher risks of physical and mental health challenges compared to host country populations (Byrow et al. 2020, Shahin et al. 2020, Sandahl et al. 2024). Common mental health conditions, such as post-traumatic stress disorder (PTSD), depression, and other psychological disorders, are more prevalent among refugees due to traumatic experiences of conflict, inadequate living conditions, limited social support, and barriers to accessing essential services (Acartürk et al. 2020, Karadağ et al. 2021). Access to mental health care remains a significant challenge for many refugees (Byrow et al. 2020, Acartürk et al. 2021, Sacha et al. 2022, Sandahl et al. 2024). Structural and financial barriers often hinder treatment adherence, as refugees struggle to secure healthcare appointments, communicate effectively with providers, and obtain prescribed medications. These obstacles frequently result in low or nonexistent adherence to psychotropic treatments (Doğan et al. 2019, Taipale et al. 2021, Sandahl et al. 2024).

According to the World Health Organization's (WHO) definition, treatment adherence refers to an individual's adherence to the recommendations of healthcare professionals, encompassing not only prescribed medications but also recommended diet and lifestyle changes (WHO 2003). Treatment adherence is the foundation of chronic disease management (Sandahl et al. 2024); however, 50% of patients do not take their medications as prescribed (WHO 2003). Nonadherence to treatment is a significant problem that may lead to increased mortality, morbidity, and suicide rates, negatively impacting the educational, social, and health outcomes of patients with mental disorders (Kane et al. 2019, Sacha et al. 2022). For this reason, WHO recommends the development of new strategies designed to improve treatment adherence (WHO 2003).

Nonadherence is particularly prevalent among refugees, a population with a high incidence of mental disorders. A systematic review by Sacha et al. (2021), which evaluated the adherence of non-Western refugees to psychotropic drugs, found low adherence levels. Dikeç and Timarcıoğlu (2023) also found that Syrian refugees living in Türkiye displayed low treatment adherence, with psychiatric symptoms worsening as adherence decreased. Identifying factors affecting treatment adherence in refugees is therefore of utmost importance (Sacha et al. 2021).

Several factors—patient-related, treatment regimen-related, health professional-related, psychopathology-related, health system-related, or environment-related—influence treatment adherence. One significant factor is the stigmatization of mental disorders, which remains prevalent in most cultures and countries (Dicomo and Mychailyszyn 2021, Sacha et al. 2022). Stigma affects individuals' attitudes toward mental disorders and contributes to internalized stigma. A study in Germany found that internalized stigmatization among Syrian nationals negatively impacted mental health outcomes (Renner et al. 2021), while a systematic review examining barriers to accessing mental health and psychosocial services determined that stigma often prevented refugees from seeking help (Satinsky et al. 2019).

Psychiatric and mental health nursing professionals must implement psychosocial interventions to address treatment nonadherence and identify its underlying causes, thereby preventing recurrent patient hospitalizations. Although mental disorders and psychotropic drug use are common among refugees (Sacha et al. 2022), no studies to date have examined the relationship between internalized stigmatization of mental disorders and treatment adherence among refugee populations. This study aims to evaluate this relationship among Syrian refugees living in Türkiye, addressing the following research questions: 1) Is there a relationship between internalized stigma and treatment adherence of Syrian refugees who use psychotropics? 2) Is there a difference between internalized stigma and treatment adherence according to the sociodemographic and mental health-related characteristics of Syrian refugees using psychotropic medications? The study hypothesizes a significant negative relationship between internalized stigma and treatment adherence among Syrian refugees. The data obtained from this study may form the basis for culturally sensitive psychoeducation programs designed to enhance treatment adherence and reduce internalized stigma among Syrian refugees.

Method

Sample and Setting

This study utilized a cross-sectional and correlational design. Data were collected between January and May

2024 through visits to non-governmental organizations, associations, markets, and neighborhoods frequented by Syrian nationals in the Bağcılar and Sultanbeyli districts of Istanbul, where many refugees reside. Two researchers (ET, HB) visited these locations and invited individuals meeting the study's inclusion criteria to participate.

The study population comprised Syrian refugees living in Türkiye who had been diagnosed with a mental disorder and prescribed psychotropic medication. A total of 110 individuals who could be contacted during the specified period and consented to participate formed the sample. A post hoc power analysis using G*Power indicated a power of 0.99 at a 95% confidence interval and a 0.05 significance level, with a correlation coefficient of 0.5. Inclusion criteria required participants to be 18 years or older, of Syrian nationality, literate in Arabic, diagnosed with a mental disorder, prescribed psychotropic medication within the previous three months, and willing to participate. Participants were queried about their medication use and duration prior to inclusion. Exclusion criteria included failure to complete data collection forms, not having been prescribed psychotropic medication in the previous three months, not having a diagnosed mental disorder, or not providing consent. Forty-eight individuals were excluded because they had not been diagnosed with a mental disorder or prescribed psychotropic medication, and 21 declined to participate.

Procedure

Ethical approval was obtained from the Non-Interventional Clinical Research Ethics Committee of Fenerbahçe University (number 105.2023fbu) on September 13, 2023, prior to the study's commencement. Institutional permission was not required, as the study was conducted in community settings. Written informed consent was obtained from all participants before data collection began.

Data were collected using self-report scales, including the Information Form, the Internalized Stigma of Mental Illness Scale (ISMI), and the Medication Adherence Reporting Scale (MARS). The ISMI was administered in Arabic, while the other forms were in Turkish, with questions translated and finalized by Arabic-speaking researchers.

Measures

Information Form

Developed by the researchers, this form included questions about participants' age, gender, economic status, education level, mental disorder diagnosis, duration of mental disorders, medications used, and length of time spent in the host country (Shahin et al. 2020, Sacha et al. 2022, Dikeç and Timarcioğlu 2023, Sandahl et al. 2024).

Internalized Stigma of Mental Illness Scale (ISMI) - Arabic Version

Developed by Ritsher et al. (2003), the ISMI is a 29-item self-report scale assessing internalized stigmatization. The total score is calculated by summing and averaging the items, with higher scores indicating more severe internalized stigma. Scores range from 4 to 91. The ISMI includes five subscales: alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance. The total score is derived by subtracting the stigma resistance subscale score from the sum of the other subscales. The Arabic version's validity and reliability were established by Kira et al. (2015), with Cronbach's alpha coefficients of 0.94 for the total score, 0.86 for alienation, 0.79 for stereotype endorsement, 0.81 for discrimination experience, 0.86 for social withdrawal, and 0.61 for stigma resistance. In this study, the Cronbach's alpha coefficient for the total ISMI score was 0.73.

Medication Adherence Reporting Scale (MARS)

Developed by Horne (2004), the Turkish validity and reliability of this scale were established by Şen et al. (2019). The MARS is a five-item, five-point Likert scale measuring medication adherence in adults with chronic physical or mental illnesses. The total score, ranging from 5 to 25, is obtained by summing the item scores. Higher scores indicate greater adherence, while lower scores indicate nonadherence. In this study, the Cronbach's alpha coefficient for the MARS was 0.66.

Statistical Analysis

Data were analyzed using SPSS 25.0. Descriptive statistics, including number, percentage, mean, and standard deviation, were used to summarize the data. Normality of scale scores and numerical variables was assessed

using kurtosis and skewness values (-1.96 to 1.96) (Erdoğan et al. 2014). All quantitative variables, except the number of hospitalizations, were normally distributed. The Pearson correlation test was used to examine the relationship between the ISMI and MARS scales. Student's t-test was employed for binary variables, and ANOVA was used for variables with three or more categories to compare scale scores across sociodemographic variables.

Simple linear regression was conducted to identify factors influencing internalized stigma, with the model including factors showing significant differences between groups or associations with independent variables. No regression analysis was performed for treatment adherence, as no associated factors were identified. The backward method was used to analyze factors influencing internalized stigmatization. All findings were evaluated at a $p < 0.05$ significance level.

Results

Participants' sociodemographic characteristics are shown in Table 1. The mean age of the participants was 27.55 years (SD = 8.95), 50.9% were male, and 49.1% were married. Comparison of scale scores between the groups showed that the mean total score of the ISMI differed significantly by gender, with the mean total score of females being statistically higher than that of males. The mean total score of the ISMI was also statistically different according to marital status, with the mean total scores of single participants being statistically higher than those of married participants. In addition, the mean total scores of participants with children were statistically higher than those without children. The total ISMI scores of participants with five or more children were significantly higher than those of participants without children (Table 1).

Characteristics	Mean (SD)	Min-Max	ISMI (Test/p)	MARS (Test/p)
Age	27.55 (8.95)	18-63	r: 0.91 p:0.34	r:0.40 p:0.67
Gender	n	%		
Female	54	49.1	t: 4.28	t: -1.70
Male	56	50.9	p<0.001	p: 0.91
Marital Status				
Married	52	49.1	t: -2.64	t: -0.17
Single	56	50.9	p: 0.01	p: 0.86
Educational Status				
Literate	12	10.9	F:2.67 p: 0.05	F:0.20 p: 0.89
Primary School	34	30.9		
Middle or High School	45	40.9		
Bachelor's or Graduate Degree	19	17.3		
Economic Status				
Good	19	17.3	F:0.14	F:1.98
Middle	74	67.3	p: 0.86	p: 0.14
Poor	17	15.5		
Having a Child				
Yes	55	50.0	F: 3.32	t: -1.06
No	55	50	p< 0.001	p: 0.96
Number of Children	n	%		
No child0	55	50	F: 3.33	F: 0.64
One child 1	3	2.7	p: 0.008	p: 0.67
Two children 2	11	10	5>0	
Three children 3	15	13,6		
Four children 4	9	8.2		
Five or more children 5	17	15.5		
Employment	n (%)			
Yes	52	47.3	t: -0.82	t: 1.57
No	58	52.7	p: 0.41	p: 0.11
Duration of Stay in Türkiye (months)	Ortalama (SD)	Min-Max		
	99.82 (36.08)	24-192	r: 0.10 p: 0.30	r: -0.18 p: 0.05

SD: Standard Deviation ; F: One Way ANOVA; t: Student t-test; r: Pearson Correlation; n: Frequency; %: Percent

The mental health-related characteristics of participants are presented in Table 2. Analysis of participants' mental disorder diagnoses showed that 22.7% had been diagnosed with a depressive disorder. Participants diagnosed with mental disorders were treated for an average of 55.36 (34.56) months. Antidepressants were

prescribed to 70.9% of the participants. The mean duration of psychotropic use was 25.56 (24.05) months. A small percentage (9.1%) of the participants had been hospitalized in a psychiatric clinic after being diagnosed with a mental disorder, and the mean number of hospitalizations was 0.15 (0.56). The ISMI and MARS indicated no difference between the groups in terms of mental health-related characteristics.

Characteristics			ISMI (Test/p)	MARS (Test/p)
Diagnosis	n	%		
Depressive Disorders	25	22.7	F: 0.45 p: 0.81	F: 0.79 p: 0.55
Bipolar Disorders	12	10.9		
Anxiety Disorders	23	20.9		
Trauma-Related Disorders	17	15.5		
Obsessive Compulsive Disorders	15	13.6		
Other (Eating Disorders, Substance Use Disorders, Personality Disorders)	18	16.4		
	Mean (SD)	Min-Max	ISMI (Test/p)	MARS (Test/p)
Duration of Diagnosis with Mental Disorders (months)	55.36 (34.56)	5-144	r: 0.03 p: 0.74	r: 0.16 p:0.08
Duration of Medication Use (months)	25.56 (24.05)	3-120	r: 0.09 p:0.34	r: -0.00 p:0.94
Psychotropics	n	%		
Antipsychotics	21	19.1	F: 0.80	F: 0.03
Antidepressants	78	70.9	p: 0.45	p: 0.96
Other	11	10.0		
Hospitalization				
Yes	10	9.1	t: -1.43 p: 0.15	t: -1.13 p: 0.25
No	100	90.9		
Number of Hospitalizations	Mean (SD)	Min-Max	ISMI (Test/p)	MARS (Test/p)
	0.15 (0.56)	0-3	r: -0.09 p :0.30	r: -0.42 p: 0.66

SD: Standard Deviation ; F: One Way ANOVA; t: Student t-test; r: Pearson Correlation; n: Frequency; %: Percent

Table 3 shows the mean total scores of the scales, and no statistically significant relationship was found between the mean total scores of the ISMI and MARS.

	Mean (SD)	Min-Max	r/p
ISMI	66.90 (10.01)	43-89	r: -0.16
MARS	19.12 (3.59)	11-25	p:0.96

SD: Standard Deviation; r: Pearson Correlation

The simple linear multiple regression analysis performed to determine the effect of gender, marital status, status of having children, and number of children (which were found to be significantly different or correlated with the total score of the ISMI) confirmed that the model was statistically significant (F:7.80, $p < 0.001$), with number of children explaining 22.9% of the ISMI variance (Adjusted R-squared = 0.22). The backward method was used to examine the variables having higher explanatory power. In this method, the model is established with its relevant variables and then tested, after which those displaying the most significant impact are examined. Accordingly, participants' gender and number of children were found to be statistically significant (explanatory power) determinants of the ISMI ($R^2 = 0.21$), with gender and number of children explaining 20.2% of the ISMI (Adjusted R Square = 0.20) (Table 4). In other words, these factors are predictors of the ISMI.

Dependent Variable	Independent Variables	B	ß	t	P
ISMI	Constant	87.41		7.52	<0.001
	Gender	-6.98	-0.35	-4.03	<0.001
	Marital Status	-3.99	-0.20	-1.11	0.28
	Having a Child	-4.09	-0.20	-0.94	0.23
	Number of Children	1.31	0.25	1.44	0.17
ISMI	Constant	74.84		25.57	<0.001
	Gender	-6.87	-0.34	-3.99	<0.001
	Having a Child	1.40	0.27	3.18	0.002
Model (p)<0.001			R ² : 0.21		

Discussion

This study examined the relationship between internalized stigma and treatment adherence among Syrian refugees living in Türkiye. It found that most participants were diagnosed with depressive and anxiety disorders and were prescribed antidepressants. The literature confirms that depression and post-traumatic stress disorder (PTSD) are the most common mental health diagnoses among refugees, with high rates of antidepressant use (Fauk et al. 2021, Boettcher et al. 2021, Moses and Holmes 2022, Sandahl et al. 2024).

Participants in this study exhibited moderate levels of treatment adherence and internalized stigma. Refugees, often facing trauma and lower education levels due to migration, tend to experience higher self-stigma related to mental disorders compared to host populations (Byrow et al. 2020). Studies involving Syrian refugees report that stigmatization is prevalent and influences help-seeking behavior (Moses and Holmes 2022). A systematic review by Byrow et al. (2020) highlighted that beliefs, attitudes, and cultural factors significantly affect treatment-seeking behavior among refugees. The review identified 16 studies, including qualitative research, indicating that mental disorder diagnoses often lead to disapproval and shame from family or community members, resulting in fear of discrimination and exclusion. The dual burden of being a refugee and having a mental disorder may exacerbate internalized stigma.

Contrary to expectations, this study found no significant relationship between treatment adherence and internalized stigma. Although the literature suggests that perceived discrimination and internalized stigma negatively impact treatment adherence in refugees (Sacha et al. 2022), the absence of a correlation in this study suggests that external factors or barriers may influence treatment adherence more than internalized stigma for this sample. Byrow et al. (2020) noted that while mental health issues are common among refugees, help-seeking behaviors are affected not only by stigma but also by structural barriers such as language difficulties, economic constraints, non-residence status, lack of knowledge about healthcare systems, and distrust of authorities. Additionally, challenges such as inability to speak the host country's language, unfamiliarity with healthcare system structures, and limited access to treatment services can further hinder treatment adherence among refugees adapting to a new environment (Tahir et al. 2022, Moses and Holmes 2022). A qualitative study by Bawadi et al. (2022) on Syrian refugees in Jordan found that insufficient knowledge about mental disorders, structural barriers, and stigmatization prevented adequate use of mental health services. Factors such as refugees' mental health literacy, understanding of psychotropic treatments (Xin et al. 2020, Sacha et al. 2022), treatment regimens, and experiences with side effects (Sandahl et al. 2024) may also affect adherence. Given that treatment adherence is influenced by multiple factors (Dicomo and Mychailyszyn 2021, Sacha et al. 2022), future research should explore additional variables associated with adherence, including in-depth qualitative studies on treatment adherence and internalized stigma.

This study found that gender significantly influenced internalized stigma, with females reporting higher stigma scores than males. Although migration-related stressors affect all refugees, women are disproportionately impacted. Mental disorders are more prevalent among refugee women, who may also access fewer mental health services due to gender role obligations (e.g., childcare or eldercare) or cultural norms (Tahir et al. 2022). In Middle Eastern cultures, women with mental disorders may face barriers to marriage or motherhood, leading to heightened internalized stigma. A systematic review by Tahir et al. (2022) found that stigmatization affected Syrian women seeking mental health services, with some labeled as "crazy," resulting in feelings of shame, guilt, and fear. Similarly, Bawadi et al. (2022) reported that women experienced greater stigmatization and anxiety and were hesitant to discuss psychosocial services with their husbands.

The study also identified parental status as a predictor of internalized stigma. No prior studies have specifically examined the relationship between having children and stigmatization in refugees. However, parents may fear that their children could also face stigmatization, potentially contributing to this finding. Additionally, single participants reported higher ISMI scores than married participants. A study of Syrian refugees in Germany similarly found that marital status influenced internalized stigma (Bar et al. 2021). This may be attributed to the social support provided by marriage, which could mitigate stigmatization, or to single individuals perceiving mental disorders as a barrier to marriage.

This study ensured participant confidentiality and protection from disclosure. However, it did not assess participants' knowledge of mental disorders or the structural barriers they faced, which may limit the findings. The use of Turkish-language Information Form and MARS scales may have influenced participants' responses, representing another limitation. Given the complexity of treatment adherence and its multifaceted influences, future studies should investigate structural barriers and additional variables in depth.

Conclusion

This study found that being female and having children were associated with higher internalized stigma, but treatment adherence was not significantly related to stigma. Future research should explore the stigmatization experiences and treatment adherence of female Syrian refugees in greater depth. Structured programs targeting women and refugees with children could reduce internalized stigma among Syrian refugees with mental disorders, potentially benefiting others in their communities. Psychiatric and mental health nurses working in mental health services, refugee health centers, schools, and non-governmental organizations should provide education about mental disorders, their causes, and associated myths to challenge negative beliefs. Additionally, these professionals should identify and address barriers to psychotropic treatment adherence and regularly monitor adherence to improve outcomes.

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