





# Factors Affecting Recovery in Patients Receiving Treatment for a Mental Illness

## *Ruhsal Bozukluk Tedavisi Görmekte Olan Hastalarda İyileşmeyi Etkileyen Faktörler*

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### ABSTRACT

**Objective:** This study sought to identify the sociodemographic and clinical factors that influence the recovery process among individuals undergoing treatment for mental illness in both inpatient and outpatient psychiatric settings.

**Methods:** A cross-sectional study was conducted with a sample of 343 patients recruited from the psychiatric inpatient and outpatient departments of a university training and research hospital, and from a public hospital's psychiatry department and affiliated community mental health center. Data were collected using a sociodemographic and clinical questionnaire and the Mental Health Recovery Measure (MHRM).

**Results:** The mean age of participants was 37.41 years ( $\pm 13.70$ ). The sample was characterized by a high proportion of middle school graduates (40.1%) and unemployed individuals (55.4%). Clinically, 35.9% had a treatment duration of 1-5 years, 30.9% carried a primary diagnosis of depression, and 17.5% had a comorbid physical illness. Analysis of MHRM scores in relation to participant characteristics revealed that marital status, treatment institution, treatment modality, primary diagnosis, level of family social support, self-reported quality of life, smoking status, and history of suicide attempts were statistically significant determinants of recovery. In contrast, factors including gender, educational attainment, employment status, income, residence, medication adherence, participation in social activities, exercise, and dietary habits did not demonstrate a significant association with recovery scores.

**Conclusion:** The findings indicate that while certain clinical and social support variables are significant predictors of recovery, a range of conventional socioeconomic indicators—such as educational level, employment, and income—exerted no statistically significant influence in this cohort. This suggests that the determinants of mental health recovery may be more closely linked to specific psychosocial and clinical factors than to broader socioeconomic status.

**Keywords:** Psychiatric patient, recovery, influencing factors

### ÖZ

**Amaç:** Bu çalışma, psikiyatrik yataklı ve ayaktan tedavi gören ruhsal hastalığı olan bireylerde iyileşme sürecini etkileyen sosyodemografik ve klinik faktörleri belirlemeyi amaçlamıştır.

**Yöntem:** Kesitsel tipteki bu çalışmanın örneklemini, bir üniversite eğitim ve araştırma hastanesinin psikiyatri servisi ile polikliniğinden ve bir devlet hastanesinin psikiyatri servisi ile toplum ruh sağlığı merkezinden olmak üzere toplam 343 hastadan oluşmuştur. Veriler, bir anket formu ve Ruh Sağlığında İyileşme Ölçeği (RSİÖ) kullanılarak toplanmıştır.

**Bulgular:** Katılımcıların yaş ortalaması 37,41  $\pm$  13,70 yıl olup, %40,1'i ortaokul mezunu ve %55,4'ü işsizdi. Ayrıca, katılımcıların %35,9'u 1-5 yıldır tedavi görmekteydi, %30,9'una depresyon tanısı konulmuş ve %17,5'inin ruhsal hastalığına ek olarak fiziksel bir hastalığı bulunmaktaydı. RSİÖ puan ortalamalarının katılımcıların sosyodemografik ve klinik özellikleri ile karşılaştırılması, medeni durum, tedavinin alındığı kurum, tedavi türü, tanı, aileden alınan sosyal destek, yaşam kalitesi, sigara kullanımı ve intihar girişimi öyküsünün iyileşmeyi istatistiksel olarak anlamlı düzeyde etkilediğini gösterdi. Öte yandan, cinsiyet, eğitim düzeyi, meslek, gelir, yaşanılan yer, ilaç tedavisine uyum, sosyal aktivitelere katılım, istihdam durumu, egzersiz yapma ve sağlıklı beslenme gibi faktörlerin iyileşme üzerinde anlamlı bir etkisi olmadığı saptandı.

**Sonuç:** Bu çalışmada, eğitim düzeyi, istihdam durumu ve gelir gibi sosyoekonomik statüyü yansıtan faktörlerin iyileşme üzerinde istatistiksel olarak anlamlı bir etkisi gözlemlenmezken, klinik ve psikososyal destekle ilişkili değişkenlerin iyileşmenin anlamlı belirleyicileri olduğu bulunmuştur. Bu bulgular, ruh sağlığında iyileşmenin belirleyicilerinin, geniş sosyoekonomik statüden ziyade spesifik psikososyal ve klinik faktörlerle daha yakından ilişkili olabileceğine işaret etmektedir.

**Anahtar sözcükler:** Psikiyatrik hasta, iyileşme, etkili faktör

## Introduction

Recovery is a concept addressed across multiple disciplines, including medicine, nursing, public health, sociology, and spirituality. In the context of psychiatric disorders, recovery refers to living a life with confidence and hope, where individuals, with adequate support, can achieve most of their life goals and sustain their social and professional roles without being constrained by illness (Şenocak et al. 2019). Additionally, the absence of relapse for at least two years and the lack of need for medical treatment are considered recovery criteria (Lunt 2002). Recovery can also be described as a stage in which individuals with mental health problems gain and maintain

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**Received:** 12.08.2025 | **Accepted:** 15.10.2025

greater control over their lives. Core components of the recovery approach include self-management, empowerment, holism, peer support, respect, responsibility, hope, and support for living a productive life (Çam & Yalçın 2018, Nişancı 2019).

Psychiatric nurses, who hold a key role among mental health professionals in the recovery process, provide essential support for patients. Their objectives within the recovery approach include encouraging patients to assume greater responsibility, manage symptoms effectively, and enhance life satisfaction by adapting to changes. To achieve these objectives, nurses plan and implement appropriate interventions, ensuring the active involvement of both patients and their families in care (Çam & Aydoğdu Durmuş 2016, Arslan Özkan & Bilgin 2016, Bağ 2018). Various biological, genetic, demographic, familial, and environmental factors may influence both the development and recovery of psychiatric disorders (Çam & Uguryol 2019). Studies have shown that the risk of psychiatric illness is strongly linked to indicators of poverty, such as low education, unemployment, and limited income, as well as to marital problems, insufficient family support, and stigma (Keskin et al. 2012, Ulutaş et al. 2019). However, a review of the literature indicated that there were not enough studies on the investigation of the relationship between these potential risk factors, psychiatric disorders, and recovery processes. Since some psychiatric disorders may arise from patients' interactions with their environment, pathophysiology cannot be explained solely through biological mechanisms, nor can treatment rely exclusively on medical therapies. A more comprehensive approach considers individuals within their biological, social, and cultural contexts (Aktay & Sayar 2021).

Recovery-oriented care is a fundamental component of behavioral health services, including those delivered in integrated settings. As attention to recovery-focused mental health services grows, understanding the recovery processes of individuals with serious mental illness remains a critical challenge (Substance Abuse and Mental Health Services Administration 2019). Early calls to define and understand recovery notably originated from peers and service users themselves. Although recovery is often described as a subjective, self-defined experience that is difficult to operationalize, a substantial body of research has expanded our understanding of recovery and the factors that may facilitate or impede it. This evolving knowledge frequently informs the development of mental health services and care models; however, identifying factors associated with recovery remains challenging.

To better support individuals in recovery, it is essential to examine the factors influencing recovery and their underlying mechanisms. In line with this need, the present study was conducted as an analytical cross-sectional investigation to identify factors affecting recovery among patients receiving psychiatric inpatient and outpatient treatment.

## Method

This study was conducted between March 1 and November 1, 2019, with 343 patients diagnosed with a psychiatric disorder according to DSM-5 criteria. Participants were receiving treatment in the psychiatry department and outpatient clinic of a university training and research hospital, as well as in the psychiatry department and community mental health center of a public hospital in a western province of Turkey. The study utilized data partly drawn from the validity and reliability study of the Mental Health Recovery Measure (MHRM) conducted by Yüksel et al. (2019). Patient selection for the sample followed standard procedures for factor analysis in scale studies, which recommend a sample size of 100-200 participants or approximately 10 participants per item on the scale (Devellis 2003). The study sample was determined based on the criterion that the number of participants should be at least 10 times the number of items on the scale. With 30 items, the minimum sample size was calculated as 300 participants ( $30 \times 10 = 300$ ). To account for potential data loss, an additional 20% was added, resulting in a planned sample of 360 patients. The study was ultimately completed with 343 participants, as 17 individuals chose not to continue during scale administration.

Inclusion criteria were a DSM-5 diagnosis of a psychiatric disorder and voluntary participation. Exclusion criteria included the presence of a secondary mental disorder and/or alcohol or substance use disorder. Data were collected by the researchers (MK, SI) through face-to-face interviews. Participants completed the questionnaire under the supervision of the researchers. No adverse events were reported during data collection (APA 2013).

## Procedure

The study was approved by the Non-Interventional Clinical Research Ethics Committee of the Faculty of Nursing at Adnan Menderes University, Aydın, on February 25, 2019 (decision number: 12381), and conducted in accordance with the Declaration of Helsinki. Patients and their families were informed about the study, and

written consent was obtained before participation. Inclusion criteria were a DSM-5 psychiatric diagnosis and voluntary agreement to participate in the study. Patients with secondary mental disorders and/or alcohol or substance dependence were excluded. Data were collected through face-to-face interviews conducted by the researchers. No adverse events were reported during data collection. Participants completed the Sociodemographic Data Form and MHRM. The MHRM was scored following standard instructions. Descriptive statistics were used to analyze the data, and mean MHRM scores were compared across participants' sociodemographic characteristics.

**Table 1. Participants' sociodemographic characteristics (n=343)**

Variable	n	%
Gender		
Female	210	61.2
Male	133	38.8
Marital Status (n=341)		
Single	190	55.7
Married	151	44.3
Education Level (n=342)		
Illiterate/Literate	19	5.6
Secondary Education	137	40.1
High School	103	30.1
University and Above	83	24.3
Occupation		
Retired	23	6.7
Civil Servant	35	10.2
Worker	49	14.3
Farmer	15	4.4
Self-employed	31	9
Unemployed	190	55.4
Income Level (n=337)		
Income Less Than Expenses	164	48.7
Income Equal to Expenses	146	43.3
Income Greater Than Expenses	27	8
Place of Residence (n=341)		
Village	63	18.5
District	116	34
Province	162	47.5
	n	Mean.±SD
Age	343	37.41±13.70

## Measures

### *The Questionnaire Form*

This form was developed by the researchers based on a review of the literature. It comprises 19 items used to assess patients' sociodemographic characteristics (e.g., age, sex, marital status) and factors considered to influence recovery (Yılmaz & Okanlı 2018, Çam & Yalçın 2018, İpçi et al. 2018, Yıldız et al. 2018, Coşkun & Altun 2018).

### *Mental Health Recovery Measure (MHRM)*

The MHRM, developed by Young et al. (1999) and revised by Young and Bullock (2003), is used to evaluate recovery in mental illnesses. The scale consists of 30 items rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating greater recovery. The validity and reliability of the 30-item form were established in previous studies. The Turkish version, validated by Yüksel et al. (2019), had a Cronbach's alpha of 0.94. In the present study, the alpha value was also 0.94, indicating excellent internal consistency.

## Statistical Analysis

Data were analyzed using SPSS version 21.0. Normality of the variables was assessed by inspecting the Gaussian curve and calculating means, minimum and maximum values, and the significance levels of the Kolmogorov-Smirnov test. For non-normally distributed variables, comparisons between two independent groups were

performed using the Mann-Whitney U test, and comparisons among three or more groups were conducted with the Kruskal-Wallis H test. Bonferroni correction was applied for pairwise comparisons when significant differences were detected. Spearman's correlation coefficient was used to examine relationships between two quantitative variables that did not follow a normal distribution. Descriptive statistics, including percentages, means, and standard deviations, were used to summarize the data. Mean MHRM scores were compared across participants' sociodemographic characteristics using the Mann-Whitney U, Kruskal-Wallis H, and Spearman correlation tests. A p-value of <0.05 was considered statistically significant.

## Results

The study included 343 participants, 61.2% of whom were female, with a mean age of  $37.41 \pm 13.70$  years. More than half (55.7%) were single. Regarding education, 40.1% were secondary school graduates, 55.4% were unemployed, and 48.7% reported that their income was less than their expenses. Nearly half (47.5%) resided in a province (Table 1).

**Table 2. Participants' recovery-related characteristics (n=343)**

Variable	n	%
Hospital Where Treatment Was Received		
University Hospital	133	38.8
State Hospital	210	61.2
Type of Treatment		
Inpatient (Hospitalized in a Clinic)	193	56.3
Outpatient (Polyclinic)	125	36.4
Community Mental Health Center	25	7.3
Diagnosis		
Schizophrenia and Other Psychotic Disorders	67	19.5
Bipolar and Related Disorders	65	19
Obsessive-Compulsive and Related Disorders	47	13.7
Anxiety Disorders	45	13.1
Depressive Disorders	106	30.9
Other	13	3.8
Presence of Physical Illness (n=342)		
No	282	82.5
Yes	60	17.5
Duration of Psychiatric Treatment (n=326)		
Less than 1 year	61	18.7
1-5 years	117	35.9
6-10 years	54	16.6
More than 10 years	94	28.8
Person First Consulted When Experiencing a Problem (n=300)		
Healthcare Professional	118	39.3
Family	148	49.3
Friend	34	11.3
Family Social Support (n=337)		
Very Good	53	15.7
Good	118	35
Moderate	94	27.9
Poor	51	15.1
Very Poor	21	6.2
Quality of Life (n=339)		
Very Good	16	4.7
Good	80	23.6
Moderate	143	42.2
Poor	69	20.4
Very Poor	31	9.1
Factors Contributing to Recovery*		
My Family	220	64.1
Regular Use of Medication	184	53.6
Having Hobbies	130	37.9
Participating in Social Activities	96	28.0
Being Employed	85	24.8

**Table 2. Participants' recovery-related characteristics (n=343)**

Variable	n	%
Doing Sports	83	24.2
Maintaining a Regular and Healthy Diet	81	23.6
Being Accepted as an Individual by Society	78	22.7
Smoking Status (n=341)		
No	152	44.6
Yes	189	55.4
Suicide Attempt (n=341)		
No	207	60.7
Yes	134	39.3
Number of Suicide Attempts	131	2.09±1.34
Age of Onset of Mental Illness	330	27.31±11.61
Number of Hospitalizations	330	2.63±3.02

\*\*More than one item was marked.

**Table 3. Comparison of participants' sociodemographic characteristics and Mental Health Recovery Measure Scores (N=343)**

Variable	n	%	Mental Health Recovery Measure (MHRM)		
			Mean±SD	Test KW, MWU, r	p
Gender					
Female	210	61.2	32.13±9.40	MWU 13486.500	0.593
Male	133	38.8	31.54±10.06		
Marital Status					
Single	190	55.7	30.94±10.01	MWU 12496.500	0.041*
Married	151	44.3	33.05±9.14		
Education Level					
Illiterate/Literate	19	5.6	35.47±7.44	KW 4.570	0.206
Secondary Education	137	40.1	32.26±9.88		
High School	103	30.1	31.86±9.99		
University and Above	83	24.3	30.55±9.23		
Occupation					
Retired	23	6.7	36.60±9.11	KW 7.913	0.161
Civil Servant	35	10.2	30.82±9.22		
Worker	49	14.3	31.71±9.99		
Farmer	15	4.4	34.66±9.22		
Self-employed	31	9	30.12±10.17		
Unemployed	190	55.4	31.65±9.56		
Income Level					
Income Less Than Expenses	164	48.7	31.00±9.50	KW 3.175	0.204
Income Equal to Expenses	146	43.3	33.02±9.69		
Income Greater Than Expenses	27	8	32.18±9.55		
Place of Residence					
Village	63	18.5	32.63±8.75	KW 0.426	0.808
District	116	34	31.79±10.63		
Province	162	47.5	31.81±9.29		
Age	343		37.41±13.70	r= 0.188	0.000*

\* p<0.05, Mean: Arithmetic mean, SD: Standard deviation, MWU: Mann-Whitney U, KW: Kruskal-Wallis, r: Spearman Correlation

In terms of treatment characteristics, 61.2% received care in a state hospital, and 56.3% were inpatients. Depression was the most common diagnosis (30.9%), 17.5% had a comorbid physical illness, and 35.9% had been in treatment for 1-5 years. When facing problems, 49.3% first sought help from family, and 27.9% reported moderate family support. Quality of life was rated as "moderate" by 42.2% of participants.

Participants identified the following factors as contributing to their recovery: family support (64.1%), medication adherence (53.6%), engagement in daily activities (37.9%), participation in social activities (28.0%), employment (24.8%), exercise (24.2%), healthy diet (23.6%), and societal recognition (22.7%). Regarding risk behaviors and clinical history, 55.4% were smokers, 39.3% had attempted suicide (mean number of attempts 2.09 ± 1.34), the mean age at onset of mental illness was 27.31 ± 11.61 years, and the mean number of hospitalizations was 2.63 ± 3.02 (Table 2).

Analysis of sociodemographic characteristics showed that marital status significantly affected recovery (MWU =

12,496.500;  $p = 0.041$ ), and age was positively, though very weakly, correlated with MHRM scores ( $r = 0.188$ ;  $p < 0.001$ ). Sex, education, occupation, income, and place of residence were not significantly associated with recovery ( $p > 0.05$ ) (Table 3).

**Table 4. Comparison of participants' recovery-related characteristics and Mental Health Recovery Measure Scores (N=343)**

Variables			Mental Health Recovery Measure (MHRM)		
				Test KW, MWU	p
Hospital Where Treatment Was Received	n	%	Mean.±SD	MWU 11722.000	0.012*
University Hospital	133	38.8	33.57±6.79		
State Hospital	210	61.2	30.84±10.97		
Type of Treatment				KW 31.539	0.000*
Inpatient (Hospitalized in a Clinic)	193	56.3	34.48±9.23		
Outpatient (Polyclinic)	125	36.4	28.69±8.86		
Community Mental Health Center	25	7.3	28.04±10.84		
Diagnosis				KW 11.690	0.039*
Schizophrenia and Other Psychotic Disorders	67	19.5	32.14±10.00		
Bipolar and Related Disorders	65	19	33.81±9.22		
Obsessive-Compulsive and Related Disorders	47	13.7	33.80±8.17		
Anxiety Disorders	45	13.1	28.82±10.34		
Depressive Disorders	106	30.9	31.51±9.80		
Other	13	3.8	28.00±8.70		
Presence of Physical Illness				MWU 7735.000	0.297
No	282	.5	31.65±9.84		
Yes	60	17.5	33.21±8.64		
Duration of Psychiatric Treatment				KW 1.115	0.773
Less than 1 year	61	18.7	30.19±10.02		
1-5 years	117	35.9	32.07±10.01		
6-10 years	54	16.6	31.74±0.29		
More than 10 years	94	28.8	31.53±9.00		
Person First Consulted When Experiencing a Problem				KW 0.171	0.918
Healthcare Professional	118	39.3	32.64±8.50		
Family	148	49.3	32.15±9.71		
Friend	34	11.3	33.05±11.32		
Family Social Support				KW 26.004	0.000*
Very Good	53	15.7	35.33±8.42		
Good	118	35	34.16±8.78		
Moderate	94	27.9	29.85±9.42		
Poor	51	15.1	29.62±10.79		
Very Poor	21	6.2	26.42±10.63		
Quality of Life				21.663	0.000*
Very Good	16	4.7	35.68±11.20		
Good	80	23.6	35.01±8.84		
Moderate	143	42.2	30.84±9.25		
Poor	69	20.4	32.08±10.01		
Very Poor	31	9.1	26.41±9.04		
Factors Contributing to Recovery				MWU 10702.000	0.001*
Family					
No	123	35.9	29.75±10.14		
Yes	220	64.1	33.10±9.17		
Regular Use of Medication				MWU 14550.000	0.932
No	159	46.4	31.77±10.58		
Yes	184	53.6	32.01±8.80		
Having Hobbies				MWU 11358.500	0.005*
No	213	62.1	30.77±9.13		
Yes	130	37.9	33.75±10.22		

**Table 4. Comparison of participants' recovery-related characteristics and Mental Health Recovery Measure Scores (N=343)**

Variables				Mental Health Recovery Measure (MHRM)	
				Test KW, MWU	p
Participating in Social Activities				MWU	0.500
No	247	72	31.70±9.02	11300.000	
Yes	96	28	32.41±11.14		
Being Employed				MWU	0.737
No	258	75.2	32.03±9.43	10699.000	
Yes	85	24.8	31.49±10.35		
Doing Sports				MWU	0.962
No	260	75.8	31.93±9.20	10752.500	
Yes	83	24.2	31.80±11.00		
Maintaining a Regular and Healthy Diet				MWU	0.102
No	262	76.4	31.77±10.58	9336.500	
Yes	81	23.6	32.01±8.80		
Being Accepted as an Individual by Society				MWU	0.000*
No	265	77.3	30.62±9.28	6883.500	
Yes	78	22.7	36.25±9.67		
Smoking Status				MWU	0.033*
No	152	44.6	33.17±8.60	12432.000	
Yes	189	55.4	30.94±10.34		
Suicide Attempt				MWU	0.002*
No	207	60.7	33.28±9.01	11064.500	
Yes	134	39.3	29.87±10.25		
Number of Suicide Attempts	131		2.09±1.34	-0.144	0.102
Age of Onset of Mental Illness	330		27.31±11.61	0.199	0.000*
Number of Hospitalizations	330		2.63±3.02	0.092	0.92

\* p<0.05, Mean: Arithmetic mean, SD: Standard deviation, MWU: Mann-Whitney U, KW: Kruskal-Wallis, r: Spearman Correlation

Regarding recovery-related characteristics, the hospital where treatment was received (MWU = 11,722.000; p = 0.012), type of treatment (KW = 31.539; p < 0.001), diagnosis (KW = 11.690; p = 0.039), family support (KW = 26.004; p < 0.001), and quality of life (KW = 21.663; p < 0.001) significantly influenced recovery. Family support (MWU = 10,702.000; p < 0.001), engagement in daily living activities (MWU = 11,358.500; p = 0.005), and societal recognition (MWU = 6,883.500; p < 0.001) were associated with higher recovery scores. In contrast, smoking (MWU = 12,432.000; p = 0.033) and suicide attempts (MWU = 11,064.500; p = 0.002) negatively affected recovery. A very weak positive correlation was observed between age at onset of illness and MHRM scores (r = 0.199; p < 0.001). Other factors, including physical illness, duration of treatment, and the first person contacted when experiencing problems, did not significantly affect recovery (p > 0.05). Likewise, medication adherence, participation in social activities, employment, exercise, and healthy eating were not associated with recovery (p > 0.05). No significant relationship was found between the number of suicide attempts or hospitalizations and MHRM scores (p > 0.05) (Table 4).

## Discussion

Recovery is defined as living a satisfying, hopeful, and meaningful life despite profound and individualized changes in attitudes, values, feelings, goals, skills, and roles, as well as illness-related limitations (Çam & Yalçınar 2018). In psychiatry, recovery is best addressed when it is comprehensive, continuous, coordinated, and collaborative; aligned with patients' goals; flexible according to the stage of illness; culturally sensitive; and supported by evidence-based, community-oriented practices (Lieberman 2011, Şahin & Elboğa 2019).

In this study, sociodemographic, sociocultural, and socioeconomic characteristics of individuals treated for psychiatric disorders were examined in relation to their recovery, as measured by the MHRM. Findings indicated that being married and older age were positively associated with recovery, whereas sex, education, place of residence, occupation, and income were not significant predictors. Other factors positively influencing recovery included receiving inpatient care in a university hospital, having bipolar, obsessive, or anxiety disorders in addition to psychosis, receiving family support, reporting a higher quality of life, societal recognition, not smoking, engaging in at least one daily activity, and not having attempted suicide.

While some findings align with previous research, others differ. Most studies report little or no relationship between recovery and gender, age, or race (Lloyd et al. 2010, Jääskeläinen et al. 2012, Girardet al. 2015). However, exceptions exist. For example, Leung and Chue (2000) found that women with schizophrenia reported higher perceived recovery compared to men.

The relationship between health status and recovery produced mixed findings. Several studies have demonstrated that poor physical health is associated with lower perceived recovery (Leung & Chue 2000, Salyers et al. 2007, Chiba et al. 2010, Roe et al. 2011, Norman et al. 2013). In contrast, research on the association between diagnosis and recovery remains inconclusive (Salzer & Brusilovskiy 2014). For instance, Fuller (2010) reported that individuals with substance dependence, without additional psychiatric diagnoses, exhibited higher recovery rates than those with serious mental illness or co-occurring disorders. Lloyd et al. (2010) found that individuals with bipolar disorder reported greater recovery than those with depression or schizophrenia, whereas Girard et al. (2015) observed no significant differences in recovery perceptions between participants with schizophrenia and those with bipolar disorder.

Personal factors influencing recovery include age, marital status, education, income, and duration of illness. Patients supported and accepted by their families tend to achieve better recovery, whereas stigma and social impairment can hinder progress. Medication adherence has been shown to mediate the relationship between psychosocial factors and recovery (Fu et al. 2025). The relatively better recovery observed in individuals with depression may reflect more effective collaboration with treatment teams, while those treated in university hospitals may benefit from more frequent follow-ups.

Family support plays a critical role in the management of chronic illnesses. A sense of belonging contributes not only to psychological well-being but also to treatment adherence and the adoption of healthy lifestyle behaviors (Ertem & Duman 2018). Lauder et al. reported that feelings of loneliness were more prevalent among individuals with mental illness than in the general population. Given the well-documented negative effects of loneliness on mental and physical health, family and social support are increasingly recognized as vital for coping with chronic illness (Arslantaş et al. 2011, Fırat et al. 2020). Two meta-analyses further demonstrated that loneliness and inadequate social support were associated with higher mortality rates, with risks comparable to established factors such as obesity, physical inactivity, and smoking (Holt-Lunstad et al. 2015, Seki & Dilmaç 2020).

The literature has shown that individuality, hope, meaning, supportive relationships, and empowerment are central to recovery in psychiatric disorders (Soygür et al. 2017, Doğan et al. 2020). Building healthy relationships with family, friends, and healthcare professionals can be key to successful recovery, as these relationships foster a sense of belonging and societal recognition. Studies consistently show that family characteristics and support play a significant role in psychiatric recovery (Arslantaş et al. 2011, Firth et al. 2015, Güler 2017).

In their systematic review, Leamy et al. (2011) proposed a conceptual framework categorizing recovery into five dimensions: connectedness, hope and optimism, identity, meaning in life, and empowerment. These dimensions were further supported by sub-dimensions, such as peer support, social inclusion, belief in recovery, motivation for change, hope-instilling relationships, positive thinking, rebuilding self-identity, overcoming stigma, quality of life, purposeful social roles, personal responsibility, life control, and strength-based approaches.

Consistent with this framework, the present study demonstrated that social support indicators, such as marital status, family involvement, and societal recognition, positively and significantly contributed to recovery. Social functioning is integral to recovery, and research consistently demonstrates the role of social networks and support in mental health outcomes. Larger social networks and greater social support have been associated with higher levels of recovery (Corrigan & Phelan 2004, Pernice-Duca & Onaga 2009, Muñoz et al. 2011, Webb et al. 2011, Salzer & Brusilovskiy 2014). Beyond network size, the quality of support is critical. The presence of a supportive individual who encourages incremental progress and provides realistic expectations promotes higher perceived recovery (Liberman 2002, Kopelowicz et al. 2005).

Employment has also been explored as a factor influencing recovery, offering opportunities for social connection and meaning, while potentially introducing work-related stressors. Findings in this area are mixed. Lloyd et al. (2010) reported higher recovery among individuals engaged in paid employment compared to those relying on social benefits, whereas Connell et al. (2011) found no significant differences. Evidence suggests that the meaningfulness of the job may matter more than employment status alone, with higher recovery observed among those employed in roles they consider meaningful (Hancock et al. 2015).

Higher perceived social and community status, along with active community engagement, have also been linked to improved recovery (Townley et al. 2009, Lloyd et al. 2010). Overall, a growing body of evidence underscores the positive associations between social support, community participation, and recovery. Individuals living with



mental illness consistently emphasize the empowering role of social support in their recovery journeys.

In this study, recovery was negatively affected in 31 participants (9.1%) who rated their quality of life as “very bad.” Quality of life is a broad, multidimensional concept influenced by numerous factors. According to the World Health Organization, it is defined as “an individual’s perception of their position in life in the context of the culture and value systems in which they live” (Aydemir & Arlı 2020).

Although individual sub-indicators of quality of life, such as healthy nutrition, exercise, medication adherence, and employment, were not independently associated with recovery, overall higher quality of life appeared to exert a positive effect. Corrigan et al. (2005) similarly reported that patients often sought help for issues related to family relationships, interpersonal connections, psychiatric symptoms, general health, employment, daily living activities, and personal life goals. Easy and continuous access to healthcare services emerged as the second most important factor in overcoming mental health problems. Participants reported better access in university hospitals and during inpatient treatment. Although recovery lacks a universal definition, it is generally recognized as highly individualized. Common components across definitions include hope, autonomy, personal growth, empowerment, responsibility, peer support, self-esteem, decision-making, engagement in meaningful social activities, life satisfaction, spirituality, recognition of personal strengths, individualized care, self-management, social and community participation, non-linear progress, and goal setting (Leonhardt et al. 2017, Fenton et al. 2017).

For psychiatric patients, trust in healthcare providers and maintaining hope are as critical as the efficacy of medical treatment. These outcomes are more achievable in centers that adopt a multidisciplinary approach, where treatment teams collaborate and coordinate closely with patients (Zuhur & Özpancar 2017).

In recent years, there has been a global shift from inpatient to outpatient care in psychiatric management. The institutionalization of mental health services and the establishment of treatment units in primary healthcare centers, community centers, and general hospitals address the growing needs of patients and families and are essential for reducing social stigma (Bekiroğlu & Demiröz 2020).

In this study, most participants (n =210) received treatment in secondary healthcare institutions, while approximately one-third (n = 133) were treated in tertiary institutions. Notably, more than half (n =193) required inpatient care. Although the expansion of mental health services has produced many positive outcomes, it remains essential to ensure that treatment teams are adequately equipped to provide comprehensive support, thereby enhancing the recovery process.

Among the participants, depressive disorder was the most common diagnosis (32.16%), followed by schizophrenia and other psychotic disorders (19%) and bipolar and related disorders (19%). According to the World Health Organization, the global prevalence of depression was 4.4% in 2015 (5.1% in women and 3.6% in men), rising to approximately 7% in more recent estimates and accounting for 26% of psychiatric hospitalizations (Yıldırım et al. 2020). The Global Burden of Disease Study (GBD 2013) identified major depressive disorder as the leading cause of years lived with disability worldwide (Vos et al. 2015). Despite this substantial burden, participants with depression in the present study exhibited relatively good recovery scores on the Mental Health Recovery Measure, whereas anxiety disorders, though less prevalent, were associated with the lowest recovery levels.

Factors such as early age of onset and a history of suicide attempts appear closely linked to the severity of illness, potentially explaining slower recovery in these groups. Socioeconomic status is another variable known to influence both the onset and recovery of mental illness. Although socioeconomic disadvantage is widely associated with psychiatric morbidity, its effect on treatment outcomes is less clear (Finegan 2018).

In our study, socioeconomic indicators, including educational status, employment, and medication adherence, had minimal, non-significant effects on recovery. Contrary to expectations, medication adherence did not significantly promote recovery. This finding may reflect the stronger influence of social support, gender, and quality of life, as well as cultural factors shaping recovery outcomes.

The main limitation of this study is that the findings cannot be generalized to all patients receiving treatment in psychiatric clinics and outpatient services nationwide due to the limited sample size. Another limitation is the cross-sectional design, which precludes definitive cause-and-effect conclusions. Despite these limitations, the study has notable strengths. Data were collected directly by the researchers (HA, MK, and SI) through face-to-face interviews, enhancing the reliability of the findings. Furthermore, this is the first study in our country to examine factors influencing recovery from mental disorders, making a valuable contribution to the literature.

## Conclusion

This study examined factors influencing recovery among patients with psychiatric disorders receiving inpatient or outpatient treatment, using the Mental Health Recovery Measure (MHRM). The findings indicate that family and social support, the role of healthcare providers, and accessibility of healthcare services significantly impact recovery outcomes. The fact that adherence to medication, participation in social activities, employment, exercise, and healthy eating were not found to be associated with recovery is important in that it shows that recovery has many different components. Additionally for future research, expanding the study population and sample size will be important to enhance generalizability. Additionally, studies involving diverse diagnostic groups, longitudinal designs, and multiple geographical regions are recommended to provide a more comprehensive understanding of the factors that influence recovery.

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**Authors Contributions:** The author(s) have declared that they have made a significant scientific contribution to the study and have assisted in the preparation or revision of the manuscript

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** No conflict of interest was declared.

**Financial Disclosure:** No financial support was declared for this study.

**Acknowledgment:** This research was derived from data collected for the “Validity and Reliability Study of the Turkish Form of the Mental Health Recovery Measure