

RISK FACTORS FOR EARLY DISCHARGE FOR WOMEN PATIENTS FROM A RESIDENTIAL DETOXIFICATION ADDICTION TREATMENT CENTER IN ISTANBUL

Başak Ünübol¹, Gizem Akülker Balcı², Berhudan Şamar³, Kürşad Nuri Baydili⁴, Selim Arpacioğlu⁵

¹ Assoc. Prof. Psychiatrist, University of Health Sciences, Erenkoy Mental Health and Neurological Diseases Training and Research Hospital, Istanbul, Türkiye • Orcid: 0000-0003-0600-7900

² Psychologist, University of Health Sciences, Erenkoy Mental Health and Neurological Diseases Training and Research Hospital, Istanbul, Türkiye • Orcid: 0000-0002-2314-7043

³ Social Worker, University of Health Sciences, Erenkoy Mental Health and Neurological Diseases Training and Research Hospital, Istanbul, Türkiye • Orcid: 0000-0001-5713-7524

⁴ Biostatistics, University of Health Sciences, Istanbul, Türkiye • Orcid: 0000-0002-2785-0406

⁵ Asist. Prof. Psychiatrist, Altınbaş University, Department of Psychiatry, Istanbul, Türkiye • Orcid: 0000-0002-1988-506X

Yazışma Adresi/Correspondence: Başak ÜNÜBOL

University of Health Sciences, Erenkoy Mental Health and Neurological Diseases Training and Research Hospital, Istanbul, Türkiye.

e-posta: basakctf@hotmail.com

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Risk Factors for Early Discharge of Female Patients from an Inpatient Detoxification Addiction Treatment Center in a Mental Health Hospital in Istanbul

İstanbul'da Bir Ruh Sağlığı Hastanesinde Yataklı Arındırma Merkezinde Tedavi Gören Kadın Hastaların Erken Taburculuk Risk Faktörleri

ABSTRACT

Introduction: Research has identified many characteristics that may influence women's progression from use to addiction and their struggle with recovery. In previous studies, it was reported that 2.9-3.2% of the applicants to addiction treatment centers in Türkiye were women. Considering the low rate of women applying to treatment compared to men, it was thought that examining the completion of treatment would make an essential contribution to the literature. At the same time, there is no recent study on the descriptive characteristics of women in inpatient addiction treatment centers in our country and the factors affecting treatment completion.

Method: Our study was conducted by examining the data of 104 female patients who were treated as inpatients with a diagnosis of alcohol or substance use disorder according to DSM-5 in an Addiction Detox Clinic of a Mental Health Hospital. During inpatient treatment, withdrawal severity is assessed according to the type of substance, and the necessary detoxification medication is administered according to the CIWA-R or COWS scales. All participants completed the Addiction Profile Index (API) scale. The data were analyzed using the SPSS-27 package program. Frequency tables for sociodemographic questions were created. Regression analysis was applied to see the effect of the independent variable on the dependent variable. The analyses were applied with alpha level = 0.05.

Findings: The mean age of the participants was 31.5 years, the primary substance of use at the time of admission to treatment was alcohol at 45% and substance at 55%, and the frequency of use was every day at 93%. Having a family history of alcohol or substance abuse was 49%. 47% were single, judicial history was 37%, 73% were unemployed, 59% had a history of comorbid mental illness, 35% had a history of suicide attempts in the past, 54% of the participants had multiple substance use, and 22% had a history of intravenous substance use, even if only once in their lives. The early discharge rate was 38%, and sociodemographic and clinical variables were not statistically significant. It was observed that the API scale was statistically highly correlated with non-completion of treatment, especially in individuals with high 'severe craving' sub-dimension scores

Conclusion: Considering that women have a low rate of applying for addiction treatment, it is important to understand the needs of women patients who apply for treatment to complete the treatment and to include gender-specific intervention programs in the treatment.

Anahtar Kelimeler: addiction, women, inpatient, discharge

ÖZET

Giriş: Araştırmalarda, kadınların bağımlılığa geçişini ve iyileşme mücadelelerini etkileyebilecek birçok özellik belirlenmiştir. Daha önceki çalışmalarda, Türkiye'deki bağımlılık tedavi merkezlerine başvuranların %2,9-3,2'sinin kadın olduğu bildirilmiştir. Kadınların tedaviye başvurma oranının erkeklere kıyasla düşük olduğu düşünüldüğünde, tedavinin tamamlanmasının incelenmesinin literatüre önemli bir katkı sağlayacağı düşünülmüştür. Aynı zamanda, ülkemizdeki yatılı bağımlılık tedavi merkezlerindeki kadınların tanımlayıcı özellikleri ve tedavinin tamamlanmasını etkileyen faktörler hakkında yakın zamanda yapılmış bir çalışma bulunmamaktadır.

Yöntem: Çalışmamız, bir Ruh Sağlığı Hastanesinin Bağımlılık Arındırma Kliniğinde DSM-5'e göre alkol veya madde kullanım bozukluğu tanısıyla yatarak tedavi gören 104 kadın hastanın verilerinin incelenmesiyle yürütülmüştür. Yatılı tedavi sırasında, yoksunluk şiddeti madde türüne göre değerlendirilmekte ve gerekli farmakolojik tedavi CIWA-R veya COWS ölçeklerine göre uygulanmaktadır. Tüm katılımcılar Bağımlılık Profili İndeksi (API) ölçeğini tamamlamıştır. Veriler SPSS-27 paket programı kullanılarak analiz edildi. Sosyodemografik sorular için frekans tabloları oluşturuldu. Bağımsız değişkenin bağımlı değişken üzerindeki etkisini görmek için regresyon analizi uygulandı. Analizler alfa düzeyi = 0,05 ile uygulandı.

Bulgular: Katılımcıların yaş ortalaması 31,5'ti. Tedaviye başvurudaki tercih maddesi %45 oranında alkol ve %55 oranında madde idi ve kullanım sıklığı %93 oranında her gündü. Alkol-madde kötüye kullanımı aile öyküsü %49 idi. %47'si bekar, adli öyküsü %37, %73'ü işsizdi, %59'unun eş zamanlı ruhsal hastalık öyküsü vardı, %35'inin geçmişte intihar girişimi öyküsü vardı, katılımcıların %54'ünün birden fazla madde kullanımı vardı ve %22'sinin yaşamları boyunca yalnızca bir kez bile olsa damar içi madde kullanımı öyküsü vardı. Tedaviyi tamamlamadan erken taburculuk oranı %38 olup, sosyodemografik ve klinik değişkenlerin istatistiksel olarak anlamlı olmadığı bulundu. Ancak BAPI ölçeğinin özellikle 'şiddetli istek' alt boyut puanı yüksek olan bireylerde tedaviyi tamamlamama ile istatistiksel olarak yüksek oranda ilişkili olduğu görüldü.

Sonuç: Kadınların bağımlılık tedavisine başvurma oranının düşük olduğu göz önüne alındığında, tedaviye başvuran kadın hastaların tedaviyi tamamlamak için ihtiyaçlarının anlaşılması ve tedaviye cinsiyete özgü müdahale programlarının dahil edilmesi önemlidir.

Anahtar Kelimeler: bağımlılık, kadın, yataklı klinik, taburculuk

INTRODUCTION

When the use of psychoactive substances between men and women is considered, the rates of use and dependence are much higher in men than in women in the general population and treatment-seeking groups (1). However, recent studies show that the gender gap is decreasing. While the male-female ratio for alcohol abuse was estimated to be 5:1 in the 1980s (2), according to the World Drug Report in 2021, one out of every three people who use psychoactive substances is a woman (3). In Turkey, most of the studies on alcohol or substance use have been conducted among students, and it is shown that alcohol or substance use is more common among men (4).

Research has identified many characteristics that may influence women's progression from use to addiction and their struggle with recovery (5). Women tend to increase their alcohol or substance use faster than men and face drug use problems more quickly (6). This telescopic phenomenon or rapid progression is associated with several variables that affect women (1). Among these, biological differences between men and women and women's greater vulnerability to adverse health outcomes stand out. For example, the negative effects of alcohol use on cognitive functioning and the risk of developing liver disease in a shorter period are common among women (7,8). Women are more likely to express mental distress, mood and anxiety symptoms and prefer to seek help for substance misuse in mental health institutions rather than addiction treatment centers (5). Women need to make more arrangements than men to stay in treatment for addiction, such as childcare resources and transportation. In addition, many women hide their addiction for fear of legal and social consequences during or after pregnancy (9). When all these reasons are considered together, it is thought that the addiction process for women of all ages with alcohol or substance use disorders is an isolating problem and a situation that needs to be addressed and dealt with sensitively.

When the studies conducted in the field of women and addiction in our country are examined, it is seen that there are studies on sexual dysfunctions in women who use substances, nursing interventions, addiction and pregnancy and stigmatization in addicted women (10-13). In previous studies, it was reported that 2.9-3.2% of the applicants to addiction treatment centers in Istanbul and Gaziantep were women (14,15). Considering the low rate of women applying to treatment compared to men, it was thought that examining the completion of treatment would make an essential contribution to the literature. At the same time, there is no recent study on the descriptive characteristics of women in inpatient addiction treatment centers in our country and the factors affecting treatment completion. In this article, we aimed to examine in detail the women diagnosed with alcohol or substance use disorder who applied for treatment.

METHOD

Our study was conducted by examining the data of 104 female patients who received inpatient treatment with a diagnosis of alcohol or substance use disorder according to DSM-5 in an addiction detox clinic of a mental health hospital between January 2020 and January 2022. The clinic is staffed by a psychiatric physician, nurse, psychologist, social worker and occupational trainers. The clinic is a treatment center where detoxification is performed, and the average stay is 3-4 weeks. Male and female patients are treated in the same building, but female patients have a separate room. During inpatient treatment, the severity of withdrawal is assessed following the substance type, necessary detoxification medication is given based on the CIWA-R or COWS scales, individual interviews and group work are conducted, psychoeducation on addiction is organized, and family interviews are held. All 104 female inpatients who received inpatient treatment within the specified date range were examined for the study, and four were excluded due to incomplete data. All female patients within the specified date range were included in the study, and only the last hospitalization of those with repeated hospitalizations within the specified period was included.

Instruments

Addiction Profile Index (API): It is a scale consisting of 37 questions and five subscales that evaluate different dimensions of addiction and measure its severity. It was developed by Ögel et al. (16). API consists of 5 subscales. 1. Characteristics of substance use, 2. Diagnostic criteria for addiction, 3. Impact of substance use on the person's life, 4. Severe desire to use substances, 5. Motivation to quit substance use and API total score (severity of addiction). Each subscale is scored on its own. Both self-report and practitioner forms are available. The self-report form was used in our study. Institutional permission and ethics committee approval was obtained from the Clinical Research Ethics Committee of XXX Mental and Neurological Diseases Training and Research Hospital.

Analysis

Data were analyzed using the SPSS-27 program. Frequency tables were created for sociodemographic questions. Regression analyses were applied to see the effect of the independent variable on the dependent variable. Analyses were applied at $\alpha=0.05$ level.

RESULTS

The mean age of the participants was 31.5 years, the primary substance of use at the time of admission to treatment was alcohol at 45% and substance at 55%, and the frequency of use was every day at 93%. 38% of the participants graduated from secondary school, 47% were single, 73% were not working, 84% lived with their families, and 57% had no children. 54% of

the participants had multiple substance use, and 22% had a history of intravenous substance use, even if only once in their lives. When the comorbid mental

illness status was analyzed, 41% had no comorbid mental illness, while the highest rate of participants with mental illness was mood disorder (Table 1).

Table.1 Sociodemographic Variables

Education Status	n (%)	
primary school	11 (11)	
Middle School	38 (38)	
High School	31 (31)	
University	20 (20)	
Marital Status		
Single	47 (47)	
Married	23 (23)	
Divorced	30 (30)	
Living with whom		
Alone	11(11)	
With his family	84(84)	
Friends/Relatives/Other	5(5)	
Employment Status		
Student	3 (3)	
Employed	20 (20)	
Unemployed	73 (73)	
Retired	4 (4)	
Primary Substance		
Alcohol	45(45)	
Substance	55(55)	
Frequency of Use		
Every day	93 (93)	
1-5 times a week	6 (6)	
1-3 times a month	1 (1)	
Child Presence		
No	57 (57)	
Yes	43 (43)	
	n (%) None	n (%) Yes
History of intravenous use in the past	78 (78)	22 (22)
Polysubstance use	46 (46)	54 (54)
Comorbid mental illness	41 (41)	59 (59)
Medical illness	55 (55)	45 (45)
Forensic history	63 (63)	37 (37)
History of suicide attempts in the past	65 (65)	35 (35)
Family history of addiction	51 (51)	49 (49)
inpatient treatment completion (discharge) status	38(38)	62(62)
Post-discharge follow-up	41 (41)	59 (59)
	Med (min-max)	
Age	31,5 (19-74)	
Number of siblings	3 (1-9)	
Duration of use (years)	10 (1-50)	
Age of onset of use	18 (10-50)	
Number of inpatient treatments in the past	2 (1-20)	
Longest duration of remission in the past (months)	3-12 (0-24+)	

When “Completion” and “Non-completion” (Early Discharge) of inpatient treatment were compared according to sociodemographic and clinical variables:

‘Educational status ($p=0.995$), Marital status ($p=0.422$), Employment status ($p=0.653$), Living with whom ($p=0.404$), Preferred substance ($p=0.852$), Frequency of use ($p=0.5$), Multiple substance use ($p=0.53$), Comorbid mental illness ($p=0.884$), Comorbid medical illness ($p=0.967$), Forensic history ($p=0.192$) and History of suicide attempt in the past’, there was no significant difference in the variables (Table.2).

When “Completion” and “Non-Completion” (Early Discharge) of inpatient treatment were compared according to Substance Use Characteristics and API Scale,

it was found that there was no significant difference in terms of:

‘duration of substance use ($p=0.07$), age of onset of use ($p=0.711$), number of inpatient treatments in the past ($p=0.07$), and number of inpatient treatments in the past ($p=0.07$), 092), the longest remission period in the past ($p=0.801$), API-Substance use characteristics ($p=0.696$), API-Diagnosis ($p=0.740$) and API-Effects on life’ ($p=0.161$) (Table. 3) and,

‘API-Severe desire ($p<0.001$), API-Motivation ($p=0.007$) and API total score’ ($p=0.004$) values were found to be higher in the group who did not complete hospitalization and were discharged early (Table.3).

Table.2. Investigation of Completion of Inpatient Treatment with Sociodemographic and Clinical Variables

	Non complete	Completed	Chi-square	p
Education status				
Primary School	4 (36,4)	7 (63,6)	0,075	0,995
Middle School	14 (36,8)	24 (63,2)		
High School	12 (38,7)	19 (61,3)		
University	8 (40)	12 (60)		
Marital status				
Single	21 (44,7)	26 (55,3)	1,726	0,422
Married	7 (30,4)	16 (69,6)		
Divorced	10 (33,3)	20 (66,7)		
Employment Status				
Student	2 (66,7)	1 (33,3)	1,978	0,653
Employed	6 (30)	14 (70)		
Unemployed	29 (39,7)	44 (60,3)		
Retired	1 (25)	3 (75)		
Living with whom				
Alone	2 (18,2)	9 (81,8)	2,992	0,404
Family	35 (41,7)	49 (58,3)		
Relatives/Friends	1 (25)	3 (75)		
Other	0 (0)	1 (100)		
Primary Substance				
Alcohol	16 (35,6)	29 (64,4)	1,530	0,852
Cannabis	3 (33,3)	6 (66,7)		
Opioid	10 (37)	17 (63)		
Stimulants	6 (42,9)	8 (57,1)		
Other	3 (60)	2 (40)		
Polysubstance use				
No	19 (41,3)	27 (58,7)	0,395	0,530
Yes	19 (35,2)	35 (64,8)		
Mental Comorbid Illness				
No	15 (36,6)	26 (63,4)	1,649	0,884
Anxiety disorder	8 (38,1)	13 (61,9)		
Mood disorder	12 (36,4)	21 (63,6)		
Psychotic disorder	1 (50)	1 (50)		
Other	2 (66,7)	1 (33,3)		
Concomitant Medical Illness				
No	21 (38,2)	34 (61,8)	0,002	0,967
Yes	17 (37,8)	28 (62,2)		
History Of Suicide Attempt				
No	26 (40)	39 (60)	0,315	0,574
Yes	12 (34,3)	23 (65,7)		

Table 3. Investigation of Completion of Inpatient Treatment with Substance Use Characteristics and API Scale

	Completed x±SS / med (min-max)	Not Complete x±SS / med (min-max)	t/Z	p
Duration of use	7,5 (1-50)	10 (2-30)	-1,811 ^Z	0,070
Age of onset of use	18 (13-47)	18 (10-50)	-0,371 ^Z	0,711
Number of inpatient treatments	2 (1-8)	2 (1-20)	-1,683 ^Z	0,092
Longest duration of remission in the past (months)	3-12 (0-24)	3-12 (0-24)	-0,252 ^Z	0,801
API-Substance use characteristics	3 (1,45-5,82)	2,73 (1,36-5,73)	-0,390 ^Z	0,696
API-Diagnosis	21,5 (13,5-24)	20 (15-24)	-0,331 ^Z	0,740
API - Effects on life	32,68±3,73	33,76±3,67	-1,413 ^t	0,161
API- Severe Desire	10,5 (2-15)	6 (3-9)	-4,759 ^Z	<0,001*
API-Motivation	11,26±0,79	10,76±0,94	2,771 ^t	0,007*
API total score	14,33±1,88	13,28±1,32	3,014 ^t	0,004*

*p<0,05 | ^t: Independent sample t test calculation value | ^Z: Mann-Whitney U test calculation value

Table 4. Determination of factors affecting treatment completion

	B	S.E.	Wald	p	OR (95% CI)
Severe Desire	-0,440	0,103	18,367	<0,001*	0,644 (0,526-0,787)
Motivation	-0,242	0,295	0,672	0,412	0,785 (0,44-1,4)
Constant	6,320	3,160	4,000	0,046	555,393

*p<0,001 | S.E.: Standart error | OR: Odds ratio | CI: Confidence interval

As a result of the binary logistic regression analysis performed to determine the factors affecting treatment completion; it was found that a 1-unit increase in 'API-severe desire' values was a 0.644-fold risk factor for non-completion (p<0.001). 'API-Motivation' values did not affect the completion of treatment (p=0.412) (Table.4).

DISCUSSION

In our study, the mean age of the women was 31.5 years. In a previous study conducted in our country, the mean age of women who received inpatient treatment for alcohol dependence in Istanbul was found to be 39.6 years (17). In a study conducted in the same province, the mean age of women who used alcohol and drugs was found to be 30.76 (13). In Antalya, the mean age of female opioid users was found to be 21.13±4.30 (18). In general, it is seen that women applying for addiction treatment are at the young age group, and our finding is consistent with the literature.

It is observed that the age of onset of alcohol/substance use in women who apply to treatment for addiction is at an early age. In our study, the earliest age of onset of substance use was found to be ten years. The mean age of onset of substance use was found to be 18 years, and the mean duration of use was found to be ten years. In a study conducted in our country, the duration of alcohol use was found to be 13.8 years, the mean age at onset

of alcohol use was 25.8 years, and 58.3% of the women diagnosed with alcohol dependence receiving inpatient treatment had not received inpatient alcohol dependence treatment in the past (17). In women receiving inpatient treatment at an AMATEM in Istanbul, the mean age of onset of alcohol use was 21.09 years, and 55.7% had not received inpatient treatment at an AMATEM before (14). In a study conducted at Akdeniz University with opioid addicts, the mean age of onset was 16.4±3.6 years for marijuana, 15.6±2.5 years for alcohol and 18.7±4.0 years for heroin (18). In line with the literature in our country, it is seen that women apply for treatment after many years, even though the addiction process starts at an early stage.

Among women who are heavy alcohol users, it has been reported that never married, divorced, or separated individuals are common (19). In our study, 77% of our sample was single/divorced and 84% lived with their families. Similarly, in a study conducted in Turkey, it was found that divorced or single patients were more common among female patients who applied for alcohol dependence treatment (14). It was also observed that 51% of the patients in our study had high school education and above, but 73% were unemployed. Similar to our findings, in a study conducted in Turkey among women receiving inpatient treatment for alcohol dependence, 75% were unemployed, 58.4% were married, and 58.4% had secondary school education (17).

Similarly, in a study conducted with women alcohol and substance users in Istanbul, 64.7% of the participants were unemployed (13). In another study conducted in Turkey, it was found that 37.8% of female patients who received inpatient treatment for alcohol use in an addiction clinic were married, 44.5% were unemployed, and 59.4% had high school or university education (14). Although the level of education varies depending on the region where the study was conducted, it is observed that women in addiction treatment generally have medium and high levels of education. However, their employment rates are low in the opposite direction with this level of education. This may be related to the impairment in functioning caused by addiction.

When the past judicial history of the participants in our study was analyzed, it was found to be 37%. This was calculated by including their probation history in this process. In a study conducted in our country with female patients who received inpatient treatment for alcohol use in addiction clinic, the rate of having forensic problems was 19.8% (14). The reason for our high rate in this area was thought to be the fact that the participants were both alcohol and substance users.

In general, women have drinking behaviors similar to those of their spouses, siblings or close friends (20). Among alcohol-dependent married women, those with alcoholic spouses are significantly more likely than married women whose spouses do not have alcohol use problems (21). In our study, in line with the literature, the rate of having a family history of alcohol-substance abuse was high at 49%.

It is reported that women suffer from psychiatric disorders, especially depression and post-traumatic stress disorder, more frequently than men (22). The high prevalence of alcohol substance use problems and psychiatric comorbidity in women is another issue that should not be ignored when working with these patients. In our study, 59% had a history of comorbid mental illness, among which mood disorders were prominent, and 35% had a history of suicide attempts in the past. In a study conducted with inpatient alcohol-dependent women in India, it was reported that 57.14% of the participants had another comorbid psychiatric disorder, such as major depressive disorder and dysthymia (23). In a recent study investigating addiction and other mental disorders in Spain, it was found that comorbidity of affective disorders was the highest among comorbid mental disorders in women, in line with our study (22). Failure to recognize comorbid psychiatric illness in women with alcohol use problems may negatively affect the course of both diseases, as well as aggravate the symptoms of the disease, and may lead to suicide attempts and difficulties in treatment (24).

In our study, the completion rate of inpatient treatment was 62%, and the early discharge rate was 38%. When

the variables that could predict this rate were examined, it was found that sociodemographic and clinical variables were not statistically significant. However, it was observed that the API scale was statistically highly correlated with non-completion of treatment, especially in individuals with high 'severe craving' sub-dimension scores. In a study investigating risk factors for early discharge in inpatient addiction treatment in the literature, it was found that craving was an essential factor for early discharge. This situation varied with the substance type, and the rate of completion of treatment among women was 74.9% in the heroin group, 63.60% in the cannabis group and 63% in the sedative group (25). In another study, lower age, Racialized, weekend, and no comorbid mental illness were found to be associated with a higher likelihood of early discharge in women (26). In a review examining this issue, it was stated that variables such as young age, low education, opioid use, polysubstance use, and intravenous substance use were associated with early discharge from inpatient treatment (27). In Baekeland and Lundwall's review (1975), it was revealed that various patient factors such as younger age, female gender, social isolation, lower socioeconomic status and motivation, the severity of alcoholism, criminal history and personality were associated with dropout from addiction treatment (28). In our study, no significant relationship was found between sociodemographic and clinical variables and treatment discontinuation, and it was found that the probability of completing treatment decreased as the 'severe craving' scores of the patients increased. The fact that the substances used by the patients were different and that they were alcohol or substance users may be a factor that made it difficult to standardize the sample.

Our study has some limitations. The API scale used in our study is a self-assessment scale. Another limitation is that only Axis-I diagnoses were taken into consideration when evaluating the additional mental diagnoses of the patients; personality disorders were not included in the evaluation. One of the difficulties in interpretation is that the findings in the study were determined only according to female patients hospitalized in the clinic. Planning a comparative research design with male patients in future studies may also reveal the difference between genders. Conducting studies to prevent treatment discontinuation and early discharge in female patients is essential. In particular, effective medications for cravings, additional individual interviews, customized intervention and support for individual needs, and the expansion of women-specific treatment centers may be considered.

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