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Factors Associated with Discharge against Medical Advice among Patients Hospitalized in the Psychiatric Hospital of Yazd Province, Iran (2023–2024)

Elahe Salarikhah [1]*, Mohammad Hadi Farahzadi [2], Homa Moazen [3], Mahdieh Masoud [4]

[1] Department of Health Care Management, Tehran South Branch, Islamic Azad University, Tehran, Iran
[2] Department of psychiatry, Research center of addiction and behavioral sciences, Non-communicable Diseases Research Institute, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[3] Health System Research Unit (HSR), Vice-Chancellor for Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[4] Bachelor Health Management, Psychiatric Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

A B S T R A C T

Introduction: Patient satisfaction has increasingly become an important issue in the healthcare system. Discharge against medical advice (DAMA) is considered an important indicator of patient dissatisfaction and may negatively affect treatment outcomes while increasing hospital costs. This issue is particularly significant among psychiatric patients due to the chronic and vulnerable nature of mental disorders. Premature discharge in psychiatric patients can increase the risk of relapse, acute psychiatric crises, suicide, self-harm, or harm to others. From a healthcare system perspective, early discharge is associated with higher readmission rates, additional healthcare costs, and reduced efficiency of the healthcare system. Furthermore, due to the social stigma associated with mental disorders in Iranian society, patients and their families may experience additional pressure to leave the hospital prematurely. Therefore, identifying the factors influencing discharge against medical advice in psychiatric hospitals is essential not only for improving clinical outcomes but also for enhancing patient safety, optimizing healthcare resources, and improving the quality of care.

Materials and Methods: This analytical cross-sectional retrospective study was conducted from April 2023 to September 2024 among patients discharged against medical advice from the psychiatric hospital in Yazd Province, Iran. A list of patients who left the hospital against medical advice during the study period was prepared, and 156 patients were selected using simple random sampling.Data were collected through the Hospital Information System (HIS) and review of patients' medical records and was analyzed through SPSS. In addition, telephone interviews with patients or their family members were conducted to validate the collected information and obtain additional details regarding the reasons for discharge.

Results: Among the 156 patients included in the study, the majority was male (67%). The highest proportion of patients belonged to the 30–39 age group. The most common reasons for discharge were fatigue from the hospital environment (23.1%), occupational and personal problems (20.5%), family dependency (17.3%), and perceived relative recovery (14.1%). Overall, 76.9% of the reasons were related to patient-related factors, while 23.1% were related to hospital-related factors.

Conclusion: The findings of this study indicate that most cases of discharge against medical advice in the psychiatric hospital of Yazd are primarily influenced by individual and psychosocial factors. Early discharge in psychiatric patients increases the likelihood of readmission and imposes significant costs on the healthcare system. Therefore, implementing early psychosocial interventions, improving hospital environmental conditions, and reducing social stigma toward mental illness are essential strategies for reducing DAMA rates.

Keywords: Discharge, Patient, Discharge against Medical Advice, Psychiatric Hospital

Introduction

The fundamental mission of healthcare systems is to promote health through the provision of services

Corresponding Author: Elahe Salarikhah
Email: Salarikhah_e@yahoo.com
Tel: +98 913 2543147
Tehran South Branch, Islamic Azad University, Tehran, Iran

to patients. Therefore, gaining patient trust and satisfaction with healthcare providers plays a central role in achieving this mission. If patients do not trust healthcare institutions, the healthcare system may fail to fulfill its essential role (1).

DAMA refers to a situation in which a patient voluntarily leaves the hospital before completing the recommended course of treatment, despite the advice of the healthcare team, including physicians and nurses (2). In recent decades, healthcare organizations have increasingly recognized that patient satisfaction is an essential component of healthcare quality (3). The number of patients who leave hospitals against medical advice may reflect dissatisfaction or indicate significant systemic problems within healthcare services (4). In this type of discharge, the patient voluntarily leaves the hospital before receiving the physician's approval (5). Discharge against medical advice is considered a major challenge during hospitalization and occurs when a patient leaves the hospital earlier than recommended by the physician (6).

Studies conducted in general hospitals in the United States have reported that approximately one out of every 65 to 120 hospitalized patients leaves the hospital against medical advice (7). Overall, DAMA accounts for approximately 0.8% to 2.2% of all hospital discharges in general hospitals in the United States (8). In Canada, it has been estimated that approximately 20,000 cases of DAMA occur annually (9).

However, DAMA appears to be more common in psychiatric wards compared with medical and surgical wards (10). Studies have reported that the prevalence of DAMA among psychiatric patients ranges from 6% to 35%, with an average of approximately 16% (11). Various studies have identified different factors associated with DAMA. These factors include demographic variables such as age, gender, marital status, and socioeconomic status; mental health-related factors such as substance use history, length of hospitalization, and personality disorders; and environmental factors such as dissatisfaction with hospital facilities and services (12). In some studies, personal or family problems, perceived improvement in health status, dissatisfaction with treatment, feelings of boredom, fatigue from the hospital environment, and dislike of the hospital setting have also been reported as common reasons for DAMA. Patients who leave the hospital against medical advice often have acute conditions and may still exhibit significant symptoms at the time of discharge. The prognosis of these patients is generally poorer compared with those discharged with medical approval. Furthermore, readmission rates are higher among patients who leave against medical advice (13).

Studies have shown that approximately 21% of patients discharged against medical advice are readmitted within 15 days after discharge, compared with only 3% among patients discharged normally. DAMA is therefore considered one of the strongest predictors of early readmission.In addition to the negative clinical outcomes; DAMA imposes considerable financial burdens on healthcare systems. For example, Barclay et al. estimated that over a five-year period, DAMA resulted in approximately 29.5 million dollars in direct costs and 8.6 million dollars in follow-up costs associated with readmissions (14).

Furthermore, due to the nature of psychiatric disorders, financial difficulties, and cultural issues, patients with psychiatric disorders and their families may prefer early discharge to prevent others from becoming aware of the hospitalization. In Iran, psychiatric disorders are often associated with social stigma, which may contribute to premature discharge (15).

Given the limited number of similar studies conducted in Iran, particularly in psychiatric hospitals, and considering the relatively high rate of DAMA in psychiatric wards compared with general hospitals, the present study aimed to investigate the factors associated with discharge against medical advice in the psychiatric hospital of Yazd Province.

Materials and Methods

This study was a descriptive, cross-sectional, and

retrospective study conducted from April 2023 to September 2024 among patients discharged against medical advice from the psychiatric hospital in Yazd Province.Data were collected using a standardized checklist designed based on national hospital accreditation standards to monitor the DAMA indicator. The checklist, approved by the medical records department, included demographic and clinical information such as age, gender, type of insurance, length of hospital stay, final diagnosis, and hospital ward.The checklist also included common reasons for discharge against medical advice, such as perceived improvement, family dependency, fatigue from the hospital environment, and financial problems. In addition, post-discharge outcomes such as readmission or emergency department visits were recorded.

To validate the checklist, it was reviewed by ten experts including psychiatrists, nurses, hospital admission and discharge officers, the nursing director, and the hospital quality improvement manager.Because the checklist was a standardized instrument approved by the University of Medical Sciences, it possessed adequate content validity. To further ensure the accuracy and completeness of the recorded information, telephone follow-ups were conducted with patients or their companions. Data analysis was performed using SPSS version 22. Descriptive statistics including frequency, percentage, mean, and standard deviation were used. Moreover, analytical statistical tests including independent t-test and ANOVA were also applied. The significance level was set at 0.05.

$$n = \frac{Z^2_{1-\frac{\alpha}{2}} \times p(1-p)}{d^2} \cong 156$$

Results

Among the 156 patients studied, 102 patients (67%) were male and the rest were female. The highest number of patients belonged to the 30–39 age group with 47 individuals (30.1%). In terms of educational level, most patients had secondary school education (Middle school). The majority of patients were covered by Social Security Insurance and Universal Health Insurance (Table 1).

Table 1. Frequency and percentage distribution of patients according to demographic variables

Variable	Category	Frequency	Percentage
Gender	Male	102	67
	Female	54	33
Age group	Under 20	15	9.6
	20–29	33	21.2
	30–39	47	30.1
	40–49	33	21.2
	Above 50	28	17.9
Education level	Illiterate	1	0.6
	Middle school	64	41
	High school diploma	50	32.1
	Associate degree	20	12.8
	Bachelor’s degree	21	13.5
Insurance type	Social security insurance	64	41
	Medical services insurance	10	6.4
	Uninsured (Self-pay)	11	7.1
	Universal health insurance (Iranian)	63	40.4
	Armed forces insurance	8	5.1

The frequency and percentage distribution of several hospitalization-related variables including hospital ward, length of hospital stay, and discharge shift are presented in Table 2.

Among the 156 patients studied, the most frequent primary diagnosis was related to mood disorders (50.6%), followed by psychotic disorders (14.7%) (Table 3).

The most important reasons for discharge against medical advice from the perspective of hospitalized patients were as follows:

Overall, the causes of DAMA were classified into two general categories:

- Patient-related factors: 76.9%
- Hospital-related factors: 23.1%

Table 2. Frequency and percentage distribution according to hospitalization related variables

Variable	Category	Frequency	Percentage
Hospital ward	Women's ward	41	26.3
	Men's ward 1	34	21.8
	Men's ward 2	1	0.6
	Dual ward	38	24.4
	VIP ward	29	18.6
	Relative recovery ward	13	8.3
Length of stay	Less than 10 days	118	83
	More than 10 days	38	18
Discharge shift	Morning	133	85.3
	Evening	22	14.1
	Night	1	0.6

Table 3. Frequency and percentage distribution according to primary diagnosis

Diagnosis	Frequency	Percentage
Substance use disorders	14	9
Psychotic disorders	23	14.7
Mood disorders	79	50.6
Obsessive disorders	7	4.5
Personality disorders	17	10.9
Developmental disorders	2	1.3
Discharged before final diagnosis	14	9
Total	156	100

Table 4. Main reasons for discharge against medical advice

Category	Reason	Percentage	Category
Patient-related factors	Fatigue from hospital environment	36	23.1
	Occupational and personal problems	32	20.5
	Family dependency	27	17.3
	Perceived relative recovery	22	14.1
	Feeling of no improvement	3	1.9
Hospital-related factors	Inappropriate physical ward environment	13	8.3
	Treatment costs	14	9
	Ward overcrowding	9	5.8
Total		156	100

The mean age of patients was 37.17 ± 14.43, with the minimum and maximum ages being 11 and 90, respectively (Table1).

Based on the results of the independent t-test, no significant difference was observed between the mean age of male and female patients (P-value = 0.134). The mean age of male and female patients was 35.91 ± 14.01 and 39.56 ± 15.05 respectively.Although the mean age of female patients was approximately four years higher than that of male patients, this difference was not statistically significant (Table1).

The mean length of hospital stay was 7.03 ± 5.39 days, with the minimum and maximum durations being 1 and 28 days, respectively. Based on the results of ANOVA, there was a significant difference in the mean duration of hospitalization according to the diagnosed disease (P-value = 0.041). The longest mean length of stay was observed among patients with psychotic disorders (9.83 ± 7.29) days.In addition, 2.5% of patients left the emergency department against medical advice, and the most common reason reported was dissatisfaction with the physical environment of the wards (Table2).

Discussion

Discharge against medical advice in psychiatric hospitals is a complex and challenging phenomenon that not only threatens the individual health of patients, but also has considerable consequences for healthcare systems, financial resources, and the quality of healthcare services.The findings of this study showed that the majority of cases of discharge against medical advice in the psychiatric hospital of Yazd were caused by individual factors related to the patient, including perceived relative recovery, family dependency, fatigue from the hospital environment, and occupational or personal problems. These findings indicate the significant role of patients' perceptions of their health status and environmental conditions in their decision to leave the hospital prematurely.

Although hospital-related factors accounted for a smaller proportion of discharges (approximately 15.2%), their influence should not be overlooked. Factors such as inappropriate ward environment, overcrowding, excessive noise, poor food quality, and treatment costs can make hospitalization unpleasant for patients and increase their motivation to leave the hospital early.These findings indicate that improving hospital facilities, enhancing therapeutic communication, and increasing patient satisfaction with healthcare services may play an important role in reducing the rate of discharge against medical advice.

Another important point is the high rate of discharge against medical advice in psychiatric wards compared with other hospital departments. This issue may be related to the specific nature of psychiatric disorders, the social stigma associated with mental illness in Iranian society, and families' tendency to conceal the hospitalization of their relatives.

From a healthcare management perspective, discharge against medical advice is associated with increased readmission rates and imposes considerable financial burdens on the healthcare system.

Conclusion

International studies have confirmed that patients who leave the hospital against medical advice have poorer prognoses and higher rates of short-term readmission compared with other patients.

Therefore, identifying high-risk patients and designing preventive interventions such as psychological counseling, patient and family education, and improving communication between healthcare providers and patients may help prevent premature and costly discharge decisions.

Finally, the present study, focusing on the psychiatric hospital of Yazd, provides a clear picture of the causes and consequences of discharge against medical advice and emphasizes the need to revise hospitalization policies, improve the quality of healthcare services, and address cultural and psychological factors.
Reducing such discharges can not only improve community mental health but also increase hospital efficiency, reduce treatment costs, and enhance public trust in the healthcare system.

Ethical consideration

This study was conducted with the necessary permits and code of ethics from the Research Vice-Chancellor of Shahid Sadoughi University of Medical Sciences (IR.SSU.REC.1403.093).

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Conflict of interests

The authors report no conflicts of interest (financial or non-financial) related to this study.

Authors' contributions

S.E and M.M Study design and / or data collection; M.H Data analysis; S.E and F,H Writing and editing the article; All authors have read and approved the final version.

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