Objective: Some patients refuse inpatient psychiatric treatment and are discharged against medical advice in the first few days itself. Reviewing related features prior to hospitalization is vital for taking precautions related to these conditions.

Materials and methods: Twenty-three patients admitted to psychiatry inpatient unit and discharged voluntarily within 72 hours were compared with a control group matched in terms of diagnosis, age, and sex, comprising patients who were hospitalized in the same period and discharged after the treatment. These two groups were compared with respect to sociodemographic and clinical characteristics, inpatient and outpatient evaluation, and treatment procedures.

Results: Sociodemographic characteristics, waiting time for hospitalization, the level of compliance with outpatient treatment, the percentage of voluntary admissions, and the type of hospitalization were similar, whereas the history of hospitalization (p = .022) and administration of psychotropics in the early period of hospitalization (p = .005) were fewer in the refusal group. There was no difference in the number of the interviews made with the staff; communication of the patients with their relatives was higher in the control group (p < .001).

Conclusion: Treatment refusal is associated with the post-admission procedures rather than the pre-admission practices, decision, and type of admission. Evaluation of these procedures in larger samples is important for taking necessary precautions related to discharge against medical advice.

Keywords: discharge, treatment refusal, inpatients, mental disorder.
INTRODUCTION

The frequency of patients requesting to be discharged before the planned treatment period among admitted inpatients in psychiatry wards is known to be increasing over the years [1,2]. The proportion of patients who want to be discharged from psychiatry services against medical advice has been noted to vary between 3% and 51% in different studies [3]. The increase in treatment options and the patients’ autonomy in making decisions concerning their treatment processes with the new legal regulations are among the leading causes of this increasing frequency [3]. When hospitalized patients are discharged before their planned treatment ends, the treatment team faces difficulties in planning outpatient treatment; furthermore, there is a strong likelihood of substantial deterioration in the patient’s health indicators [4]. This may cause the patient to face an inadequately treated medical problem, to reapply to health services with recurrent disease symptoms and be repeatedly hospitalized [4].

Refusal of inpatient treatment against medical advice may be associated with the patient’s level of knowledge regarding diagnosis, treatment, and characteristics of their illness, in addition to the proposed treatments and the practices of the treatment team [1,5]. The most prevalent factors related to treatment refusal are hospitalization with the diagnosis of substance-use disorder, having a history of more than two inpatient treatments in the past, gender (male), absence or low levels of suicidal ideation at the beginning of hospitalization, unemployment, and living alone. In the case of closed psychiatric wards, among the factors regarding the refusal of inpatient treatment after hospitalization and demanding early discharge, there are additional features such as the feeling of having lost one’s freedom, restricted access to one’s personal belongings such as mobile phones and computers, and smoking and leaving the ward without permission [6,7].

Although the risk factors related to the desire of inpatients to be discharged before the planned treatment is completed are the subject of many studies in the literature, the findings of a recent meta-analysis revealed that the characteristics regarding treatment team practices have not been adequately investigated and that some of the studies did not cover the psychiatric inpatient treatment [8]. It is important to evaluate the relationship of treatment refusal to informing the patient adequately and efficiently about the patient’s benefit regarding the hospitalization process, restrictions and regulations in the ward and the attempts of the treatment team to increase the treatment cooperation during the hospitalization period.

It is crucial to determine the risk factors contributing to high rates of against medical advice discharges from psychiatric wards to screen the patients for the features and to take related measures before admission to the ward. This study was conducted with the aim to compare the patients who refused to stay in the ward and were discharged against medical advice in the early period of their inpatient treatment (the first 72 hours), with the age-, sex-, and diagnosis-matched controls who continued their inpatient treatment in the same period, in terms of the characteristics identified as risk factors in the literature pertaining to the demand for early discharge, and the approaches of the treatment team before and during hospitalization.

METHODS

This is a retrospective case-control study. All the sociodemographic and clinical data about the patients are obtained from hospital records. Twenty-three patients admitted to Hacettepe University Hospital psychiatry inpatient unit between June 2015 and December 2017 and discharged voluntarily within 72 hours against medical advice constitute the “Refusal Group”. The control group was composed of patients who were matched with the patients in the refusal group in terms of diagnosis, age, and sex and were hospitalized in the same period with the refusal group and discharged after the completion of their treatment. Patients with a major psychiatric comorbidity were excluded from the study group in order to evaluate the effect of each psychiatric diagnosis on early discharge against medical advice.

The first 72-hour period was considered for early discharge request to be compatible with other studies in the literature [3,7]. The majority of states in USA and European countries employ a 72-hour
period in which patients can be held following a request for discharge from hospitalization [3,7].

The refusal and the control groups were compared with respect to sociodemographic and clinical characteristics, inpatient and outpatient evaluation, and treatment procedures. Information about the sociodemographic and clinical characteristics of all participants, and characteristics of the procedures held by the treatment team during the pre-admission follow-up and hospitalization periods were had been recorded. Outpatient treatment compliance of the refusal group and the control group was evaluated by checking the hospital outpatient clinic records about whether the patients applied to our outpatient clinic after discharge and whether they were still taking the psychotropic drugs prescribed at discharge.

The study was carried out in accordance with the Declaration of Helsinki Principles and with the approval of Hacettepe University Non-Interventional Clinical Studies, Ethics, Committee (Number: 2021/04-26).

Statistical Analysis
The conformity of the data to the normal distribution was evaluated with the Shapiro-Wilk test. Chi-square analysis was used to compare the groups in terms of categorical variables, and the Mann-Whitney U test was used for comparisons of continuous variables that did not fit into the normal distribution. Normally distributed continuous variables are shown as mean (standard deviation). The statistical significance limit was accepted as p < .05.

RESULTS

Sociodemographic and Clinical Characteristics of the Refusal Group and the Control Group
As the refusal group and the control group were one-to-one matched in terms of age, gender, and diagnosis, the mean age of the groups was 31.8 ± 11.5%, 48% of them were women, and the most common diagnosis (39%) was mood disorders.

It was observed that patients with the diagnosis of schizophreniform disorders were not included among the patients who were discharged against medical advice, since all the schizophrenia patients staying in the ward at the time of the study had been compulsorily admitted to the ward and involuntary commitment proceedings had been initiated for all by our facility.

In the refusal group, 28.6% were married / had a partner, 7.7% lived alone, 41.2% had primary school education, 58.8% had a high school or higher education level, and 78.9% were unemployed. Both groups were found to be similar in terms of sociodemographic characteristics such as age (p = .484), gender (p = 1), marital status (p = .526), education level (p = .502), accommodation (p = .598), and employment status (p = 1) (Table 1).

Characteristics of Pre-Admission Follow-up and Hospitalization Procedures
The refusal and control groups were similar in terms of characteristics such as the length of time between the decision on inpatient treatment and admission of the patients to the ward, the presence of re-evaluation in the outpatient clinic during this period, compliance of the patients with drug treatments in the pre-hospitalization period, and the type of admission to the ward (urgent [unplanned] / planned), whereas the number of admission to any psychiatry service in the past was found less in the refusal group (p = .022) (Table 2). Among the patients in the refusal group, 80% were admitted to the service voluntarily, whereas 20% of them refused inpatient treatment and were hospitalized with the consent of their relatives. In the control group, the rate of being admitted voluntarily was 95.7%. However, the rates of voluntary admission were not statistically different between the groups (p = .110). The rate of having a relative accompanying the patient during hospitalization procedures was similar in both groups (p = .230).

Table 1. Distribution of Diagnoses of Refusal and Control Groups*

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Refusal Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood Disorders</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>Alcohol and Substance Use Disorder</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Obsessive Compulsive Disorder</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Conversion Disorder</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Eating Disorder</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Body Dysmorphic Disorder</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*The distribution of the diagnoses is same in both groups, since they are diagnosis-matched.
Characteristics of the Treatment Staff’s Clinical Practices in the Early Period of Hospitalization

There was no difference between the two groups in terms of the number of interviews made by the treatment team with the patients after admission \( (p = .294) \), whereas the rate of those in the control group who had contact with a family member during the early period of hospitalization was higher than those in the refusal group \( (p < .001) \) (Table 2). The rate of administration of the psychotropic medicine planned by the treatment team in the early period of hospitalization was lower in the refusal group \( (p < .001) \) (Table 2). It was noted that 60% of the refusal group demanded to be discharged at the initial interview with a member of inpatient treatment staff; this rate was 13% in the control group, and there was a statistically significant difference between the two groups \( (p = .001) \) (Table 2). The median discharge time of the refusal group was 25 hours. The rate of application to the outpatient clinic after the discharge was found to be lower in the refusal group compared to control group \( (p = .001) \).

DISCUSSION

In this study, the characteristics earlier reported to be associated with the early discharge against medical advice were evaluated by comparing a group of patients who refused to continue their psychiatric inpatient treatment and had been prematurely discharged with a group of age-, gender-, and diagnosis-matched patients who completed their inpatient treatment, unlike the other studies in the literature in which patients from different diagnosis groups were evaluated together. As a result of this matching, which was not done in previous studies, it was found that the group who refused to stay in the ward and demanded to be discharged differed from the control group primarily in terms of their experience regarding their treatment in the first few days of hospitalization and the clinical practices of the treatment staff.

In this study, not being able to meet face-to-face with a family member in the first few days of hospitalization is among the factors associated with discharge against medical advice. The rate of meeting with a family member in the refusal group was lower than in the control group. One of the risk factors put forward in the literature regarding the patients’ request to be discharged by refusing treatment is family-related issues \([3,9]\). The relative lack of adequate support from their families during their hospital stay and insufficient information about critical family-related situations while they are away from home can be considered among the factors that make it difficult to comply with the treatment while staying in the ward. Visits to patients by a family member during their inpatient stay may be regarded as one of the important indicators related to family support. The fact that patients in the refusal group had less contact with their relatives during the hospitalization period indicates that the lack of family support during

### Table 2. Clinical Variables of Refusal and Control Groups Related to Pre-Admission Follow-up, Admission Type, Inpatient Stay and Post-Discharge Follow-up

<table>
<thead>
<tr>
<th></th>
<th>Refusal Group</th>
<th>Control Group</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 23</td>
<td>n = 23</td>
<td></td>
</tr>
<tr>
<td>Pre-admission follow-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having outpatient visits while waiting for hospitalization</td>
<td>% 7.3</td>
<td>% 8.4</td>
<td>.678</td>
</tr>
<tr>
<td>Treatment compliance before hospitalization</td>
<td>% 70.0</td>
<td>% 85.7</td>
<td>.277</td>
</tr>
<tr>
<td>Previous hospital stay</td>
<td>% 13.0</td>
<td>% 43.3</td>
<td>.022</td>
</tr>
<tr>
<td>Type of admission</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntarily</td>
<td>% 80.0</td>
<td>% 95.7</td>
<td>.110</td>
</tr>
<tr>
<td>Accompanied by patient's relatives</td>
<td>% 85.0</td>
<td>% 95.7</td>
<td>.230</td>
</tr>
<tr>
<td>During inpatient stay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face to face contact with a family Member</td>
<td>% 47.4</td>
<td>% 100.0</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Discharge request at initial interviews with Treatment Team</td>
<td>% 60.0</td>
<td>% 13.0</td>
<td>.001</td>
</tr>
<tr>
<td>Administration of psychotropic medication within first 72 hours</td>
<td>% 70.0</td>
<td>% 100.0</td>
<td>.005</td>
</tr>
<tr>
<td>After Discharge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient clinic application after Discharge</td>
<td>% 47.4</td>
<td>% 100.0</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
their inpatient stay should be considered one of the risk factors for inpatient treatment refusal and premature discharge against medical advice.

The fact that the scheduled psychotropic drug doses were administered at a lower rate in the early period of hospitalization in the refusal group suggests that this group has problems with treatment compliance in the first few days of hospitalization. The problem of adherence to treatment, which can be observed frequently in outpatient treatment of mental disorders, can also be seen during inpatient treatment [10,11]. Although the reasons for the lack of administration of psychotropic drugs in the refusal group in the first days of their hospital stay could not be examined retrospectively, it is believed that one of the possible reasons may be the refusal of taking the medicine offered by the treatment staff due to the lack of insight about their illness and need for treatment. Lack of insight is known to be associated with non-compliance with outpatient and inpatient treatments, such as distrust of the treatment team, fear of being harmed, and hostility [10,12]. The fact that the patients could not receive psychotropic treatment in the early period of their hospitalization may be regarded as one of the predictive features of refusing inpatient treatment. and it may also have played a facilitating role in The failure in early administration of psychotropics or the refusal of treatment by the patient might have led to insufficient relief of the patients’ present symptoms to a certain extent with the help of a medication.

There was no difference between the two groups in terms of the number and type of one to one sessions with the patient after admission to the service, which are thought to be among the treatment refusal-related features regarding the clinical practices of the treatment staff. However, the refusal group conveyed a higher rate of discharge demand than the control group in the interviews immediately after admission to the ward. In order to manage these demands psychotropic medications are administered with the aim of relieving the mental symptoms pertinent to non-compliance and the supportive and motivational interviews with the members of treatment staff, emphasizing the need for inpatient treatment, and that the treatment was for the benefit of the patient are made. Of these patients, who persisted in their demands despite the mentioned efforts were discharged from the ward before 72 hours because of the absence of a compulsory hospitalization decision. Some of these patients may have been admitted to the hospital against their will even if they were not detained with a compulsory hospitalization decision. They were deemed not required to be hospitalized because of the risk of harming themselves and others in the community, caused by the symptoms of the disease [13,14] but hospitalization was still deemed necessary for emergency intervention for distressing symptoms due to mental conditions such as acute psychosis, mania, drug/substance intoxication, withdrawal. These people may have temporarily lost their insight and decision-making skills regarding their illness and treatment needs, and thus, they can be treated urgently against their will, with the consent of their legal custodian, if assigned, or their first-degree relatives. It is anticipated that early discharge demands are more common in involuntarily hospitalized patients [7]. Patients who are involuntarily admitted to the ward may be prematurely discharged despite medical advice, because they may have felt that their autonomy has been violated during the hospitalization process, and their anger toward the treatment staff has not subsided. They even may feel stigmatized, even if they have partial insight into the treatment, their illness, and the need for treatment [7]. It is thought that all these characteristics may play a role in the refusal of inpatient treatment in involuntary hospitalizations. However, in this study, involuntary hospitalization rates of the control and refusal groups were found to be similar. In other studies in the literature, it has been reported that patients who are hospitalized voluntarily may demand early discharge because they cannot reach their personal belongings as they wish and feel that their freedom is restricted within the scope of security measures [6,7]. Patients who are admitted to the inpatient service of our hospital voluntarily are informed about the service conditions and restrictions prior to admission. However, it is not always possible for patients to adapt to the conditions they previously accepted when they are exposed to these restrictions. In addition, the fact that the patient is informed by the treatment staff and that the patient has signed the consent form indicating that he/she accepts the conditions may not always mean that the information can be conveyed to the patients and internalized by them to the extent of the treatment team’s expectation. Thus, some of the patients who are voluntarily admitted to the ward, may have
given their consent for voluntary hospitalization by not being “truly” informed. Some patients, who are hospitalized voluntarily, may not be able to comprehend the information given about the inpatient treatment and ward regulations at the time of the admission to the hospital due to the cognitive deficiencies and impaired judgment caused by their mental illness. Thus, this group may refuse to stay in the ward and demand discharge against medical advice shortly after their admission to the ward. The use of methods that evaluate the patient’s capacity to give consent for inpatient treatment before hospitalization will allow the clinicians to distinguish involuntary hospitalizations from voluntary ones. The MacArthur Competence Assessment Tool for Treatment (MacCAT-T) is a widely used measurement tool in this field and has a valid and reliable Turkish version [15].

Appointing a custodian or issuing a compulsory hospitalization decision through the court for patients who are determined to be incapable of giving consent with such tools may allow these patients to be kept in the ward in case they want to be discharged against medical advice. This method may prevent them from being deprived of an effective treatment that can only be achieved through hospitalization.

In this retrospective study, the level of insight and information about their illnesses and treatment needs in the first few days of hospitalization could not be examined. In future studies, the level of insight in the first days of hospitalization should also be examined as a variable related to refusal of inpatient treatment.

Many factors related to the post-hospitalization process were found to be associated with refusing treatment and being discharged from the hospital, whereas the sociodemographic characteristics and the factors related to pre-hospitalization processes, such as hospitalization decision, type, waiting time for hospitalization, and outpatient treatment compliance were found to be similar between the refusal and control groups. Patients who were discharged after refusing treatment were not different from the control group in terms of sociodemographic characteristics such as employment and accommodation status, education level, which are considered to be risk factors according to the findings of other studies in the literature.

Predictors of discharge against medical advice in psychiatric patients were investigated in heterogeneous diagnostic groups in other studies [3,6,7]. Unlike other studies, the refusal group was compared with the control group consisting of age- and sex-matched patients from the same diagnosis group in this study; thus, predictors of discharge against medical advice could be evaluated by excluding the effects of features that have a significant effect on treatment rejection, such as disease diagnosis, age, and gender. The facts that the features reported in the literature [5,6,16] to be associated with discharge against medical advice like certain sociodemographic and pre-hospitalization clinical characteristics had been found similar in two groups, suggests that there are other stronger factors that may be related to the hospitalization process that can effectively predict treatment refusal.

The refusal group and the control group were found to be similar in terms of waiting time for hospitalization and adherence to treatment before admission, while the history of previous admission to a psychiatry service was found to be less in the former. This finding is different from the results of the studies in the literature in which more than two previous hospitalizations were found as one of the risk factors for discharge against medical advice [5,16]. However, our results are in line with the results of a study in Iran showing that admission to a psychiatry service for the first time was one of the risk factors for treatment refusal and early discharge of patients from different diagnostic groups [1]. In the case of hospitalization for the first time in a psychiatry service, it has been suggested that the patients and their relatives have difficulties in adapting to the conditions of the ward because of their unfamiliarity with the hospital environment, and the lack of awareness about the chronic and/or recurrent course of the diseases is related to the refusal of inpatient treatment. Considering that the most common diagnosis in the sample of our study, mood disorder, is one of the psychiatric disorders with the highest recurrence rate, insufficient awareness of the recurrent nature of the disease is another important risk factor. In studies that found a higher rate of patients being discharged by refusing inpatient treatment in the first 72 hours in patients with multiple pre-admission to psychiatry services, it was also stated that these patients applied to emergency psychiatry practices.
more frequently [7,17]. It is known that recurrent hospitalizations and frequent emergency visits are associated with the inability to comply with regular treatment [18]. As the patients with a high number of previous hospitalizations are those with less adherence to treatment, it can be argued that multiple previous hospitalizations are predictive of not being able to comply with inpatient treatment and discharge against medical advice. However, no difference was found between the refusal and control groups in terms of treatment compliance before hospitalization in our study, Therefore, the difficulty of patients who had no previous hospitalization experience in accepting the regulations and the physical conditions of the wards, despite the information given to them before admission seems to be a more important factor associated with discharge demands against medical advice. In addition, as internalized stigmatization is often seen in patients with chronic mental disorders in and their family members, and can lead to difficulties in compliance at every stage of the treatment [19], it was thought that the possible internalized stigmatization of patients and their relatives, who had not been hospitalized in a psychiatry service before, might have led to incompatibility regarding hospitalization. Due to the retrospective design of this study, the level of stigmatization in patients and the family members is unknown but internalized stigmatization should be among the factors investigated for early discharge of psychiatric patients against medical advice.

In this study, the factors related to the hospitalization process were evaluated retrospectively, and the data were accessed from the file notes. The most noteworthy limitation of this study is the inability to access the information about the main complaint leading to the demand for discharge and the level of insight of the patients from the file notes. Including age-, sex-, and diagnosis-matched control group matched with the refusal group ensures that the confounding effect of these features that are known to be significantly affecting refusal can be excluded. Even if the severity of the mental symptoms of the patients in both groups with the same diagnosis is assumed to be at a level that will constitute an indication for hospitalization, it’s a limitation that the effect of disease severity on treatment refusal could not be directly investigated. In addition, choosing the control group from patients hospitalized in the same time period as the refusal group ensures the similarity of the treatment staff and their practices between the groups. Excluding the confounding effects of well-known determinants of treatment refusal constitutes the strength of this study by enabling the investigation of other important factors that may determine discharge against medical advice.

The prominent features of the treatment team and their practices in this study, which are thought to determine discharge in the early period of treatment against medical advice, should be further evaluated in prospective trials with larger samples.

CONCLUSION

The patients who were discharged in the first 72 hours of inpatient treatment in a psychiatry ward against medical advice were not different from the patients who complied with the inpatient treatment in terms of the rate of voluntary hospitalization, but had refused to take the psychotropic drugs recommended by the treatment team and demanded discharge at first interviews with a member of treatment team at a higher rate than the control group. These results suggest that the adequacy of the pre-hospitalization information about ward regulations and restrictions and the validity of voluntary hospitalization decisions should be questioned. In order to distinguish involuntary admissions from voluntary ones and to effectively investigate the factors that are associated with discharge against medical advice, in the early period of inpatient treatment by excluding the confounding effect of involuntary hospitalization, the patient’s consent capacity for inpatient treatment and the validity of their consent should be evaluated with standard methods and adequate information about inpatient treatment regulations should be provided in a standard manner prior to admission to the psychiatry wards.

Author contribution

Study conception and design: MİY, EA, and KB; data collection: MİY, EA, and KB; analysis and interpretation of results: MİY, EA, and KB; draft manuscript preparation: MİY, EA, and KB. All authors reviewed the results and approved the final version of the manuscript.
Ethical approval
The study was approved by the Hacettepe University Faculty of Medicine Ethics Committee (Protocol no. 2021/04-26 / 23.02.2021).

Funding
The authors declare that the study received no funding.

Conflict of interest
The authors declare that there is no conflict of interest.

REFERENCES