INTRODUCTION

In psychiatric settings, phenomenon of leaving against medical advice (LAMA) is a natural consequence of the relative increase in treatment options and patients' autonomy in making decisions about their care. However, it is a source of frustration to the mental health professionals who care for these patients as it may put patients at risk of adverse health outcomes often generating hospital re-admission.1,2

Along with that, the responsibility that comes on doctor with such discharges; fear of legal implications are also a matter of concern for physicians. Some hospitals have even promoted policies affecting the likelihood that a patient who wants to leave early against medical advice is required to sign a formal notice of leaving against medical advice. This may reflect the extent to which physicians at the hospital are concerned about malpractice risk.3

Leaving against medical advice had been defined in different ways by different clinicians and both its definition and prevalence have been shaped with the advent of psychiatry. Previously, a patient was considered as left against medical advice only if he or she managed to escape from the hospital and did not return within an allotted period. LAMA has been defined, as any patient who “insists upon leaving against the expressed advice of the treating psychiatrist”.2,4

Against-medical-advice-discharges continue to be a highly prevalent problem of health care quality, representing as many as 1 – 2% of all hospital discharges.5-7 Psychiatrists are concerned more, where the LAMA rates have been found to exceed 20% as opposed to less than 4% for medical admissions.8,9

Few data is also available on the estimated total costs to the health care system of such discharges, however, multiple studies have found that patients who leave against medical advice are at a risk for early readmission resulting in higher, un-necessary health care costs.4

Understanding why patients choose to leave the hospital against medical advice has obvious importance because of the potential to identify those at higher risk. This could help to intervene earlier to prevent excess morbidity, mortality, and health care costs.4 The following correlates of patients who leave against medical advice have been reasonably consistent over time: lower socioeconomic class, male gender, younger age, no insurance, and substance abuse.4,6,10

ABSTRACT

Objective: To determine the frequency of patients leaving against medical advice (LAMA) in an inpatient psychiatric facility in Rawalpindi, Pakistan.

Study Design: Descriptive cross-sectional study.

Place and Duration of Study: Institute of Psychiatry, Benazir Bhutto Hospital, Rawalpindi, from August 2010 to February 2011.

Methodology: Patients who got admitted during study period irrespective of duration of illness and mode of admission were recruited through non-probability consecutive sampling and followed till discharge to determine their mode of leaving hospital. A thirteen-item proforma was developed and information was obtained on demographic, socioeconomic, patient related and disease related variables. Descriptive statistics were calculated on SPSS 14.

Results: The total number (n) of participants was 246. Among the participants, 96 (39%) left against medical advice (LAMA) whereas 150 (61%) left on regular discharge on physician's advice. Frequency of patients who left against medical advice was found to be more in males (63.5%), younger age groups (21 – 30 years), lesser educated (more than half were under matric) and with the ICD-10 diagnosis of substance abuse (23.9%). About half of patients who LAMA had a prior history of psychiatric illness and a significant number (37.5%) had a history of previous psychiatric admission.

Conclusion: Leaving against medical advice is a frequent problem in psychiatric inpatients and is a matter of great concern for the treating doctors.

Not much has been done in our region in terms of research in this area so far and the purpose of this study was to determine the magnitude of problem of patients leaving against medical advice in psychiatric population and to explore any existing association with demographic and disease related variables. The information obtained would help clinicians in early identification of patients at higher risk for such discharges. This in turn would allow clinicians to intervene earlier to initiate preventive measures in order to prevent excess morbidity and health care costs, decrease un-necessary attrition and improve utilization of treatment resources.

METHODOLOGY

Following departmental research committee and institutional ethical board approval, written informed consent was obtained from consecutive patients admitted from August 2010 to February 2011 of all ages, irrespective of duration of illness and mode of admission (Emergency or OPD) by medical officer on duty. Patients who were admitted by the physician but went away prior to reporting in the ward were excluded.

The research was conducted by a team of 5 doctors, including principal author along with 4 house officers. At the time of admission, data was collected using a 13-item proforma consisting of some demographic variables and some admission related variables. Most of information was filled in at time of admission, however, some variables namely, date of discharge, duration of stay and their mode of discharge was left blank and filled in at the time of discharge by the medical officer in-charge.

In case of emergency admission, medical officer on call made a differential diagnosis according to ICD-10 classification of mental and behavioural disorders and initiated treatment after discussing it with consultant on call. In case of OPD admission, patient was seen by medical officer and discussed with the consultant and treatment initiated. In subsequent days during clinical ward rounds, clinical diagnosis was reviewed and updated on the research proforma.

Daily clinical rounds were conducted during which patients to be discharged were decided with the mutual consensus of the treating team of doctors along with patient and his attendants.

In case a patient was found out of bed, without any knowledge of duty medical officer and his attendants were also found missing from ward, that was reported to medical officer by the house officer on duty or staff nurse. His name was displayed on notice board and he was waited for, while enquiry about his whereabouts was made from other patients and their attendants in the same ward. If he did not show up within 24 hours, he was declared as LAMA.

In case a patient requested to get discharged from ward through treating doctors who thought otherwise, reasons of such request were explored. He and his carers were educated about pros and cons of such a decision and if they decided to leave despite the counselling, a discharge on request was made, however, patient was declared as LAMA.

In case some severely disturbed or agitated patient left the ward and was not brought back by attendants, he was also declared as LAMA.

Before finally entering data, a cross-check was made to validate the data by matching it with the patients' record that were maintained in the record room in the form of a file for every patient who was admitted in institute.

All data collected was entered and analyzed in Statistical Package for Social Sciences (SPSS) version 14.0. Simple frequencies and proportions were calculated for categorical variables whereas mean and standard deviation were calculated for age, duration of illness and duration of stay.

RESULTS

The total number of patients was 246. The mean age of the sample was 33.30 (S.D ± 13.053), with an age range of 12 – 75 years. Among the participants, 146 (59.3%) were males.

Of all, 62 (25.2%) had no formal education while 124 (40.5.5%) were under matric. Thirty three point seven percent of sample had history of previous admission in psychiatry.

Two hundred and forty five participants were divided into 10 groups according to their diagnoses. Diagnostic breakup of sample is shown in Table II.

Table I: Showing frequency and percentages of gender distribution, education status, previous history, past admission and type of admission of study participants n = 246 and percentage of the same variables in LAMA patients.

<table>
<thead>
<tr>
<th></th>
<th>Frequency and percentages of total participants (n = 246)</th>
<th>Percentages of patients LAMA (n = 96)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>146 (59.3%)</td>
<td>63.5%</td>
</tr>
<tr>
<td>Female</td>
<td>100 (40.7%)</td>
<td>36.5%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uneducated</td>
<td>62 (25.2%)</td>
<td>22.9%</td>
</tr>
<tr>
<td>Under matric</td>
<td>124 (50.5%)</td>
<td>51.0%</td>
</tr>
<tr>
<td>Matric</td>
<td>35 (14.2%)</td>
<td>14.5%</td>
</tr>
<tr>
<td>Graduate</td>
<td>18 (7.3%)</td>
<td>9.3%</td>
</tr>
<tr>
<td>others</td>
<td>7 (2.8%)</td>
<td>0.02%</td>
</tr>
<tr>
<td>Previous admission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>83 (33.7%)</td>
<td>37.5%</td>
</tr>
<tr>
<td>No</td>
<td>163 (66.3%)</td>
<td>62.5%</td>
</tr>
<tr>
<td>Past history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>122 (49.6%)</td>
<td>49%</td>
</tr>
<tr>
<td>No</td>
<td>124 (50.4%)</td>
<td>51%</td>
</tr>
<tr>
<td>Type of admission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient</td>
<td>177 (71.9%)</td>
<td>66.67%</td>
</tr>
<tr>
<td>Emergency</td>
<td>69 (28.05%)</td>
<td>33.33%</td>
</tr>
</tbody>
</table>
Among the participants, 96 (39%) left against medical advice (LAMA) and age range in which maximum patients LAMA was found to be 21 – 30 (48/96). Amongst 96 patients who left against medical advice, 61 (63.5%) were males and 35 (36.5%) were females and majority patients (49) had less than matriculation education.

Diagnostic breakup of LAMA patients is shown in Table II. A high percentage of LAMA patients (23.96%) had a diagnosis of substance abuse.

Amongst those who got LAMA, 64 (66.67%) were admitted from out-patients and 32 (33.33%) from emergency; 36 (37.5%) had a previous history of psychiatric admission. Out of 96 patients who LAMA, 47 (49%) had previous history of psychiatric disorder (Table I). Mean duration of illness for sample was 380 whereas mean duration of illness for LAMA patients was 172 (Table III).

In patients who left against medical advice (96), 62.5% patients had been ill for less than 13 days (29+31) and mean duration of stay was 5.30 ± 5.60. Out of these, 33 left on admission day and maximum number of patients i.e. 36 left in the next 5 days.

Amongst the patients of dissociation disorder who LAMA (20), 5 left on admission day and 9 within 1st week. In cases with depression, who LAMA, 14 did so within 1st week of admission. Amongst patients of drug abuse, however, maximum number of patients (10) left on the day of admission and a high number left within first week of admission i.e. 10 (1st day) and 9 (within first week of admission) out of 23.

### DISCUSSION

Duration of stay in hospital is a matter of concern for patients and their families. Discharge or leaving against medical advice (LAMA) is a common phenomenon in hospitals and patients in psychiatric units are more likely to LAMA than patients on medical or surgical units. The literature, however, is limited primarily to medical record reviews and retrospective analyses of factors related to LAMA discharges.

In terms of outcome, it is worse in patients who leave against medical advice than the patients with regular discharges. LAMA patients tend to respond poorly to inpatient care, show reduced benefits from treatment and re-hospitalized sooner and more frequently. Amongst psychiatric inpatients, more frequently identified reasons for leaving against medical advice are found to be personal matters, financial strains, dissatisfaction with treatment received, illness factors and preference for a nearby hospital.

Amongst illness factors, it was found that patients with a diagnosis of substance abuse, psychotic illness, depressive illness and patients with passive aggressive traits had increased frequency of LAMA.

This study examines the problem of LAMA and frequency of such discharges in a psychiatric health care facility. It revealed that frequency of patients leaving against medical advice was 39%. This is in line with the results of other studies, including local and international literature.
LAMA is not a rare phenomenon and it occurs frequently all over the world, even in the most developed and equipped medical centres. Brooks et al. found its prevalence to be ranging from 3 – 51%, with a mean rate of 17%.²

The percentage of LAMA found in this study falls within this range, however, there could be several possible reasons for being this percentage towards the upper limit. The above mentioned study is a review of articles of past 50 years so there is a variation of findings from different studies. Also the authors stated that they found the prevalence of this phenomenon to be increasing over time and since that review was published in 2006, this could be a possible reason of our finding to be higher than the mean (17) whereas remaining between the ranges (3 – 51).

Franks et al. found that LAMA rates for psychiatric patients exceed 20% whereas percentage of LAMA has typically been less than 4% for medical admissions.⁹ The results are in line with the findings of this study. Possible reason is the similarity in patient variables that LAMA in both the studies as they are one of the strong predictors of assessing patients at risk of LAMA.

Franks et al. also found that hospital risk factors for LAMA included location of hospital in large urban areas.⁹ The hospital in which this study is conducted also falls under this domain and, therefore, higher rates of LAMA are found in this study affirming this finding.

In a review article by Brooks et al. looking at LAMA over past 50 years reviewing 61 articles, most common predictors amongst patient factors were young age; single marital status; male gender and diagnosis of personality or substance use disorders.² Similarly, in this study, age range in which maximum patients (> 50%), got LAMA was found to be 21 – 30 years, 63.5% were males. However, there was an unequal distribution of gender in admissions where males were already in higher proportion which might have led to a higher representation in LAMA group.

Alfandre et al. in his study based on retrospective cohort studies, found younger age, no insurance, male gender, and current or a history of substance or alcohol abuse to be predictors of LAMA discharge.⁴ Similarly, in this study, amongst patients who LAMA, most common diagnosis was substance abuse (23.39%). Twenty point eight three percent of patients had dissociation and 17.70% suffered from depressive illness.

Most researchers like Dalrymple et al.¹⁸ and Franks et al. have found admissions for alcohol, drug abuse, and psychiatric problems, to be associated with LAMA where the rates have been found to exceed 20% that is consistent with the results of this study.

In a regional study by Syed done at a University Hospital in Pakistan,¹⁹ and by Shirani in Tehran,²⁰ frequency of LAMA amongst patients admitted through emergency was quite high. Similar results were revealed through this study where 46.2% of all emergency patients LAMA as compared to 36.2% of patients admitted throughout.

Shorter hospital stay is also a predictor of leaving against medical advice in some cases as discussed by Devitt et al., Ibrahim et al. and Tulloch et al.³,⁶,²¹ Similarly, in this study, 51.04% of patients LAMA within 1st week of admission. Amongst patients of substance abuse, maximum number of patients who LAMA, did so on 1st day of admission and a significant number left within 1 week of admission (19/23) as found in a French study by Mabiala-Babela where 34.8% left on 1st day of admission.²²

This study has several limitations. Problem of LAMA is associated with type of hospital setting, staffing pattern and admission and discharge policies.⁶,¹⁹,²³ so generalizing this finding to another psychiatric setting is difficult. Also this study determined the frequency of LAMA and its relations only to a few demographic and illness related variables but did not look into any statistical associations. Ideally all variables i.e. patient related and temporal should be considered along with patients' perspective and reason given to LAMA.

Despite these limitations, findings suggest that leaving against medical advice continues to be a quite frequent problem for patients and their physicians. Attempts at devising measures capable of identifying patients at greater risk for discharge against medical advice should be conducted in future. Prospective studies of psychiatric patients, focusing on patient, physician, and hospital variables, are most likely to reveal reliable and valid data about how best to address, prevent, and treat the LAMA behaviour.

CONCLUSION

The problem of LAMA continues to be quite frequent in the patient population coming to a government funded psychiatric facility. Efforts to combat this problem, as well as research exploring the possible solutions are warranted. Such information could help devise preventive strategies at the national level in Pakistan.

REFERENCES


