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Factors Affecting Discharges against Medical Advice in an Emergency Department of a Tertiary Care Center

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ABSTRACT

Introduction: Patients leaving against the advice of the treating team before being certified as fit is a major concern and challenge for the treating professionals as it possesses adverse medical outcomes. This study hence aimed at identifying the prevalence and major factors affecting such discharges so that advocacy can be done to help prevent it.

Methods: A descriptive cross-sectional study was conducted at emergency department of a tertiary center in Lalitpur from 15th May 2019 to 15th August 2019. All the patients visiting the emergency department were included in the study and a non-probability purposive sampling method was used excluding the patients who denied giving reasons for them leaving against medical advice. Data was collected using pre-structured questionnaire and analyzed using SPSS-v21 software.

Results: A hundred and fifteen patients (4.08%) left against medical advice out of 2812 patients who presented to emergency department. There were 63 male patients (54.8%), 75 patients of the total patients in the age group of 15-44 years (65.2%) and those living within a distance of 1km from the hospital (53%). The most common reason for the patients leaving against medical advice was found to be due to financial constraint (38.3%) followed by preference to other hospitals (16.5%).

Conclusion: Patients leaving against medical advice possesses a small percentage of actual hospital admissions but is still a major health concern as it drastically increases the morbidity, re-admission rates and total health-care costs. Hence, understanding the general characteristics and predictors of such discharges is of utmost importance to help improve the patient outcome and reduce the health-care costs.

Keywords: Discharge; Against Medical Advice; Emergency Department

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INTRODUCTION

Patients leaving against medical advice (AMA) from the Emergency Department (ED) is a common condition but is poorly studied especially in our part of the world. These are patients who leave the treating facility without completing service after evaluation and initiation of workup or after a physician decision to admit to the hospital.¹

Majority of the studies regarding discharges AMA are conducted in the inpatient departments with significant variation in the prevalence rate ranging from 0.002% to up to 45%.² Few studies conducted at the emergency department of US and UK showed a prevalence rate of 0.1% to 2.7% of Emergency Department visits with increase risk of mortality and hospital re-admissions.³ The variation in frequency of leave against medical advice has been shown to be dependent upon type of hospital, region and country.² These discharge rates in developing countries is found to be two times higher as compared to developed country.⁴

The Leaving against Medical Advice (LAMA) predictors can be broadly categorized into patient variables (socio-demographic characteristics, diagnosis, treatment history and attitude towards treatment) and health-care provider variables (hospital settings, policies, staffing pattern, physician's clinical style and experience). Patients who are young, male, with no insurance, low socio-economic status, having alcohol and drug abuse, psychiatry illness, patients lacking social support are found highly likely to be discharged AMA.⁵ Other reasons are dissatisfaction with the care received, family responsibilities and a sense of health improvement.⁶

Considering all these factors, this study aims to identify the prevalence and reasons of discharges against medical advice.

METHODS

This is a cross-sectional descriptive study done at Emergency Department (ED) of a tertiary level hospital in Lalitpur from 15th May 2019 to 15th August 2019. All the patients who left against the medical advice were included in the study. Non-probability purposive sampling method was used for the study and patients who did not give any reason for their leaving AMA were excluded from the study.

Any patients who signed the hospitals legal "Leave

against Medical Advice (LAMA)" document and opted for getting discharged AMA were asked about the details in the pre-structured questionnaire after getting the consent. The questionnaire included the patients demographic profiles like his/her age, sex, address; whether he had any habit of substance abuse; and his reason for leaving the hospital without medical advice. The health personnel filling the form made the additional details in the questionnaire regarding triage, diagnosis, co-morbidities and duration of hospital stay.

The analysis of the data was done using Statistical Package for the Social Sciences (SPSS) software version 21. Descriptive analysis was used. Institutional ethical clearance (IRC No: 2075/76/83) was obtained and informed consent was taken from the patient.

RESULTS

During the three months period of the study, 2812 were seen in Emergency Department with 115 patients leaving against medical advice (4.08%). The age of the patients leaving against medical advice ranged from 3 months to 91 years. 75 patients (65.2%) were among the age group of 15-44 years (Table 1). There were 63 males (54.8%) and 52 females (45.2%).

Twelve percent of the patients leaving against medical advice were critically ill (Table 2).

Table 1 Age Category

Age group	Frequency	Percent
< 1 year	4	3.5
1-14 years	15	13.0
15-44 years	75	65.2
45-75 years	19	16.5
>75 years	2	1.7
Total	115	100.0

Table 2. Triage Category

Triage Category	Frequency	Percent
Emergent	14	12.2
Urgent	39	33.9
Semi-urgent	62	53.9
Total	115	100

Table 3. Duration of Hospital Stay

Duration	Frequency	Percent
< 1 hour	6	5.2
1 - 3 hours	42	36.5
3 - 6 hours	65	56.5
>6hours	2	1.7
Total	115	100

Table 4. Reason for Leaving against medical advice

Reasons	Frequency	Percent
Financial constraint	44	38.3
Preferred other hospitals	19	16.5
Felt better	18	15.7
Ignorance about the disease condition	16	13.9
Personal reason	10	8.7
Stays near by	5	4.3
Old age, palliative care	2	1.7
Wanted to go to traditional healers	1	0.9
Total	115	100.0

Figure 1. Reason for Leaving AMA in accordance to Triage

More than 50 % of the patients utilized the hospital emergency service for more than 3 hours before leaving AMA (Table 3).

Maximum number (38.3%) of the patient left AMA due to financial constraint. 15.7 % of the patients left because they felt better after initial treatment and 13.9 % of patients went without medical advice because they were ignorant about the disease condition (Table 4). Fifty percent of the patients who were critically ill under an emergent triage left AMA due to financial constraints as shown in figure 1.

DISCUSSION

Patients who leave AMA are both a concern and challenge for health care professionals. Identifying

such high risk patients is of utmost importance to intervene early in order to prevent excess morbidity, mortality and health care costs.⁷This study aimed at identifying the patient characteristics who leave AMA and their reasons for doing so.

There are only few studies regarding patients leaving AMA from an Emergency Department(ED) showing a prevalence rate of 0.1% to 2.7% of ED visits.³ We had 115 patients who left AMA in our three months period of study with a total ED visits of 2812 concluding a prevalence rate of 4.08% which is higher than other studies.³

The age range of patients leaving AMA was from three months to 91 years, highest in the age group of 15-44 years (65.2%) similar to other studies^{1,3,8-10} with slight male preponderance (54.8%)^{3,9-12} which may be attributed to financial and social pressure to this group. Since health insurance system is not available in our part of world, all the health care expenses come from patients own capital. Maximum patients (38.3%) in our study leaving AMA decided to do so because they were not financially secure. This data is relatively less in comparison to a study conducted by Naderi et. al. where they found 84% of patient leaving AMA because of financial constraints.¹³ It may be because the study was conducted in a private hospital while our study was conducted in a teaching hospital where the health care costs are considered relatively cheaper. However, financial insecurity is still considered as one of the main reason for patient leaving AMA.^{4,7,14,15} Though these patients ultimately left against medical advice, 65 patients (56.5%) stayed for 3-6 hours in ED.

The other main reason for patient leaving AMA in our setting is because they preferred other hospitals (19; 16.5%). The reason for preference to another center may be because of better service provision like the hospital setting and structure, admission and discharge policies, staffing, physician's clinical style and experience as explained by Ibrahim Al Ayed⁵ which has not been considered in detail in this study. In addition, there are almost 9 hospitals in 5 km distance to ours, both tertiary government and private hospitals, so patients have ample of choices to choose from.

At times even if the patient comes to the hospital in seek of medical care; they tend not to further proceed with their treatment plans after the acute

condition subsides.^{6,7} Eighteen patients (15.7%) in this study went AMA after they felt better with emergency management. Sixteen of the patients (13.9%) of the patients were ignorant about their disease condition questioning the treating physicians' ability to communicate about the patients' actual health status. Other few patients left for their personal reasons like work difficulties (1.7%), no guardian to stay with them at the hospital (3.5%) or no one to take care of family members at home(3.5%). Two patients were taken back home for palliative care and one infant went home AMA to be taken care by traditional healers (*dhami / jhakri*). Five patients (4.3%) left against medical advice to get admitted to follow up in out-patient department because they stay nearby. Upon analyzing 53% of the patients leaving AMA lived within 1km distance.

Various studies have also concluded alcohol as one of the reasons for patients discharging AMA due to their addiction and/or impaired judgement.^{3, 6-8, 16} However, our study showed only 16% of the patients leaving AMA consumed alcohol.

Out of the patients who went AMA, 34% had urgent condition and 12% had emergent condition in our study stating that even patients with very critical condition leave against medical advice similar to studies performed by Carron Pierre-Nicolas et al and Gautam Nikhil et al.^{2,10} Fifty percent of emergent cases and 41% of urgent cases in our study had left AMA because of financial constraint highlighting how our financial status depicts our capability to live in such grave conditions.

Such patients leaving AMA can be minimized with a good national health policy diminishing the financial burden to the individual in regards to their health, improving communication between the patient, care providers and healthcare team; explaining in details about the possible adverse outcome, giving patient time to think about their decision and providing alternative treatment strategies if available which may be acceptable to both the patient and the treating team.^{14, 16}

Limitation

The study was conducted in a single center; hence the results cannot be generalized. Follow up of the patients to determine the outcome and make comparison with normal discharges were not done.

CONCLUSION

This study found male gender, working age group and patients staying nearby to be more vulnerable for leaving AMA despite their triage status, the most common reason being financial constraint. Thus, reinforcing the health insurance system, improving the health education and strategies may reduce such discharges along with skillful communication, negotiable management options and good clinical care.

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