



ORIGINAL RESEARCH PAPER

Surgery

LEAVING AGAINST MEDICAL ADVICE IN TRAUMA PATIENTS FROM EMERGENCY DEPARTMENT: A RETROSPECTIVE STUDY IN TERTIARY HEALTH CARE CENTRE

KEY WORDS: LAMA, Emergency department, trauma patients.

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ABSTRACT

Aim: Our aim was to find out the reasons behind the leaving AMA in trauma patients from emergency department in payment prior model.
Material and Method: We conducted a retrospective review study of charts of ED patients who were discharged AMA between 1 November 2015 and 1 April 2016 at a tertiary care center in Andhra Pradesh, India. Reasons for leaving against medical advice among trauma patients from the emergency department were collected by follow-up telephone interviews.
Results: A total of 127 patients discharged AMA during the study period. Their mean age was 35yrs (SD±14.7) with 70% of them are males. Reasons for leaving AMA were, patient attained symptomatic relief (33.1%), for seeking second opinion (19.7%), financial reasons (11.8%), and long wait times (5.5%), family obligations (3.1%), and others (0.8%). Discharge diagnoses were mainly head injuries (24.4%), long bone injuries (19.7%), facial injuries (3%), and minor injuries (44.9%) and other injuries (8%).
Conclusion: This study interprets that LAMA patients who are at high risk could avoid the unwanted complications by seeking medical advice.

Introduction:

Emergency departments (EDs) of hospitals play an important role in saving people's life. Management and evaluation of EDs performances can only be attained by having reliable information about the current situation. The quality of services given by any hospital can be assessed by the quality of services provided by ED, as it receives the maximum number of cases and most serious cases when compared to other departments [1].

The process of discharge of patient is an important part of hospital management, and implementing correct discharge process plays a key role in defining hospital function. Hence, Leaving against Medical Advice (LAMA) is a critical problem in hospitalization wherein a patient decides to leave the hospital before completion of his or her treatment against the doctor's advice [2].

LAMA disposition from emergency department (ED) is poorly studied [3]. The incidence of Leaving against Medical Advice (LAMA) has been increasingly seen over the past three decades and is becoming one of the biggest preventable problems which forms approximately 2% of all hospital discharges [4].

LAMA has proved to be a problem because of the increase in the number of readmissions of the LAMA patients and also increased risk of complications in them as compared to those patients who finish the entire treatment [5, 6].

Various studies showed different Reasons for leaving AMA, they can be, family obligations, or financial restraints, symptomatic relief by the patient himself, and location of the hospital. Dissatisfaction with the services of hospital to the patient, long waiting times, and ED crowding are associated more with patients leaving the ED without being seen by a medical provider [7].

Considering all of the above, this study aimed to examine the prevalence of LAMA and their reasons in a public teaching hospital in Andhra Pradesh in 2015-2016.

Materials and methods

Study design and setting:

This study was conducted in NRI General Hospital, a tertiary public teaching hospital in Andhra Pradesh, with nearly 3000 trauma patients visit to the emergency department per year. This hospital was an educational, research, and clinical center with 750 Beds.

The ED has payment prior to service model, where the patient is financially cleared before delivering the services.

Inclusion / exclusion criteria:

In our system AMA is a separate category that is assigned to the patient by the discharging provider. A list of all trauma patients who left AMA during the study period was generated and their charts were included for review.

Over a 6-month period, data was collected of all trauma patients who left against medical advice from the emergency department. The following details were collected: (1) Personal Details including age, sex, address, occupation; (2) clinical and administrative elements (Emergency Severity Index, diagnosis, ED length of stay (LOS), cost of care), and hospital characteristics (ED volume) were retrieved from the Medical records department.

A retrospective chart review of all patients who were discharged AMA from the ED between November 1, 2015 and April 1, 2016 were done. Reasons for leaving against medical advice among trauma patients from the emergency department were collected by follow-up telephone interviews, and the reasons were categorized.

The study was approved by the Institutional ethical committee.

This is a descriptive study and the data was expressed in tables, percentages, mean and standard deviation.

Results:

Out of 767 trauma patients who attended casualty department over a period of 6 months, a total of 127 patients left AMA. Their mean age was 33yrs with standard deviation of ±14.7.

Several reasons for leaving AMA were elicited during telephonic interview. The data was categorized on the basis of age, sex, diagnosis, and reasons for LAMA.

Table 1. Population characteristics

Age:	
1-16 yrs	6
17-50 yrs	106
>50 yrs	15

Sex:

Male	98
Female	29

According to the age, the study population was divided into 3 categories. Most of them are adult (17-50 yr) population (83%). Out of 127 people, males are 98(77%) and females are 29(23%).

Table 2.
Presumed Diagnosis of the LAMA

Diagnosis	Percentage
Head Injuries	24.4
Long Bone injuries	19.7
Facial injuries	3
Minor injuries E.g. multiple lacerations requiring suture	44.9
Others E.g. Blunt injury, assault, crush injury, burns	8

The patients who left against medical advice from emergency department, majority of them are suffered with minor injuries (44.9%), followed by head injury patients (24.4%), followed by long bone injuries (19.7%).

Table 3.
Reasons for LAMA

Reason	Total	Percentage
Patient factors		
Monetary issues	15	11.8
Symptomatic relief	42	33.1
For second opinion	25	19.7
Family obligations	4	3.1
Medical staff factors		
Inadequate medical service	0	0
Behavior of the staff	0	0
No proper response	1	0.8
Delay in treatment	7	5.5
Delay in diagnosis	0	0
Others		
Not answered	27	21.2
Re-Admitted	6	4.7

In our study we found that the prime reason for LAMA is false feeling of symptomatic relief by the patient him/herself (33.1%). Other reasons were to seek second opinion from family doctor (19.7%) and monetary issue (11.8%). Only 5% patients left because of delay in the treatment.

Discussion:

In every hospital, it is observed that patients who refuse the complete care, usually face many problems, such as health deterioration, developing further complications, and going for readmission. This may be potentially harmful to both the patient and the doctor [8].

This study is aimed to know the prevalence of patients leaving against medical advice (LAMA) and their various reasons in a teaching general hospital in Andhra Pradesh in 2015-2016. Our study examined characteristics of patients and reasons for leaving AMA from a Casualty with payment prior to service model in a tertiary care Centre in rural region.

The results of this study showed that about 16.56% of patients had been discharged against medical advice. Other studies have reported different prevalence of LAMA.

The prevalence of LAMA in public and teaching hospitals has been reported in several studies. For example, the prevalence of LAMA in the Shirani et al study, conducted in the emergency department of a teaching hospital, was 20.2% [9]. The prevalence of LAMA in the Rangraz Jeedi et al study and Kavosi et al study were

respectively, 10.3% and about 9% which were lower than our study prevalence [10,11].

Several reasons for leaving AMA were also identified in our population. These are classified into patient factors, medical staff factors and hospital environment factors. These included symptomatic relief, for seeking second opinion, family obligations, addiction to alcohol, and delayed workup in addition to financial problems.

Findings showed that among the patient factors, the choice of "symptomatic relief" (33.1%) had the highest impact which in comparison with the findings of Rangraz Jeedi et al and Roodpeyma and Noohi K [10,12,13]. Majority of them suffered with minor head injury and the CT brain report was normal study. This prompted the patients to leave without any observation period as advised by the doctors. To eliminate the false or temporary "symptomatic relief" of patients, we should inform the patient about the consequences associated with LAMA [14].

The other important reason for LAMA is the idea to seek second opinion (19.7%) from family doctors or other experts and want to get complete private care with less expenses. This is similar to the findings of other studies Al-Ghafri M and Onukwughu [15, 16].

Similar to other settings, patients who left AMA were relatively young and uninsured. Because of monetary issues 25 patients (11.8%) were left against medical advice from our hospital in the study period. A study by Ding et al in a urban inner US city teaching hospital found that patients who left AMA were significantly more likely to be uninsured and from low economic status [5]. The results were not comparable to other studies because of population studied were different and our hospital is a general teaching hospital where the costs are not too high and out of patient's ability to pay.

Majority of the LAMA cases are males, this finding can account for the social responsibility that men feel in caring for the family, their risk taking attitude in making decisions. This is similar to other studies finding [13]. Family obligations are another cause for LAMA, like lack of attendants with the patient, which would hinder the process of further workup and treatment options and sometimes decision making.

This study highlights many important issues some of which are applicable to other ED with similar payment prior service model. Our interventions should aim at the reducing the risk by addressing the causes of LAMA. Mazen El Sayed [17]. Described various levels of interventions to limit the complications of LAMA discharge. They are, need for documenting the capacity of the patients to understand the problems associated with LAMA. Second, we should try to prevent LAMA by explaining all treatment options available. Third, obtaining proper consent, clear documentation of the events and reason for LAMA to be included in documents. Lastly, if all fails, we should offer the patient return to EDs if their condition changes.

Although some patients discharged against medical advice may have left the hospital prematurely, it also is possible that the increased risks associated with discharge against medical advice result from poor post discharge follow-up. Lack of trust and poor patient/provider communication have been associated with discharge against medical advice [18,19].

Limitations

Limitations of the study are, One is retrospective nature of the study. Another limitation is reasons for leaving AMA were not documented in the patient's records. Few patients were lost follow up

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