

Original Research Article

Incidence and reasons for leave against medical advice among orthopedic and trauma patients at the university college hospital Ibadan

Tolulope O. Ogunrewo, Oluwadayo A. Magbagbeola*, Samuel T. Oladejo, Adeoye Allen-Taylor

Department of Orthopedics and Trauma, University College Hospital, Ibadan, Oyo State, Nigeria

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*Correspondence:

Dr. Oluwadayo A. Magbagbeola,
E-mail: oamagbagbeola@gmail.com

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ABSTRACT

Background: Leave against medical advice (LAMA) of hospitalized patients is an adverse clinical event in which a patient chooses to leave the hospital before it is medically advisable to do so and it negatively affects the treatment outcome. Because of this, the study was designed to determine the incidence of and indications for LAMA among orthopedic patients who presented at the accident and emergency department of the university college hospital, Ibadan.

Methods: This was a prospective hospital-based study determining the incidence of LAMA among orthopedic patients who presented at the accident and emergency department of the university college hospital, Ibadan between September 2019 and March 2020.

Results: A total of 289 patients with orthopedic conditions presented within the study period and about 12.46% of these LAMA. The male to female ratio observed in this study is 2:1. The age range was between 8 and 93 years. Trauma from motorbike and motor vehicle accidents accounted for over 80% of the etiology. The most important factor influencing LAMA is financial constraints (63.9%) and LAMA was signed mostly by the patients (25%).

Conclusions: LAMA among orthopedic patients in Ibadan is mostly due to financial reasons, therefore, factors that will reduce the cost of management such as the accessibility to health insurance schemes will significantly reduce the incidence of LAMA among orthopedic patients in Nigeria.

Keywords: LAMA, DAMA, Health insurance scheme

INTRODUCTION

Patients who leave the hospital before the clinician certification of fitness are said to have LAMA.¹ LAMA otherwise referred to as discharge against medical advice (DAMA) or discharge at own risk (DAOR) of hospitalized patients is an adverse clinical event often resulting from a fundamental disagreement between the patient or an interested third party and the attending physician and/or the hospital environment care.^{2,3} LAMA is the situation in which a patient chooses to leave the hospital before it is medically advisable to do so and it involves the signing of a legal release form by the patient, caregiver or parent/guardian for children.^{4,5} This prevents such patients from having the full benefits of services rendered by the

health facility as such these individuals place themselves at medical risk as observed by Jeremiah et al in their study.^{6,7}

LAMA negatively impacts treatment outcomes, healthcare resource utilization and exposes the clinician as well as health care administrators to the hazards of litigations.⁸⁻¹⁰ It is also associated with higher readmission rates for the same or related morbidity and higher long-term financial cost of medical care.^{11,12}

Patients have a right to decide to leave the hospital. Steven Stack, a member of the board of the American medical association opined that “medical decisions are a partnership between the patient and the doctor, but the

patient is nearly always the final decision maker”.¹¹ Patients who leave the hospital against doctor’s order have been reported to be at a higher risk of adverse health outcomes compared with patients who follow doctor’s advice.¹¹

The incidence of LAMA ranges from 0.2 to 2.25% of hospital admissions in developed societies.^{11,12} The rate ranged from 0.7 to 2.2% for general medical admissions, 6 to 54% for psychiatry admission and 0.9-4.2% for emergency admissions.^{1,3,13,14} The study done in Uyo, Nigeria showed a rate of 5.9% among orthopedic patients.¹⁵

LAMA is influenced by some factors. These factors include patients’ medical condition, the availability or otherwise of health insurance.⁹⁻¹¹ It is observed to be more common in alcoholics and drug addicts as well as mentally and psychologically challenged patients.⁹

Some reasons given for LAMA include dissatisfaction with care, enticement/inducement by alternative medical practitioners/traditional bonesetters, sociocultural beliefs patient feeling better; family obligations, financial reasons and legal issues.^{10,16} Other factors such as younger age, male sex, substance abuse disorders and lack of health insurance have been noted.¹⁷ Also, high illiteracy rate in Nigeria and other parts of Africa may make comprehension of explanations as regards patient’s health and patient care difficult and this may lead to a lack of trust in orthodox treatment.¹⁸

Patient non-compliance has the potential to result in harm to the individual’s health and professional liability is also a concern for medical professional caring for these patients.

In children, it was observed that the commonest reason for LAMA is the parental fear of accumulation of hospital bills and this affects the health-seeking behaviour.⁵

Patients who LAMA usually patronize alternative medicine (i.e. traditional, trado-medical, spiritual healing homes and quack clinics) and some of the reason for this include ignorance, poverty and lack of proper healthcare plan.¹⁸⁻²⁰

Because of this, the study was designed to determine the incidence of and indications of LAMA among orthopedic patients who presented at the accident and emergency department of the university college hospital, Ibadan, Oyo State, Nigeria.

METHODS

This was a prospective hospital-based study to determine the incidence of LAMA among orthopedics patients who presented at the accident and emergency department of the university college hospital Ibadan, an 850-bed tertiary hospital located in Ibadan, the capital of Oyo State in the Southwest of Nigeria. It included all consecutive patients admitted for orthopedic and extremity trauma-related consults who left against medical advice between September 2019 and March 2020. Data were obtained using a predesigned proforma which was administered by the orthopedic registrar on-call. Information retrieved included the patient’s initials, age, occupation, sex, level of education, cause of fracture, type of fracture, diagnosis, duration of hospitalization before LAMA, the reason for LAMA and the signatory to the LAMA.

Data analysis was carried out using IBM SPSS statistics for Windows, version 20.0. (IBM Corp., Armonk, NY, USA).

RESULTS

A total of 289 orthopedics and trauma-related consults were requested during the study period with 36 of them leaving against medical advice. The ratio of males to females was 2 to 1. The patients aged from 8-93 years, with the patients aged 20-29 years having the highest frequency of LAMAs followed by the 30-39 years (36 to 25% respectively). Eighty-three per cent of the patients who LAMA was involved in road traffic crashes. Femur, tibia and fibula fractures were the highest among patients who LAMA followed by upper limb fractures (Table 1).

Almost all (97%) of the patients who LAMA did so within the first 7 days of admission (70% of these patients leave within the first 24 hours). Two-thirds of these patients LAMA due to inability to pay for care and 60% of the LAMAs were signed by family members (Table 2).

Table 1: Demographics and injury characteristics of orthopaedics and trauma patients who LAMA in the accident and emergency at UCH, Ibadan (n=36).

Characteristics	N (%)
Gender	
Male	24 (66.7)
Age (years)	
19 and younger	5
20-29	13
30-39	9
40-49	4
50 and older	5

Continued.

Characteristics	N (%)
Educational level	
Primary	11 (30.6)
Secondary	14 (38.9)
Tertiary	8 (22.2)
None	3 (8.3)
Diagnosis	
Femur fracture	10 (27.78)
Tibia and fibula fractures	10 (27.78)
Humerus fracture	4 (11.11)
Radius and ulna fractures	3 (8.33)
Diabetic foot syndrome	1 (2.78)
Ankle fracture	2 (5.56)
Floating knee	3 (8.33)
Hip dislocation	1 (2.78)
Open knee injury	1 (2.78)
Foot injury	1 (2.78)
Mechanism of injury	
Motor-vehicle road traffic accident	18 (50)
Motor-bike road traffic accident	12 (33.3)
Fall	5 (13.9)
Occupation-related	1 (2.8)

Table 2: Days on admission before LAMA, the reason for and signatory to LAMA.

Variables	*N (%)
Days on admission before LAMA	
1	24 (68.56)
2	5 (14.29)
3	3 (8.57)
4	1 (2.86)
7	1 (2.86)
14	1 (2.86)
Reason for LAMA	
Financial	24 (66.7)
Alternative care (TBS)	9 (25)
Another facility	1 (2.8)
Inadequate care	2 (5.6)
Signatory to the LAMA	
Self	9 (25)
Father	7 (19.44)
Mother	2 (5.56)
Children	2 (5.56)
Brother	6 (16.67)
Sister	2 (5.56)
Husband	2 (5.56)
Friends	6 (16.67)

N=36; *n=35.

DISCUSSION

According to human rights and the 'patients' charter', a patient has a right to self-determination or autonomy, while the healthcare providers also have the right to do what they think is best for the patient (to act with beneficence).⁶

A total of 289 patients with orthopedic conditions presented to the accident and emergency department of the university college hospital, Ibadan within the study period. 36 patients left the hospital against medical advice. This accounted for 12.46% of the patients with orthopedic and extremity trauma-related conditions. A similar study done in Uyo showed a lesser value of 5.9%, while Udosen et al.^{15,21} found a rate of 72.2% among patients who presented with acute trauma in their study. The high cost of procuring health care services among Nigerians and poverty may be accountable for this higher rate of LAMA. This is because most Nigerians still pay out of pocket for their health as the health insurance scheme is not widely adopted. The male to female ratio observed in this study is 2:1. Udosen et al.²¹ in Calabar observed a similar finding while Nasir et al.¹ observed a much higher ratio in their study. More males are involved in trauma, and acute trauma has been observed to be associated with a high rate of LAMA.²² This may be the reason for the higher prevalence of males in LAMA.

The age range is between 8 and 93 years, however, 61.1% had their age between 20 and 39 years. This age bracket suggests a significant effect and influence of economic and social pressure¹ as such they are more predisposed to traumatic events thereby predisposed to LAMA.

About 90% of our patients who left against medical advice had some form of formal (primary, secondary or tertiary) education. 69.5% of them had their education up to the secondary school level. Most of the communication is done in English and local dialect as such failure to comprehend information concerning care and health may not significantly influence in or predispose these patients to LAMA. Trauma from motorbike and motor vehicle

accidents accounted for over 80% of the etiology. Other studies also showed trauma as the main cause with the rate ranging between 63.9 and 97.2%.^{1,8,9} Road traffic crash is common in our environment due to bad roads and poor road network, driving above the speed limit, inadequate road signs and driving under the influence of alcohol. Most of these patients left within the first days of admission. Similar studies done elsewhere in Nigeria showed most patients LAMA within the first five days of admission.^{15,21}

Financial reason was the most given reason for LAMA in this study (63.9%). This is as observed in the study done in Enugu, Nigeria.²³ The health insurance in Nigeria is not yet as widely used especially by individuals in the informal sector of the economy as such most of these patients pay out of pocket. Also, in its present form, not all aspect of treatment is covered by the health insurance for those presently on it. Consequently, limited financial resources remains a major barrier to the delivery of quality healthcare in Nigeria as well as a major factor that predispose our patients to LAMA.

The desire for management at the traditional bonesetter (TBS) is the next most common reason for seeking discharge against medical advice as it accounted for 25%. Similarly, other studies observed that most of the patients who LAMA did so to seek alternative/unorthodox treatment.^{1,16} This is because such individuals have more faith in the treatment by the TBS and the view that they are not as expensive as the orthodox methods of treatment make patients choose this form of treatment. Other reasons given include unsatisfactory care and need for treatment at another facility.

LAMA was signed by the patients in 25% of instances and by the family members (father, mother, siblings, children and spouses) in 58.3% of cases. 16.7% of LAMAs were signed by friends. This trend is similar to that found by Eze et al.²³ This observation further shows the dominant role of the opinion of family members in influencing an individual's healthcare choices among Nigerians, as families and caregivers bear the cost of medical care due to poor or non-existent social security services.²⁴

CONCLUSION

LAMA among orthopedic patients in Ibadan is a common event and is mostly due to financial reasons. Therefore, increasing access to health insurance schemes will significantly reduce the financial burden of care, reduce the incidence of LAMA and improve the outcome of patients with orthopedic problems in Nigeria.

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