Clinical spectrum of discharges against medical advice in a developing country

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Abstract

Background Patients who leave the hospital before clinician certification of fitness are referred to as discharge against medical advice (DAMA). This phenomenon of discharges against medical advice is an undesirable but relatively common occurrence worldwide. Professional liability and harmful effect of this practice to individual health are of concern.

Aims: The essence of this study is to determine the spectrum of patients who DAMA in a Nigerian teaching hospital.

Design Descriptive study over a two-year period in an urban teaching hospital in Nigeria.

Materials and methods All consecutive patients who discharge against medical advice at the surgical emergency room of University Teaching Hospital, Ilorin from January 2004 to December 2005 were studied prospectively. The patients' demographic details, diagnosis, reason for discharge, signatory to discharge and length of hospital stay were studied.

Statistical analysis Analysis of the data was done using Statistical Package for Social Sciences (SPSS) version 11.

Results Prevalence rate of DAMA was 4.2%, comprising 110 of a total of 2,617 patients admitted during the study period. Male to female ratio was 3.8:1, the mean age was 30.0 years (range, 4–70 years). Trauma accounted for the highest number of patients 102(97.2%) out of whom 52 (51%) had long bones fracture. Patients who wish to seek alternate medical care accounted for 43.6%, while financial constraint contributed to 29.1% DAMA. Forty-five out of forty-eight (93.7%) of patients who DAMA to seek alternate medical care had fracture.

Conclusion Trauma was the most common clinical condition for patients who DAMA. Most common reason for DAMA was to seek alternate treatment followed by financial constraint. Health education on potential benefit of orthodox treatment of fracture, treatment subsidy and full implementation of national health insurance scheme will reduce incidence of DAMA.

Keywords Discharge · Medical advice · Trauma · Health education

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Introduction

Patients who leave the hospital before the clinician certification of fitness are referred to as “discharges against medical advice” (DAMA). They are both a concern and a challenge for individuals in the health care field [1]. It is surprising that patients who come to the hospital trusting in the ability

of the medical expert to solve their problem will undertake discharge from the hospital before clinician certification of fitness. This may be due to lack of trust in orthodox treatment. Patient non-compliance has the potential to result in harm to the individual's health and professional liability is also a concern for surgeons caring for these patients. Although patients still maintain their inalienable right to accept or reject medical treatment, when a patient decides to discharge himself against medical advice, he is assumed to be exercising this fundamental human autonomy over his choices of medical treatment [2]. The phenomenon of DAMA is an undesirable but relatively common occurrence worldwide [1, 3–6]. DAMA have been widely studied among adult psychiatric patients [1, 6, 7, 8]. Studies on surgical patients are scanty, mostly retrospective. Previous studies on surgical DAMA have demonstrated a variety of results [3, 4]. Patients DAMA for heterogeneous reasons [3, 4, 6, 8, 9]. The objective of this study is to determine the clinical spectrum of surgical patients who DAMA. The study will also propose interventions to limit legal liability and incidence of DAMA.

Materials and methods

This was a prospective study conducted over 24 months from January 2004 to December 2005, at the surgical emergency room of the University of Ilorin Teaching Hospital,

Ilorin, Nigeria a 450-bed hospital. It serves as a catchment area for approximately 10 million people who live in south-western and northcentral zone of the country. The subjects included consecutive surgical patients who discharged against medical advice. The attending casualty officer or one of the authors completed the proforma at the time of DAMA. Data collected on a standard proforma included: age, gender, diagnosis, managing unit, length of stay in hospital, discharge date, reason for discharge (DAMA) and signatory to discharge. Analysis of the data was done using Statistical Package for Social Sciences (SPSS) version 11. Chi-square test was used for test of association and the significant level was put at $P < 0.05$. Findings are presented in tables and graphs as appropriate.

Results

Characteristics of the study population is shown in Table 1. Out of a total of 2,617 patients admitted into surgical emergency room during the study period, 110 cases (4.2%) were DAMA. There were 87 males and 23 females. Male to female ratio was 3.8:1. the mean age was 30.0 ± 14.5 years (range, 4–70 years). Sixty-five per cent of patients were in the age group 21–40 years (Fig. 1).

Figure 2 shows diagnosis associated with DAMA. Trauma accounted for the highest number of patients 102 (97.2%) out of whom 52 (51%) had long bones fractured.

Fig. 1 Age and sex distribution of patients that discharged against medical advice (Jan. 2004–Dec. 2005)

Fig. 2 Diagnosis of patients discharged against medical advice (Jan. 2004–Dec. 2005)

Bone fracture and dislocation accounted for 53.6% while head injuries contributed to 22.7% DAMA. Soft tissue injuries were the diagnoses in 17.3% of patients. Other diagnoses included C-spine injuries in 3.6%, limb gangrene in 3.6%, blunt abdominal injuries in 2.7%, blunt chest injuries in 2.7%, burns in 0.9%, gastrointestinal disorder in 5.5% and urinary retention in 0.9%.

The mean duration of hospitalization was 53.4 hrs (range, 1 hr–15 days). In this study, 85 (77.3%) of patients stayed 3 days or less before DAMA. Reasons given for DAMA are showed in Table 2. Patients who wish to seek alternate medical care accounted for 43.6%, financial constraint contributed to 29.1%, while request for treatment in another hospital and treatment close to relative constituted 5.5% and 6.4% respectively. Other reasons given included dissatisfaction with hospital facilities by 7.3% and disagreement with planned treatment (2.7%). There was a significant association between the diagnosis and reason given for DAMA ($P < 0.05$). Forty-five out of forty-eight (93.7%) patients who DAMA to seek alternate medical care had fracture while 17 out of 32 (53.1%) patients who DAMA for financial reasons had head injuries. Relatives were signatory to DAMA in 85 (77.3%) patients and only 15 (13.6%) patients signed for themselves as illustrated in Fig. 3.

Table 1 Characteristics of study population

Characteristics	No
Total admissions	2,617
DAMA	110
Males	87
Females	23
M : F ratio	3.8:1
Prevalent rate	4.2%
Mean age (range)	30 yrs(4–70 years)
Mean duration of admission (range)	53.4 hrs(1 hr–15 days)

Table 2 Reason for discharged against medical advice (Jan.2004–Dec.2005)

Reasons	Patients (%)
To seek alternative medical care	48(43.6)
Financial difficulties	32(29.1)
Dissatisfaction with hospital facilities/services	8(7.3)
Prefers treatment close to relative	7(6.4)
Transfer to another hospital	6(5.5)
Disagrees with planned treatment	3(2.7)
To complete police investigation	1(0.9)
Non specific	12(10.9)

Fig. 3 Distribution of signatory to discharged against medical advice (Jan. 2004–Dec. 2005)

Discussion

Discharge against medical advice has been widely studied especially among adult psychiatric patients in developed countries. Few retrospective reports on surgical patients showed prevalence rate of 1.94–13% [3, 4].

The preponderance of male over female in this study is in keeping with earlier studies [1, 3, 4]. It could be explained by the nature of surgical problems in these patients. Trauma which is associated with the highest number of patients seeking for DAMA is more common in males than females [10]. This is because of greater exposure and risk among males. Higher involvement of age group 21–40 in this study may be due to influence of economic and social pressure on this group.

DAMA involves a heterogeneous group of diagnosis with trauma being the most common in surgical patients. Akiode reported 63.9% of trauma while 82% was reported by Olanaka in Benin [3, 4]. In this study trauma accounted for (97.2%) while long bone fracture was the most common diagnosis in patients that DAMA (51%). This is because trauma is the most common reason for patients being admitted in surgical emergency as shown by Solagberu et al [11]. Perhaps our people have faith in the traditional bone setters than in the orthodox medical practice. This was demonstrated in this study as most patients that DAMA to seek alternate medical care had fracture. Some patients with foot gangrene also DAMA, since the treatment usually entails amputation of the affected part of the body. This form of treatment is not easily acceptable by our people because of the stigma and the belief of reincarnation with absence of the lost part of the body [3]. In our study, like others [4, 9, 12] financial

constraints was a major reason for DAMA. In most low and medium income countries where rate of unemployment is abysmally high and social security services are non-existent, families and caregivers sustain an endless rising cost of medical care. The Nigerian National Health Insurance Scheme introduced in 1984 and re-launched recently needs to be implemented nationwide in a sustainable manner that ensures that the most vulnerable / downtrodden population, which include trauma patients are not marginalized. Also non-governmental organisations (NGOs) and groups who are favourably disposed to care of trauma patients should be encouraged to commit charity funds for special cases such as trauma care to reduce incidence of DAMA. Government should also accelerate measures to alleviate poverty. In this study, some cases of DAMA were attributable to patients' disagreements with planned treatments and dissatisfaction with hospital facilities. Health workers often face some difficulty in patients care attributable to limited facilities, being understaffed, busy schedules and uncooperative attitude and uneducated caregivers. This may lead to the disagreement and dissatisfaction. There is a need for improved communication between patients and health team. Improved communication will clarify or reduce misconception and adverse attitude that sometimes lead to refusal of life-saving therapy. Patients that DAMA to receive treatment close to their relative or to other hospital closer to their homes for convenience of nursing may be justified since most patients with trauma are likely to be in transit. This category of patients need not DAMA where there is good communication and understanding between patient and health care provider. The hitherto situation where caregivers are involved in the purchase of most items

needed to treat patients including medication and blood can be frustrating thus necessitating DAMA. There is a need for managers of public health institutions to worry about the confidence and satisfaction of their patients. They need to reduce the unnecessary bottleneck in patient management.

Culturally, relatives constitute the primary caregivers in developing countries and are mostly involved in health decision-making at the expense of patients' consent perhaps due to financial constraints. This was aptly illustrated in this study where relatives were signatories to DAMA in 77.3% of patients. Patients 18 years and above should ideally sign discharge on their own. It was noted that some health workers in this institution did not follow the procedure for DAMA before allowing patients to sign against medical advices. Proper form for documentation was not available in this centre. Discharging against medical advice without documentation that the physician conscientiously addressed patients problems and determine patients competency to sign, leave the health care provider and the hospital authorities legally unprotected in the event of an adverse consequence.

Health education on the potential benefits of orthodox medical treatment of fracture over alternative medical care need to be discussed with patients and caregivers. This has been shown to reduce DAMA rate [4]. Patients-clinician communication skill should be applied to prevent DAMA. Well informed patients and caregivers are more likely to take rational health decision concerning their ailments. Irrespective of their final decision, DAMA patients should be supported as alluded to by Okoromah et al [9]. The role of social health workers in the pre and post discharge management of patients requesting DAMA cannot be overemphasized. Comprehensive documentation has become increasingly important, particularly that pertaining to DAMA as with any form of patient non-compliance. This will assist in defending against liability implications.

Inability to follow-up DAMA patients to determine outcome and compare with patients who were discharged normally were the limitations of this study.

At this point, a prospective study with patient follow-up would certainly provide an added dimension to this research.

Continuous public education on merit of orthodox management of fracture, improvement in the national health allocation, introduction of treatment subsidy for trauma patients and full implementation of National Health Insurance Scheme will reduce the incidence of discharges against medical advice in developing countries.

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