Original Article

A Study of Patients who leave the Accident & Emergency Department against Medical Advice: An Eastern Nigeria Tertiary Institution Experience

Oguzie GC.¹, Lasebikan OA.^{2*}, Chukwumam DOC.¹, Oparaocha DC.³, Onyempka CJ.⁴, Lasebikan NN.⁵

¹Department Orthopedics, Federal Medical Center, Owerri, Imo State

²National Orthopedic Hospital, Enugu, Enugu State

³Department of Surgery, Federal Medical Center Owerri, Imo state

⁴Department of Surgery, Federal Medical Center, Owerri, Imo State

⁵Department of Radiation Medicine, University of Nigeria Teaching Hospital, Enugu

**Corresponding Author: Dr Omolade A. Lasebikan, Department of Orthopedic Surgery, National Orthopedic Hospital, P.M.B 01294 Enugu, Enugu State, Nigeria. ladelash@yahoo.com*

ABSTRACT

The concept of patients leaving the Accident & Emergency Department against medical advice, Discharging Against Medical Advice (DAMA) or Signing Against Medical Advice (SAMA) is a common occurrence in our sub-region. These groups of patients are often considered high-risk, as they are prone to complications from seeking alternative healthcare services, which might be detrimental to their health. The objective was to determine the characteristics of patients signing against medical advice and the subspecialty with the highest prevalence of patients leaving the hospital against medical advice. A quantitative cross-sectional study design was chosen to accomplish the objectives of the study. A retrospective study was carried out in the Accident & Emergency Department (A & ED) of Federal Medical Center, Owerri (FMCO), to determine the characteristics of this distinct group of patients who left the hospital against medical advice. A review of the records of all patients who left against medical advice between 1st of August 2012 and 31st of July 2014 was done. There were 137 DAMA cases during the study period. The mean age of the DAMA study group was 32.3 years $\pm$ 15.9. The major subspecialty involved was Orthopedics and Trauma with 51.8% (n = 71). The modal age group was between 21 – 30 years with 41.6% (n = 57) while 77.4% were males. In conclusion younger males with orthopedics and trauma cases were the most involved in DAMA and so this group of patients should be counseled as soon as they arrive the Accident and Emergency Department. A further study is needed to find out where they go and their outcome.

Keywords: Discharge Against Medical Advice, Signing Against Medical Advice.

INTRODUCTION

The concept of Patients leaving an Accident & Emergency Department against medical advice is a common occurrence in our sub-region. This group of patients are often considered high-risk group as they are prone to seeking alternative healthcare services which might be detrimental to their health.^{1,2} A retrospective study was carried out in an

2018 Journal Impact Factor: 1.10
Print ISSN: 2636-7378 | Online ISSN: 2651-5865

Accident & Emergency Department (A & ED) to determine the characteristics of this distinct group of patients and the specialty with the most patients leaving against medical advice (LAMA). Patients have the right to leave an Accident and Emergency Department (A & ED) against medical advice based on human rights and the "Patients' charter".³

This is often a source of dissatisfaction for the medical staff that have to sustain an equilibrium between the welfare of the patient in preserving his/her autonomy and the interests of the state in maintaining life and adequate health. Discharges against medical advice were considered by some studies to be a high-risk event with the potential of leading to malpractice litigation.^{1,4,5} The health of this group is considered to be at a higher risk. A study conducted by Youssef in Saudi Arabia estimated the mortality rate of patients who were discharged against medical advice in a year at 16%,⁶ perhaps because there is a delay/deviation in the treatment of these individuals due to the change in plan, considering that this is an emergency. Furthermore, they will need to transport patient to another facility, hence increasing the risk of morbidity and mortality associated with the condition. Preventing misfortune following discharge against medical advice is an essential risk management issue in emergency medicine.

The objectives of this study were: (1) To determine the characteristics of patients discharged against medical advice; (2) The subspecialty with the most patients discharged against medical advice.

MATERIALS AND METHODS

A retrospective study was carried out in the Accident & Emergency Department of Federal Medical Center, Owerri to determine the characteristics of this distinct group of patients who sign and leave against medical advice (AMA). A review of the records of all patients who left Against Medical Advice between 1st of August 2012 and 31st of July 2014 was done and data collected which includes their biographic details, diagnosis and subspecialty under which they were managed.

Federal medical Centre, Owerri is a tertiary institution and serves as a major referral center in Owerri, Imo state and is situated in the eastern part of Nigeria. The case notes of patients who left against medical advice from the accident and emergency and had signed the DAMA form were included in our study. Patients who refused treatment but did not require admission were excluded. The survey included questions on

demographic characteristics, chief complaints and the subspecialty involved in the case management.

RESULTS

The A & ED had 8300 patients admitted during the period of the study of two years, out of which 137 cases were discharged against medical advice during the study period, equivalent to 1.65% of patients. The mean age was 32.33 years $\pm$ 15.99 and there was a significant difference in sex with preponderance of males 77.4% (n = 106) and females 22.6% (n = 31) as shown in figure 1.

Figure 1: Gender distribution of patients

The major subspecialty involved in SAMA included Orthopedics and Trauma 51.8% (n = 71), Internal medicine 27.7% (n = 38), Burns and Plastics 8.8% (n = 12), General surgery 5.8% (n = 8) and the least number was in Cardiothoracic and ENT units with both 1.5% (n = 2) respectively. (Figure 3) The modal age group in this study was between 21 – 30 years with 41.6% (n = 57). The lowest age group found in the study was 51 – 60 and 61 – 70 years with 2.2% (n = 3) respectively (Figure 2). Figure 4 showed the male orthopedic patients were predominant, however there was a female preponderance in internal medicine, general surgery and plastic surgery.

Figure 2: Age group distribution showing 21 – 30 years as the largest population

Figure 3: Distribution patients by specialty

Figure 4: Distribution of Specialties by Sex

Key: CTU-Cardiothoracic; ENT-Ear, Nose & Throat; GS- General Surgery; MED-Internal Medicine; OPHTH-Ophthalmology; ORTHO-Orthopedics; PLASTIC-Plastic Surgery

DISCUSSION

There is paucity of studies on DAMA patients in the A & ED setting in our sub-region. Ensieh *et al.*, reported a DAMA rate of 3.27% while 0.73% and 0.68% was reported by Pennycook *et al.*, and Carmago respectively; we also observed a similar low rate of 1.65 %.⁷⁻⁹ There are several factors which could affect the result; hence stern comparison would not be appropriate.⁷

Wong *et al.*,¹ and Jimoh *et al.*,¹⁰ had the pediatric age group constituting the largest group of patients who left AMA; however, our study showed the largest group was 21-30 years (41.6%). This composed of the young age group; hence the speculation that financial reasons are the major cause of leaving the hospitals. It also suggests that the knowledge of alternative cheaper options such as the traditional herbalists would serve as attractions for them. The small number of children involved (less than 20years) is not surprising, as children are dependent on their parents for support and their anxious parents may have difficulty leaving the children in the hospital or discharging the child against medical advice. The Emergency physicians need to treat both these individuals and their anxious parents and relations.

Our study reported the least age group as the older individuals within the 51-60 years and 61-70 years with 2.2% each. Moy's had a similar experience in his study where it was shown that older individuals were less likely to LAMA.⁹ The small number of elderly involved might be a reflection of the small number of aged patients that attend the ED in our setting. Most of the elderly prefer alternative healthcare due to proximity to traditional healers, traditional beliefs, and preference of out-patient treatment. On the other hand, dependence on their children and other relatives who are the care givers might limit their leaving the hospital as the caregivers might insist on hospital care. In addition, based on the life expectancy in Nigeria, elderly population are in the minority.

In Nigeria, most patients pay for their hospital bills out-of-pocket. With majority of the population living below poverty line, the paucity of health insurance participation in this part of the world may be contributory to the rate of DAMA. In Moy's study, it was shown that individuals with no insurance were more likely to leave against medical advice.⁶ In our resource limited setting; hospital charges are significant except for those under the National Health Insurance Scheme (NHIS). However a study in Tehran did not find a statistical significant relationship between insurance status and DAMA.¹¹

In our study, trauma cases were the most common cases seen. This is similar to the finding by Pennycook *et al.*,⁷ Dubow *et al.*,¹² and Nasir *et al.*¹³ Considering the peculiarity of trauma patients – the need for surgery, long hospital stay, and mostly young male patients with active life style; financial problems; traditional and religious beliefs; advice from friends, and the high publicity of the traditional bone setters; the high prevalence of DAMA is no surprise.

Other factors that play a role in the decision to leave the A & ED are the waiting time and proper understanding of treatment options.^{7,12-15} Pennycook suggested that prompt, friendly and sensitive nurse triage and minimizing waiting time might decrease the number of patients leaving AMA.⁷ Dan Mayer's study suggested that the usual reasons for patients' refusal of medical attention included misunderstanding, anger and fear.¹⁶ Clarification of misconceptions and modification of negative preconceptions about hospitalization by a team of patient advocates was successful in reducing the rate of AMA discharges in a psychiatric hospital.¹⁷ Though an effective mode of tackling the problem, the heavy patient load and few doctors in our setting might make this a challenging task.

It is a common belief that it is difficult for an emergency physician to establish a trusting relationship with an unfamiliar patient due to the short stay in A & ED; this may be contributory to the reason for the high DAMA rate. In Dubow's study, 30% of the patients reported dissatisfaction with their emergency physicians.¹² Pennycook *et al.*, in their study, also noted that alcohol intoxication was found to be a main reason (65.5%) for irregular discharge in a UK study.⁷ In our study, we could not assess the reason for their leaving and if they returned, since this was a retrospective study.

Although no formal complaint was received and no medico-legal action was brought against the hospital related to these events during this period, DAMA is still considered an important risk management issue. This highlights the need for proper documentation to prevent litigations against hospitals, and ensure accountability to patient care.¹⁸ In his study, Dubow found that the documentation on the ED records of patients signing out AMA was generally poor, as was found in our study.¹² The American College of Emergency Physicians suggests that every chart should reflect that the patient is competent, and understands the diagnosis, treatment offered, alternative therapy and potential consequences of disregarding the recommended treatment.⁵ In A & EDs, a standardized form and protocol should be introduced for AMA discharges as this will definitely improve on the DAMA documentations.¹⁸

Akinbodewa *et al.*, in their study stated that Adherence to standard DAMA protocol by medical staff was poor in their study and further suggested update courses on ethico-legal matters, adopting a discharge planning team approach, upgrading of DAMA forms and stressing global best practices are ways to mitigate or eliminate risk of litigations from DAMA cases.¹⁹

A considerable proportion of patients who present to the emergency department take DAMA in favour of unorthodox form of treatment.²⁰ This represents a challenging concern in healthcare for health-care providers alike and patients.^{1,13,17-20}

CONCLUSION

The study showed the younger males with orthopedics and trauma cases account for the majority of patients involved in DAMA and so this group of patients, and their relations, should be counseled and prompt definitive management instituted as soon as they arrive the A & ED. Further prospective studies are needed to find out the exact reasons for leaving, and where they go for care, as well as their outcome.

Acknowledgement

Appreciation is extended to Drs Ekwunife Christopher & Asodike V.C for their support and contributions to the success of this work.

Conflict of interest

None declared

REFERENCES

1. Wong TW, Lee KM, Chan R, Lau Collin. A Study of patients who leave an Accident and Emergency Department against medical advice. Hongkong J.of Emerg. Med 2000; 7:22-26.
2. Querques J, Kontos N, Freudenreich O. Discharges against medical advice. JAMA. 2014; 311(17):1807–8.
3. Sheikhmoonesi F, Khademloo M, Pazhuheshgar S. Patients Discharged Against Medical Advice from a Psychiatric Hospital in Iran: A Prospective Study. Glob J Health Sci. 2014; 6(3):213–8.
4. Selbst SM. Leaving against medical advice. Pediatric Emergency Care 1986; 2:266-8.
5. Rogers JT. Risk management in emergency medicine. Dallas: American College of Emergency

- Physicians 1985;1-36
6. Youssef A. Factors associated with discharge against medical advice in a Saudi teaching hospital. *Journal of Taibah University Medical Sciences*. 2012;7(1):13–8.
 7. Pennycook AG, McNaughton G, Hogg F. Irregular discharge against medical advice from the accident & emergency department-a cause for concern. *Archives of Emergency Medicine* 1992; 9: 230-8.
 8. Camargo CA, Jr. Patient who leave against medical advice from the emergency department. *Acad Emerg Med* 1995; 2(5) 233.
 9. Moy E, Bartman BA. Race and hospital discharge against medical advice. *J Natl Med Assoc* 1996; 88:10, 658-60.
 10. Jimoh BM, Anthonia OC, Chinwe I, Oluwafemi A, Ganiyu A, Haroun A, Chinwe E, Joshua A. Prospective evaluation of cases of discharge against medical advice in Abuja, Nigeria. *Scientific World Journal*. 2015; 2015:314817.
 11. Ensieh Ashrafi, Samin Nobakht, Meysam Safi Keykaleh, Edris Kakemam, Edris Hasanpoor, Mobin Sokhanvar. Discharge against medical advice (DAMA): Causes and predictors; *Electron Physician*. 2017; 9(6): 4563–4570.
 12. Dubow D, Propp D, Navasimhan K. Emergency department discharges against medical advice. *J Emerg Med* 1992;10:513-6.
 13. Nasir AA, Babalola OM. Clinical spectrum of discharges against medical advice in a developing country. *Indian J Surg*. 2008; 70(2):68-72.
 14. Adefemi SA, Adeleke IT, Gara P, Ghaney OOA, Omokanye SA, Yusuf AMJ. The rate, reasons and predictors of hospital discharge against medical advice among in-patients of a tertiary health facility in North-central Nigeria. *American Journal of Health Research*. 2015;3(1–1):11–6.
 15. Eze B, Agu K, Nwosu J. Discharge against medical advice at a tertiary center in southeastern Nigeria: sociodemographic and clinical dimensions. *Patient Int*. 2010;2:27–31.
 16. Mayer, D.M., and Sullivan, D.J. 1997. Refusal of Care. In: *Emergency Medicine Risk Management: A Comprehensive Review* by G.L. Henry, and D.J. Sullivan, 2nd ed. Dallas, Texas: American College of Emergency Physicians, 1997: 399-414.
 17. Targum SD, Capodanno AE, Hoffman HA, Foudraine C. An intervention to reduce the rate of hospital discharges against medical advice. *Am J Psychiatry* 1982 May; 139; 5: 657-9.
 18. Ferguson B, Gerald J, Petrey J, Huecker M. Malpractice in Emergency Medicine-A Review of Risk and Mitigation Practices for the Emergency Medicine Provider. 2018;55(5):659-665.
 19. Akinbodewa AA, Adejumo OA, Adejumo OA, Adebayo FY, Akinbodewa GO, Alli EO, Benson MA. Evaluation of administration of discharge against medical advice: Ethico-legal considerations. *Niger Postgrad Med J* 2016;23:141-5
 20. Yusuf MB, Ogunlusi JD, Popoola SO, Ogunlayi SO, Babalola WO, Oluwadiya KS. Self-discharge against medical advice from tertiary health institution: A call for concern. *Niger Postgrad Med J* 2017;24:174-7.