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An Assessment of Factors influencing Hospital Discharges Against Medical Advice of Paediatric Patients in Enugu: A Review of 67 Cases

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Summary

Ikefuna AN, Emodi IJ. An Assessment of Factors influencing Hospital Discharges Against Medical Advice of Paediatric Patients in Enugu: A Review of 67 Cases. *Nigerian Journal of Paediatrics,* **2002; 29; 1.** A study was carried out with the aim of determining the prevalence of discharges against medical advice (DAMA) at the University of Nigeria Teaching Hospital, Enugu as well as identifying the reasons for such requests. Data in respect of 67 patients who fulfilled the criteria for DAMA were analysed. A prevalence rate of 1.8 per cent was obtained for DAMA out of 4443 admissions over the study period. Poor financial support was the commonest reason for discharge against medical advice. Septicaemia was the commonest cause of admission accounting for 17 (25.4 per cent) followed by HIV/pulmonary tuberculosis in 15 (22.4 per cent) cases. Fifty-three (79.1 per cent) children were admitted without a formal referral letter and 51 (76.2 per cent) children were discharged within two weeks of admission while 45 (67.2 per cent) children belonged to the lower social classes. It is concluded that parental low social class, poor financial support and unpreparedness for hospital admission are risk factors for DAMA. A case is made for the implementation of the National Health Insurance Scheme as well as a review of the methods of counseling parents who ask for DAMA for their children or wards. This is important since the children are not directly involved in their parents'/guardians' decision to seek their discharges.

Introduction

CLINICIANS are often confronted by parents/guardians who insist on taking a discharge for their children or wards against medical advice (AMA) even when it is obvious that such decisions are detrimental to their children's health. Such decisions are not only disturbing but frustrate the clinician's efforts at ensuring that the child's health is restored. Discharges against medical advice (DAMA) prevent the patients from deriving the full benefits of services rendered by a health facility such as a hospital.[1] Besides, they place themselves at medical risk as has been observed by Jeremiah and his co-workers.[2] However, this view is not shared by Sheer and Barton[3] who, working on adult psychiatric patients observed that DAMA was not detrimental to the patients' health many months later. They concluded that, by taking such decisions, the patients may be "running towards health" rather than "away from health". It is however, difficult if the same conclusion can be made in paediatric patients considering their state of ill health at the time of discharge. Information reveal that the patients may, indeed, seek re-admission in another health facility or alternative treatment in churches or with herbalists. For example, while working on adult patients, Weingart and his co-workers[4] noted that 54 per cent of their patients who were discharged against medical advice, were later re-admitted into the hospital. O'Hara and his colleagues[5] noted that 1.5 per cent of mainly adult discharges were DAMA. In the United States, data from the National Hospital Discharge Survey in 1990 revealed that of the 241911 discharges, DAMA constituted about 0.92 per cent of live discharges.[6] Oyedeji[7] noted a prevalence of 0.96 per cent in a seven-year review (between 1978 and 1984) at Ilesha.

The present study was aimed at determining the prevalence of DAMA in Enugu as well as evaluating the factors that influence it.

Materials and Methods

A list of children who were discharged against medical advice from the paediatric wards of the University of Nigeria Teaching Hospital, Enugu between January 1995 and December 1999 were compiled. Neonates aged 0-72 hours of age who were admitted into the Newborn Special Care Unit (NBSCU) were excluded from the study. A total of 78 patients fulfilled the criteria for DAMA. Of this number, the medical files could not be traced in respect

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of 11 patients; these were therefore excluded from the study. The remaining 67 medical files were retrieved and analysed. Information extracted in respect of each patient included age, sex, place of abode (urban and rural), duration of stay in hospital, and the social class of the child using the scheme proposed by Oyedeji.[7] This scheme based the social class on the occupation and the highest educational attainment of each parent. It ranged from highly skilled professionals with University degrees or their equivalents (class I) to unskilled persons who could barely read or write (class V). Further information obtained from the medical files included the diagnosis where available, patients' clinical conditions on discharge and route of admission into the wards (i.e. through the general children's outpatient clinic (CHOP), children's emergency room (CHER) or the paediatric consultants' clinic). Finally, the reasons for DAMA were noted where these were documented in the medical records.

Results

During the period of study, January 1995 – December 1990, there were 4443 admissions into the two paediatric wards of which 78 patients fulfilled the criteria for DAMA giving a prevalence of 1.8 per cent. Of the 67 children whose data were analysed, there were 36 male and 31 female patients (ratio 1.2:1). Their ages ranged from nine days – 16 years. None of these patients came back for re-admission.

Table I

Diagnosis in 67 Patients Discharged AMA*

Diagnosis	*M*	*F*	*Total*
Septicaemia	9	8	17
HIV/Pulmonary tuberculosis	6	9	15
Protein energy malnutrition	7	6	13
CNS infections	4	6	10
Congenital malformations	6	4	10
Malignancies	4	1	5
Others	6	1	7

* Some patients had more than one diagnosis

Table II

Routes of Admission of 67 Patients Discharged AMA

	M	*F*	*Total*	*Per cent of Total*
Children Emergency Room (CHER)	20	12	32	47.8
General Children's Outpatient Clinic	10	11	21	31.3
Consultants' Clinics	6	8	14	20.9

Table III

Duration of Hospital Admission in 67 Patients Discharged AMA

Days	*M*	*F*	*Total*	*Per cent of Total*
0-7	11	16	27	40.3
8-15	15	9	24	35.8
16-23	7	3	10	14.9
24-31	1	2	3	4.5
>31	2	1	3	4.5

Table IV

Clinical State of the Patients at the time of DAMA

Clinical State	*M*	*F*	*Total*	*Per cent of Total*
Relatively improved	4	-	4	6.0
Still ill	28	30	58	86.6
Very ill (worse than on admission)	4	1	5	7.4

Table I shows the diagnosis of the children on admission. Septicaemia accounted for 17 (25.5 per cent) followed by HIV/pulmonary tuberculosis (HIV/PTB) and protein energy malnutrition (PEM) in 15 (22.4 per cent) and 13 (19.4 per cent) cases, respectively. Congenital malformations including spinal and cardiac defects accounted for 10 (15 per cent) cases. Table II shows the routes of admission. It is observed that 32 (47.8 per cent) children were admitted through CHER, 21 ((31.3 per cent) through CHOP and 14 (20.9 per cent) via the consultants' clinics. Thus, 53 (79.1 per cent) children were admitted without formal referral letters. Table III shows that the duration of admission of the children before DAMA ranged from 0-41 days. While 27 (40.3 per cent) children were discharged AMA by the seventh day of admission, 24 (35.8 per cent) children had DAMA by the 14th day of admission. Thus, 51 (76.1 per cent) children were discharged AMA by the second week of admission. Table IV shows their clinical state on discharge. Four (six per cent) of the children were apparently clinically better on discharge, five (7.4 per cent) had deteriorated; in 58 (86.6 per cent), the clinical condition remained the same. These were mainly patients with malignancies, HIV/PTB, congenital malformations, CNS infections and those who either could not pay for their laboratory investigations to allow for continuation of proper treatment or could not

Table V

Reasons for Requesting for DAMA*

Reason	M	F	Total
Poor finance	20	12	32
Relation felt the clinical outcome was poor	6	5	11
Patient's relation refuses blood transfusion	5	2	7
On father's request	4	2	6
Others (e.g. mother is ill, parents are in transit, father on military transfer, etc)	3	2	5
Reasons not stated	6	12	18

* In some cases, more than one reason was given for requesting for DAMA

provide drugs for their treatment.

Table V lists the reasons for requesting discharge AMA as given by the parents of these children. While poor finance was documented as a reason for requesting for DAMA in 32 (47.8 per cent) children, no reason was recorded in 18 (26.9 per cent). An analysis of the social classification of the children using the scheme proposed by Oyedeji[7] shows that of the 55 children whose social classes were known, 46 (83.6 per cent) came from the low social classes (social classes IV & V) while six (11 per cent) children came from the middle social class (social class III). Three (5.5 per cent) children came from the upper social classes (social classes I & II); two of these children were relatively better and one child had meningomyelocele.

Discussion

Discharges against medical advice occur in patients with diverse clinical conditions. In this study, infections accounted for more than 50 per cent of cases. This differs from Oyedeji's[7] study which documented prematurity as the commonest condition for which DAMA was requested. However, our exclusion of babies admitted into the NBSCU makes it difficult to make meaningful comparisons. The prevalence of DAMA in our study of 1.8 per cent is higher than that of 0.96 per cent and 1.5 per cent by Oyedeji[7] and O'Hara,[5] respectively. One possible explanation of this difference between our study and that of Oyedeji[7] is that in the 1980's, certain groups of illnesses were treated at minimal or no costs to the parents. Such illnesses included protein energy malnutrition (PEM), tuberculosis (TB) and malignancies, hence patients could afford to stay longer in hospital. However, by 1995, patients were made to pay their full medical bills making it difficult for them to cope financially.

Certain factors contribute to the high incidence of DAMA. Berg and Dhopesh[8] observed that unplanned admission may be responsible. Although their study was carried out on adult patients, it was observed that patients who had unscheduled admissions for substance abuse had high incidence of DAMA. This is further highlighted by Weingart and his colleagues[4] who observed that admission through the emergency room constituted one of the factors related to a high incidence of DAMA. This study reveals that only 20.9 per cent of the patients were admitted into the paediatric wards via the paediatric consultants' clinic. These patients were often referred to the clinic. The remaining 53 (79.1 per cent) were admitted through CHER and CHOP. This implies that a greater number of children were admitted into the ward, unexpectedly, when their parents or guardian may not be emotionally and financially prepared for such admission. This is similar to the findings by Berg and Dhopesh.[8] Oyedeji[7] working in Ilesha with paediatric patients, noted that 51 (74 per cent) of 69 fathers who signed the DAMA request forms for their children belonged to the lower social classes (iv and v) and subsequently were financially handicapped to pay their medical bills. Other factors incriminated in DAMA by Oyedeji[7] included long hospital stay, nature and severity of the illness.

An analysis of the duration of hospital stay reveals that 76.1 per cent of the children were discharged AMA within two weeks of admission. This figure is comparable to that of Oyedeji[7] who noted that 70.9 per cent of the children in his series, were discharged within the first two weeks of admission. However, while our study observed that the maximal hospital stay was 41 days, children in Oyedeji's series[7] stayed up to 63 days. It is possible that with the introduction of hospital fees for paediatric patients, the lean resources of the parents are depleted early, especially as they had to pay for the various laboratory tests. This is evidenced by the fact that poor financial resources was the commonest reason for DAMA in this study as in the series by Oyedeji.[7] Most of these patients are from the low social classes; associated with the low social class is ignorance. Thus parents of these children would need adequate health education and counseling in order to minimize DAMA. This view is also held by McGihon.[9] This study also reveals that the nature of the illness is a causative factor for requesting for DAMA; most of the patients in this study had chronic illnesses that are associated with long hospital stay.

A close look at the AMA discharge forms reveals that relations who request for DAMA are merely informed of the consequences of their actions. However, it is our view that the mode of counseling should be modified for paediatric patients since the children are not directly

involved in the decision to be discharged. Hence, they should be given a choice of follow up treatment since the most frequent reason for requesting for DAMA is poor finance. The suggestion by Sheer and Barton[3] and the series by Weingart and his colleagues,[4] clearly reveal that when given a choice of follow-up treatment, some of them may return to the hospital when their financial situation improves. In addition, the implementation of the National Health Insurance Scheme (NHIS) would assist the parents of these children in paying for health care and thus overcome the role of poor finance as a reason for requesting for DAMA.

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