Nigerian Journal of Paediatrics 2006; 33 (3&4): 99-103

Paediatric Discharges against Medical Advice in Sagamu

MB Fetuga*, AF Adekanmbi*, TA Ogunlesi*

Summary

Fetuga MB, Adekanmbi AF, Ogunlesi TA. Paediatric Discharges against Medical Advice in Sagamu. *Nigerian Journal of Paediatrics* 2006; 33: 99.

Background: Frequent changes in the political, economic and health policies which may influence the purchasing powers of the populace may also make it difficult for the average family to pay hospital fees and culminate in a tendency to premature termination of medical care.

Objectives: To describe cases of paediatric discharges against medical advice seen at the Olabisi Onabanjo University Teaching Hospital (OOUTH), Sagamu.

Patients and Methods: A retrospective study of the records of children who were discharged against medical advice from January 1995 to December 2004 at the OOUTH, Sagamu, was carried out. Data extracted from the case notes included age, sex, clinical diagnosis, parental occupation, duration of hospital stay, reason(s) for, and signatories to DAMA.

Results: The yearly prevalence of DAMA fluctuated with no consistent pattern, ranging from 2.1 to 5.0 percent with a mean of 3.3 percent, of paediatric admissions. The median age was 365 days and the male to female ratio was 1.4:1. The median duration of hospitalization prior to DAMA was four days. Majority (92.1 percent) of the children belonged to the low socioeconomic classes. The signatories to DAMA were mostly mothers (80.2 percent). Financial constraints in 61.9 percent were the commonest reasons for DAMA. Neonatal conditions, malaria and respiratory disorders were the main clinical diagnoses accounting for 28.5, 20.1 and 9.0 percent, respectively.

Conclusion: Conscious effort must be made by government to create an enabling environment for financial empowerment of families. Hospitals should have avenues of defending the rights of children to life and health.

Key words: Discharges against medical advice, Sagamu.

Introduction

CHILDREN have a right to health and medical care.[1] However, being minors, decisions relevant to their well-being are usually taken by their parents/guardians against the background provided by their own understanding, interest and welfare. Due to shortage of hospital personnel, a common feature of paediatric practice in many facilities is admission of children into paediatric units along with their caregivers, oftentimes the mothers. Such practices may have social and economic implications. This may temporarily distort the routine care of the family, reduce the productivity of the caregivers and thus, cause a reduction in the finances of the family. Such hardships often precipitate premature discharge against medical advice (DAMA) which is usually seen as a mere withdrawal of the original consent given by the parents or guardians.[2] Nevertheless, this decision may have far reaching and diverse implications.[1-4] The major implication of DAMA is perhaps prolonged morbidity and increased risk of mortality both of which might have significant effects on the other members of the family as well as the society at large.

Studies on DAMA have been mostly on adult patients.[5-8] Although some have been carried out on paediatric patients,[9-11] the only study on paediatric DAMA in our centre took place almost two decades ago.[12] Considering the political and economic changes that the nation has experienced in the intervening

Olabisi Onabanjo University Teaching Hospital, Sagamu

Department of Paediatrics
* Lecturer/Consultant

Correspondence: Dr MB Fetuga
E-mail: bolanlefetuga2000@yahoo.com

period, it is pertinent to study the pattern of paediatric DAMA during a period of severe economic hardship. Therefore, the objective of the study was to describe the prevalence and pattern of DAMA at the Olabisi Onabanjo University Teaching Hospital, Sagamu over a ten-year period.

Patients and Methods

The paediatric facility of Olabisi Onabanjo University Teaching Hospital (OOUTH), formerly Ogun State University Teaching Hospital (OSUTH) Sagamu, Ogun State is a 51-bed ward comprising three subunits namely neonatal, children emergency and children's wards. It provides specialized health care for non-surgical paediatric admissions for children in Ogun and Lagos States. The hospital management operates a revolving fund system characterized by compulsory bulk cash deposit and settlement of outstanding balance on discharge, in order to facilitate retrieval of running cost and try to guarantee service.

The study was retrospective and descriptive in design. With ethical approval from the hospital ethical and scientific review committee, available records of paediatric patients who were discharged against medical advice (DAMA) over a ten-year period (January 1995 to December 2004) at the hospital were compiled from the admissions and discharges registers. Data extracted from the case notes included age, sex, clinical diagnosis, parental occupation, duration of hospitalization, year of hospitalization, reason(s) for their discharges and the signatories to DAMA. Parental occupations were used to assign the children into social classes.[9] Data entry and analyses were carried out using SPSS 11.0. Statistical comparison was done using chi-squared test; the level of significance was $p < 0.05$.

Results

The records showed that 344 of the 10,373 paediatric admissions between January 1995 and December 2004 were discharged against medical advice. Thus, the overall DAMA prevalence rate was 3.3 percent. There were 199 (57.8 percent) males and 145 (42.2 percent) females with a ratio of 1.4:1. Their ages ranged from six hours to 15 years with a median age of 12 months.

Table I shows the age and sex distribution of the subjects. There was no significant difference in the 100 (3.5 percent) out of 2,873 neonates discharged against medical advice compared to the 244 (3.2 percent) of 7,520 post-neonatal children ($\chi^2 = 0.362$, $p = 0.55$) who went AMA. The yearly prevalence of DAMA is shown in Fig. 1. There was no consistent trend in the prevalence rates but the lowest rate of 2.1 percent was recorded in 1996 while the highest rate of 5.0 percent was recorded in 1998 and in 2000. The mean DAMA rate was 31.3 per year. The duration of hospitalization is shown in Table II; it ranged from six hours to 60 days with a median of four days; 81.4 percent of the discharges against medical advice were within 10 days of admission. There was sufficient data to classify 280 (81.4 percent) subjects according to socio-economic groups. The distribution

Table 1

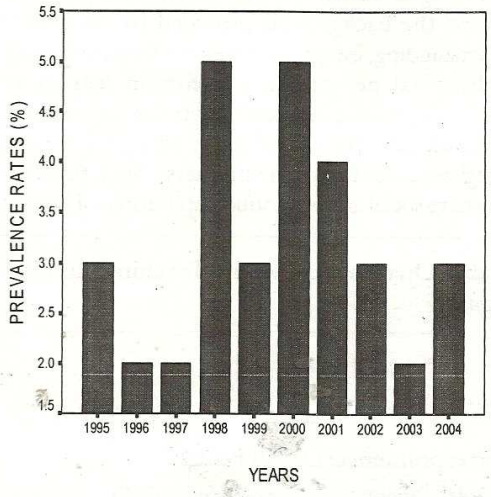
Age and Sex Distribution of the Patients

Age Range	*Male*	*Female*	*Total*
0 – 28 days	65	35	100
29 days – 11 months	28	26	54
1 – 5 years	64	52	116
> 5 years – 10 years	20	15	35
> 10 years	22	17	39
Total	199(57.8)	145(42.2)	344

Table II

Duration of Hospitalization prior to DAMA

Duration of Hospitalization	*No of Patients*	*Percent of Total*
< 24 hours	51	14.8
1- 3 days	129	37.5
4-10 days	100	29.1
11-28 days	52	15.1
> 28 days	12	3.5
Total	344	100.0



in Table III shows that the majority belonged to low socioeconomic class V.

The signatories to DAMA were mainly mothers (276; 80.2 percent). Others were fathers (63; 18.3 percent), both parents together (four; 1.2 percent) and other relations (one; 0.3 percent). The reasons given for DAMA are displayed in Table IV. Financial constraints were the commonest, accounting for 61.9 percent. The various clinical diagnoses of the subjects are shown in Table V. Neonatal conditions, malaria and respiratory disorders were the commonest, accounting for 28.5, 20.1 and 9.0 percent, respectively.

Table III

Parental Socioeconomic Classes

Social Class	*No of Patients*	*Percent of Total*
I	3	1.1
II	5	1.8
III	14	5.0
IV	43	15.3
V	215	76.8
Total	280	100.0

Table IV

Reasons given by Parents/Guardians for DAMA

Reasons	*No of Patients*	*Percent of Total*
Financial constraints	213	61.9
Felt patient had improved	58	16.9
No reason given	23	6.7
Wished to try alternative care	13	3.8
Too long a hospital stay	11	3.2
No improvement	9	2.6
Multiple*	9	2.6
Others**	8	2.3
Total	344	100.0

* Presence of more than one reason for DAMA.
** Parental conflict; a need to care for siblings at home.

Table V

Clinical Diagnoses in 344 Paediatric DAMA

Clinical Diagnosis	*No of Patients*	*Percent of Total*
Neonatal conditions	98	28.5
Malaria	69	20.1
Respiratory disorders	31	9.0
CNS disorders	22	6.4
Infectious diseases	18	5.2
Gastrointestinal disorders	18	5.2
Febrile convulsion	14	4.1
Septicaemia	13	3.8
Surgical conditions	11	3.2
Renal disorders	9	2.6
Malnutrition	9	2.6
Haemoglobinopathy	8	2.3
Malignancies	4	1.2
Others	20	5.8
Total	344	101.0

CNS = central nervous system

Discussion

The 3.3 percent prevalence rate of DAMA in the present study was similar to the 3.6 percent previously reported by Olowu[12] from this same centre more than a decade and a half ago. It was however, much higher than the 0.9 and 1.2 percent reported about two decades ago from Ilesa[9] and Lagos,[11] respectively. The relatively high rate in our study may however be due to the fact that our hospital, being a major referral centre in the locality, possibly had a higher patronage of very ill children requiring relatively more expensive investigations and treatment. The rate in our study was also higher than the 1.8 percent recorded at Enugu.[10] However, neonates were excluded from the Enugu study, thus making comparison difficult.

We observed in the current study that a high percentage of the parents (92.1 percent) were from the lower socioeconomic classes, a finding that was similar to the 96.7 percent and 83.6 percent earlier reported from Sagamu and Enugu, respectively.[10,12] Against this background, it was not surprising that financial constraints were the commonest reasons for DAMA in our study. The caregivers appeared to lack the means to meet the cost of hospital services. It had been shown in earlier studies that increasing hospital charges adversely affected the utilization of hospital services[13] and was directly related to DAMA rate.[14] Therefore, if hospital services are subsidized for children and families are economically empowered, the DAMA rate would most likely fall. This may be achievable with quality social security system that gives priority to maternal and child care.[15]

Apart from being due to financial constraints, DAMA is also considered in some circumstances, to be an indication of lack or loss of confidence in the ability of the medical facility to cure an illness. Wrong perceptions concerning the nature, cause, implications and outcome of illness may also contribute to the high DAMA rate. Our results therefore emphasize the need for hospitals in Nigeria to be in a position to diagnose diseases early and institute appropriate therapy with dispatch and at affordable cost to the patient. Only then will patients be satisfied that they have benefited maximally from the system.

It is pertinent to highlight the fact that most (81.4 percent) of the children in our study were discharged against medical advice within ten days of admission. This figure is higher than the 70.9 and 76.1 percent reported in previous studies.[9,10]

The signatories to DAMA in this studywere mainly the mothers; a finding that was similar to that reported by Oyedeji,[9] but contrasts with that of Olowu[12] in which the fathers were the commonest signatories to DAMA. The predominance of the mothers in the current study may be related to the fact that the mothers usually stayed in the hospital with their wards. It is however doubtful if the mothers took the decision without the knowledge and consent of the fathers. It is therefore likely that the fathers being the primary provider of funds for the family, were the masterminds behind the decision to terminate hospital care.

Although the span of clinical conditions was wide, the dominance of neonatal conditions was in keeping with previous reports.[9-11] The reasons for this may be basically socio-cultural. Christening ceremonies for newborn infants typically hold on the eighth day after birth. Often, families ask for premature discharges of their babies to enable them perform the traditional naming ceremonies at home. Perhaps hospital policies could be adjusted to permit the conduction of naming ceremonies in hospital as a compromise.

We acknowledge the retrospective nature of this study as a limitation particularly with respect to the incomplete socio-demographic data. Perhaps, a prospective, multi-centre collaborative study might help elucidate the issues surrounding DAMA and lead to a more rational solution to this impediment to care of needy children. Meanwhile, the problem of DAMA should be addressed by governments through education and conscious effort to create an enabling environment for financial empowerment of families. Hospitals should have avenues of defending the rights of children to life and health.

Acknowledgements

We thank the doctors and nurses who took part in the care of the patients and Alhaji Biodun Allison of the hospital medical records department for retrieving the case notes.

References

1. Convention on Child's Rights. Available at www.unicef.org
2. Devitt PJ, Devitt AC, Dewan M. Does identifying a discharge as 'against medical advice' confer legal protection? *J Fam Pract* 2000;49:224-7.
3. Dalrymple AJ, Fata M. Cross-validating factors associated with discharges against medical advice. *Can J Psychiatry* 1993;38:285-9.
4. Jeremiah J, O'Sullivan P, Stein MD. Who leaves against medical advice? *J Gen Intern Med* 1995;10:403-5.
5. Alpert HD, Kornfield DS. The threat to sign out against medical advice. *Ann Intern Med* 1973; 79: 888-91.
6. Pages KP, Russo JE, Wingerson DK, Ries RK, Roy-Byrne PP, Cowley DS. Predictors and outcome of discharge against medical advice from the psychiatric units of a general hospital. *Psychiatr Serv* 1998; 49: 1187-92.
7. Alebiosu CO, Raimi TH. A study of hospital patients discharged against medical advice in the Ogun State University Teaching Hospital Sagamu. *Nig Med Pract* 2001;40:33-6.
8. Aslam HA, Huiying S, Daphne PG, Palepu A, Schecter MT, Shaughnessy MVO. Leaving hospital against medical advice among HIV-positive patients. *CMAJ* 2002; 17:633-7.
9. Oyedeji GA. Hospital discharges of children against medical advice. *Nig J Paediatr* 1986;13:1-5.
10. Ikefuna AN, Emodi IJ. An assessment of factors influencing hospital discharges against medical advice of paediatric discharges in Enugu: a review of 67 cases. *Nig J Paediatr* 2002;29:1-4.
11. Okoromah CN, Egri-Okwaji MT. Profile of and control measures for paediatric discharges against medical advice. *Nig Postgrad Med J* 2004; 11:21-5.
12. Olowu AO, Olanrewaju DM. Discharge against medical advice–Ogun State University Teaching Hospital experience. *J Comm Med* 1990;3:57-65.
13. Owa JA, Osinaike AI, Makinde OO. Trends in utilization of obstetric care at Wesley Guild Hospital, Ilesa, Nigeria. Effects of a depressed economy. *Trop Geogr Med* 1995;47:86-8.

14. Gloyd S, Kone A, Victor AE. Pediatric discharge against medical advice in Bouake Cote d'Ivoire, 1980-1992. *Health Policy Plan* 1995;10:89-93.

15. Campbell PC. A decade of National Health Insurance Scheme in Nigeria Part I. *Nig Q J Hosp Med* 1998;8:60-4.