

Full Length Research Paper

Discharge against medical advice in children at the University of Abuja Teaching Hospital, Gwagwalada, Nigeria

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Discharge against medical advice is not an uncommon practice encountered by health care providers in resource limited settings. The peculiarity of paediatric cases is that the index subjects are not party to the decision taken on their behalf. This practice usually occurs with ill children and may contribute to poorer outcome. The aim of this study is to document the prevalence and reason(s) for discharge against medical advice in a new Teaching Hospital in the Federal Capital Territory, Abuja, Nigeria. A one-year retrospective review of all cases of discharge against medical advice from January to December 2009 was carried out to determine the prevalence and reason(s) for such action. Of a total of 1,385 children admitted into the three paediatric wards during the one-year review period, 102 (7.4 %) were discharge against medical advice. Fifty six (54.9 %) of the 102 were males and 46 (45.1%) females, m:f ratio of 1.3:1. Fifty three (51.9%) of discharge against medical advice occurred in the emergency paediatric unit of paediatric ward, 29 (28.4%) in the special care baby unit, and 20 (19.6%) in the paediatric medical ward. The three commonest ailments of the children in respect of whom discharge against medical advice were requested were severe malaria (12.7%), protein energy malnutrition (9.8%), and gastroenteritis with dehydration (8.8%). Financial constraint (42.2%), and resort to alternative medicine (20.5%) were the two main reasons for parents/guardians requesting for discharge against medical advice of their children/wards. Discharge against medical advice occurred most frequently in the first (30.3%), and the second (17.6%) years of life, within the first 14 days (86.4%) of admission, and in children from low (66.7%) and middle (29.4%) socio-economic classes. The prevalence of discharge against medical advice was high in our environment, and was most common in the less privileged and vulnerable group, and in those with life threatening emergencies. Implementation and sustenance of national health insurance scheme at all levels of the society or provision of free or highly subsidized emergency medical services in most health institutions will assist in no small way in mitigating this ugly trend in children.

Keywords: Discharge against medical advice, emergency paediatric unit, special care baby unit, paediatric medical ward.

INTRODUCTION

Discharge against medical advice (DAMA) is a very frustrating practice encountered by clinicians caring for sick people in our environment. The practice not only prevents the patients from deriving the full benefits of medical services rendered in the health facilities, but also

frustrates the clinician who tries to restore the normal health of the individual. The peculiarity of paediatric patients is that the patients affected are not directly involved in the decision making. Such practice as noted by Jeremiah et al (1995) and Dalrymple et al (1993)

poses a big medical risk to the patients and can result not only premature death, but also dangerous complications in those who survive. However, some workers while looking at adult patients believe that such decisions may not necessarily mean running away from health, but rather running towards it (Sheer et al., 1974).

It is a common belief in most cultures across the country that long lasting disease has some spiritual or devilish component attached to it. It is also for this reason that many cases of DAMA resort to alternative care in churches or herbal homes for their health needs. Most studies of DAMA in the country (Ikefuna et al., 2002: Oyedele 1986: Onyiriuka 2007: Ibekwe et al., 2008) have reported poor financial and low socio-economic status as the main reasons for requesting for DAMA. Reports from elsewhere, (Green et al., 2004: Agency for Health Care Research and Quality 2005: Devitt et al., 2000: Veirum et al., 2007) have also found poor financial status, low socio-economic class, and most recently, human immunodeficiency virus related conditions as the main reasons for DAMA in their environments.

To our best knowledge, there is no reported data on this frustrating practice from health facilities in the Federal Capital Territory (FCT), Abuja. The present study is therefore aimed at determining the prevalence of this condition in a new teaching hospital in the capital city, as well as evaluating the factor(s) influencing such practice. It is envisaged that the results of the study will not only provide data on the magnitude of the problems in this part of the country, but also will help in suggesting policies that will address them in the various health facilities.

SUBJECTS AND METHODS

The case records of all paediatric patients DAMA from the three paediatric wards in our health institution from January to December 2009 were retrieved from the medical records department. Information extracted were age, sex, reason(s) for admission, duration of stay in the hospital before the discharge, reason(s) for DAMA, the paediatric wards where the patients were admitted, and the social classes of the parents using (Olusanya et al., 1985) two factor index, husband's occupation and mother's level of education. This was used to group the subjects according to their socio-economic background. Accordingly, scores of 3,2,1 were assigned to husband's occupation: 3 points for unskilled workers, 2 points for middle level bureaucrats, technicians, skilled artisans, and well to do traders, and 1 point score for professionals, top civil servants, politicians and businessmen. For maternal level of education: zero point was assigned to university education, 1 point for those who completed secondary or post secondary schools and

two point score for those who had only primary education or received no education at all. The scores were summed up and the total score was used to determine socio-economic status (SES) as follows: 1 and 11 (upper SES), 111 (middle SES), and 1V and V (low SES). Seven case notes with incomplete data were excluded from analysis.

The study was carried out after receiving clearance from the ethical committee of the hospital. The hospital was upgraded to the level of a teaching hospital in April 2006. It is a 350-bed capacity hospital sub-serving many states including Nassarawa, Kogi, Niger, parts of Kaduna state, Benue, and FCT, Abuja. It has three admitting wards for paediatric patients, namely: emergency paediatric unit (EPU) for emergency cases aged above 28 days to 17 years, special care baby unit (SCBU) for newborns up to 28 days of age, and paediatric medical ward (PMW) for children aged 28 days to 17 years with cold cases and those patients recovering from life threatening conditions from the EPU are admitted. Each ward has 36 beds and provides services to paediatric patients on 24-hour basis. Paediatric patients in the health institution pay like any other patient exception for radiology services and bed fees where they pay halve the adult fees.

Data analysis was carried out using SPSS program version 13.5. This provided frequency distribution, tables, chi square, and tests of significance.

RESULTS

A total of 1,385 patients admitted in the three paediatric wards during the one year review period, 102 (7.4 %), consisting of 56 (54.9%) males, and 46 (45.1%) females, m: f ratio of 1.3:1 were DAMA. Table 1 shows the pattern of DAMA in the wards. Fifty three (52.0%) were patients from EPU, 29 (28.4%) from SCBU and 20 (19.6%) from PMW.

Table 2 depicts the diagnoses in cases DAMA. The three commonest diagnoses were severe forms of malaria (12.8%), protein energy malnutrition (9.8%), and gastroenteritis with dehydration (8.8%), while the least common diagnoses were congenital abnormalities (2.9%), cardiac conditions (3.9%) and sickle cell anaemia (3.9%). Further analysis showed that neonatal jaundice (24.1%), neonatal sepsis (20.1%), severe birth asphyxia (17.4%) and congenital abnormalities (10.3%) were the leading cases associated with DAMA in SCBU. Protein energy malnutrition (50.0%) and malignancies (30.0%) were the main diagnosis in cases of DAMA in PMW, while severe forms of malaria especially those associated with severe anaemia (24.5%), and gastroenteritis with dehydration (18.9%) were the leading diagnoses in EPU.

Table 3 summarizes the reasons for DAMA. Financial constraint (42.2 %) was the main reason for the parents/

Table 1: Pattern of DAMA in various Paediatric Wards

Wards	No of Admissions	No of DAMA (%)	M (%)	F (%)	DAMA Cases as % of Admissions
EPU	600	53(52.0)	31(58.5)	22(41.5)	8.8
SCBU	438	29(28.4)	14(48.3)	15(51.7)	6.7
PMW	347	20(19.6)	11(55.0)	9(45.0)	5.7
Total	1,385	102(100)	56(54.9)	46(45.1)	7.4

EPU - Emergency paediatric ward
 SCBU - Special care baby unit
 PMW - Paediatric medical ward

Table 2: Diagnoses in Cases Discharged against Medical Advice

Diagnosis	Total	% of Total
Severe malaria	13	12.8
Protein energy malnutrition	10	9.8
Gastroenteritis with dehydration	9	8.8
Septicaemia	8	7.8
Neonatal jaundice	7	6.9
Pneumonias/effusion	7	6.9
Neonatal sepsis	6	5.9
Malignancies	6	5.9
HIV/AIDS	6	5.9
CNS infection	5	4.9
Renal conditions	5	4.9
Severe birth asphyxia	5	4.9
Sickle cell anaemia	4	3.9
Cardiac conditions	4	3.9
Congenital abnormalities	3	2.9
Others	4	3.9
Total	102	100.0

Table 3: Reasons for Requesting for DAMA

Reasons	Total	% of Total
Financial constraint	43	42.2
Resort to native/spiritual healers	21	20.6
Clinical condition not improving	15	14.7
Refuse blood transfusion	9	8.8
Nobody to take care of younger ones	4	3.9
Reason not stated	10	9.8
Total	102	100.0

guardians requesting to discharge of their child/ward against medical advice. The wish to explore alternative medical care (20.6%) and the patients not improving

(14.7 percent) were other major reasons. A reasonable number of cases (9.8%) did not state any reason for wanting to take their children from the wards against

Table 4: Discharge Against Medical Advice according to Age in the Three Paediatric Wards

EPU				PMW				SCBU			
Age (yrs)	No. Admitted	No. DAMA	% of Total	Age (yrs)	No. Admitted	No. DAMA	% of Total	Age (Days)	No. Admitted	No. DAMA	% of Total
0 - <1	185	16	30.2	0 - <1	112	7	35.0	1 - 3	96	8	27.6
1 - <2	156	9	17.0	1 - <2	83	5	25.0	4 - 7	104	4	13.8
2 - <3	65	4	7.5	2 - <3	52	2	10.0	8 - 11	84	2	6.9
3 - <4	53	7	13.2	3 - <4	37	2	10.0	12 - 15	63	4	13.8
4 - <5	22	3	5.7	4 - <5	25	1	5.0	16 - 20	37	2	6.9
5 - <10	69	11	20.8	5 - <10	38	3	15.0	21 - 24	28	4	13.8
10 - 17	50	3	5.7	10 - 17	24	-	0.0	25 - 28	15	3	10.3
Total	600	53	100	Total	374	20	100	29- 42	11	2	6.9
								Total	438	29	100

EPU- Emergency paediatric ward

PMW- Paediatric medical ward

SCBU- Special care baby unit

Table 5: DAMA and the Socio-economic Status of the Parent/Caregivers

SES of Parents	No of Cases	% of Total
Upper SEC	4	3.9
Middle SEC	30	29.4
Low SEC	68	66.7
Total	102	100.0

Table 6: Duration of Stay in the Hospital of Children Discharged Against Medical Advice

Duration of Stay (Days)	Total	% of Total
1-3	38	37.3
4-7	33	32.4
8-11	17	16.7
12-15	8	7.8
16-20	3	2.9
21-24	2	2.0
25-28	1	1.0
Total	102	100

medical advice. It is obvious in Table 4 that 73.6% and 85.0% of all children DAMA in EPU and PMW were children less than five years, with children below one year accounting for 30.2% and 35.0% in the two paediatric wards, respectively. In the SCBU, 69.0% of all patients DAMA were aged between one to 20 days. There was a significant difference in the percentage of cases of DAMA in respect of the children less than five year when

compared to those older than 5 years (85 Vs 17, $p < 0.05$) in EPU, and among the upper and lower SEC (4 Vs 68 $p < 0.001$) table 5.

Most cases of DAMA (69.6%) occurred in the first seven days of admission with 37.3% occurring in the first three days, while 24.5% occurred after 1-2 weeks stay in the hospital (Table 6). Fewer (2.9%) patients were DAMA after a much longer (3-4 weeks) stay in the hospital

(2.9%).

DISCUSSION

The 7.4% prevalence of DAMA obtained in this study was considered high and underscores the need for urgent action to be taken to mitigate this ugly trend that might have a devastating effect on the lives of the affected children. This prevalence was higher than 0.96%, 1.5%, 1.8% and 1.0% reported by (Oyedede 1986) from Ibadan, (Ibekwe et al., 2008) Abakiliki, (Ikefuna et al., 2002) in Enugu, all from Nigeria, and (Sedemann et al., 1997) Guinea Bissau. It is however somewhat similar to the reported 5.7% by (Onyiriuka 2007), Benin in Nigeria, 5.3% by (Roodpeyma et al., 2010) from Tehran in Iran, 12.0% by (Glody et al., 1995), Core d'Ivoire, and 6–13% by the (Agency for Health Care Research and Quality 2005) from the United States of America. The marked difference between the previous findings by (Oyedede 1986) and others (Ikefuna et al., 2002; Ibekwe et al., 2008; Sedemann et al., 1997) and the present one could be as a result of minimal or no fee payment for some disease entities in the health facilities during the period when these studies were carried out. Because of less financial involvement, patients and their parents/guardians could afford to stay for longer periods in the health facilities without much cost. This emphasizes the role financial cost play in determining the health care seeking behaviour of parents/guardians for their children/wards. At the University of Abuja Teaching Hospital (UATH), Gwagwalada where the present study was carried out, parents/guardians were made to pay for every medical service offered the children. To buttress the view that lack of adequate finances was one of the main reasons for the high prevalence of DAMA in this study, is the fact that 42.2% cases of DAMA were due to financial constraints, while 66.7% were from low socio-economic class. This conforms to the findings of 36.9% and 63.8% by (Onyiriuka 2007) and the reported 74% of cases from the poor socio-economic class by (Oyedede 1986). The less privileged classes in the society usually find it very difficult to pay their hospital bills, and this in turn, reflects the general parental poverty in this country, and the need for a sustainable and equitable financing of health care services for the underprivileged. Achieving this through the National Health Insurance Scheme (NHIS), whose main objective is to protect families especially those from the underprivileged segment of the society from huge medical bills, will be the ultimate goal (Federal Republic of Nigeria National Health Insurance Scheme Decree, 1999; National Health Insurance Scheme 1992; Airede 2003).

The present study also showed that most cases of DAMA were at the EPU and were among patients with

life threatening conditions, thus buttressing the financial unpreparedness of most families in handling emergency conditions as reported by (Ikefuna et al., 2002; Ibekwe et al., 2008, and others (Sodemann et al., 1997; O'Hara et al., 1996). It was also observed in this study that a large number of children DAMA were aged below two years, while the duration of admission before DAMA was less than one week in a significant number of children. This sad situation has also been noted by other workers (Roodpeyma et al., 2010; Ibekwe et al., 2008; Okoromah et al., 2004; Glody et al., 1995), and call for urgent intervention because this group of children are already laden with the burden of childhood diseases and higher mortality than older children. The issue of DAMA being higher among them will be an additional burden that will further worsen their situation.

CONCLUSION

The prevalence of DAMA is high in our environment. It is commoner in the younger age group, those from less privileged families, as well as those with life threatening emergencies. Implementation and sustenance of NHIS at all levels of society, or provision of free or highly subsidized emergency medical services will assist in no small way in mitigating this ugly trend in children

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