

SOME CHARACTERISTICS OF PAEDIATRIC ADMISSIONS AT THE UNIVERSITY OF NIGERIA TEACHING HOSPITAL ENUGU-NIGERIA.

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SUMMARY

Background: In spite of its limitations, documentation of health facility utilization is an aspect of planning for patient care. Information obtained from such studies is usually useful in evaluating existing facilities, documenting trends in patients needs and improving facilities for patients care.

Objectives: To assess the characteristics of children who utilize the services of the University Teaching Hospital(UNTH) Enugu for admission and treatment.

Design: A prospective study of the characteristics of children admitted consecutively over an eight month period into the Paediatric medical wards of UNTH was determined with the use of a structured questionnaire.

Results: Of the three hundred and thirty seven children admitted into the wards, aged 5 weeks to 18 years, two hundred and five(61%), 78(23%) and 54(16%) belonged to the lower, middle and upper social classes respectively. There was a male preponderance (1.3:1) and 60.5% of the children were less than 5 years of age. The children emergency room (CHER) was the route of admission of 214(63.5%) of the children and was statistically significant for all social classes ($p=0.006$). The difference in duration of symptoms before presentation in hospital between upper (I and II) and lower social (IV and V) classes was statistically significant ($p=0.005$).

Conclusion: The services of this hospital are used mainly by the lower socio economic class of the society. There is a delay in presentation of patients even to emergency room. The delay in presentation of children to hospital for treatment could be due to lack of education or knowledge, economic hardships, and absence of health insurance.

Key Words: Paediatric Admission, Teaching Hospital

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INTRODUCTION

An assessment of various characteristics of children admitted into the hospital for treatment constitute an essential part of health care and audit. Such studies and subsequent deductions may provide useful and interesting clues to interacting or causative factors in patient care¹ especially in an environment such as ours where families complain of various problems that arise from the prevailing economic difficulties. Such information are useful in the monitoring health seeking behaviour and the development of health programs. Attendance to hospitals, therefore, may depend on ease of access to medical care, level of parental anxiety, knowledge as well as severity or acuteness of the illness.^{2,3}

In a depressed economy when there are difficulties in coping with the strains and stresses for good family upkeep, easy access to medical care may not be feasible to all the social groups. Apart from the financial well being, some workers believe that the exposure of parents in the upper classes to the use of modern health facilities and improved perception of the nature of the children's illnesses may account for the early response to medical care seen in the upper social groups.⁴⁻⁶ The consequence is that while parents in the privileged groups seek medical assistance early due to this better perception, others in the lower socio economic groups seek medical attention late with the attendant complications. Late presentation, probably, occurs because of parental attempts at alternative medical practices^{7,8} which arises from our socio cultural background.⁹

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Other parents are believed to engage in home medication or treatment.¹⁰

The present study attempts to examine some characteristics of hospitalized paediatric patients in Enugu with the aim of highlighting the problems associated with such admissions especially among poor socio-economic groups.

Furthermore, the review also seeks to ascertain the health needs of a people with a view to reducing our mortality rate.

SUBJECTS AND METHODS

Children who were admitted into the Paediatric wards of UNTH Enugu between 1st April and 31st December 2004 were prospectively studied. Admission into the wards of the hospital is usually via Children Emergency Room (CHER) for emergency cases, Children outpatient clinic (CHOP) for general

Paediatric cases and Consultant clinics (CC) for children who were either referred for specialist care or had been, previously, admitted for in-patient care. Information obtained in respect of each patient included their route of admission, biodata, duration of symptoms before presentation to the hospital, reasons for

delayed presentation or treatment, religion and place of domicile whether urban or rural. Bed occupancy of the 60 bedded Paediatric ward was also reviewed. Social classification was done using the method proposed by Oyedeji¹¹ which recognizes paternal and maternal education and occupation. It is grouped from class I representing University graduates and highly skilled professions to class V which represents illiterates and the unemployed.

These social classes are divided into upper (social class I and II), middle (social class III) and lower (social class IV and V).

RESULTS

During the study period, a total of 337 children were admitted. The age ranged from five (5) weeks to eighteen (18) years, (mean \pm SD 49.4 \pm 27.6 months). There were 188 males and 149 females. M:F 1.3 :1. Table 1 shows the age and sex distribution of the children. It was observed that 204 (69.5%) children were less than 5 years old. It was observed that of the 337 children, 205 (61%) belonged to social class IV and V while 54 (16.1%) came from classes I and II. The remaining 78 children (23%) came from the class III. (Table II). Thus most of the children are from the low social classes.

of the 337 children, 214 (63.5%) were admitted via the Children Emergency Room. The remaining 123 children (36.5%) were admitted through the consultant or children outpatient clinic (25.8%) - Table III. Thus more children were admitted because of the urgent need for treatment or that they were very ill.

The duration of symptoms before presentation indicates that 7 (13%) of the 54 children in the upper class presented to hospital within 2 days of onset of symptoms whereas 14 (6.8%) of the 205 children in the lower class presented to hospital over same period. In all, children in the upper social class significantly

had earlier hospital referral than those in the lower social class ($\chi^2 = 12.72$ $p = 0.005$).

Similarly the upper social class children can be said to be more health conscious and thus responded better to health needs than those from the middle class ($\chi^2 = 11.978$ $p = 0.007$). However there is no significant difference between the middle and lower class $p = 0.073$ as regards early presentation to hospital (Table IV)

Table V reviews the relationship between duration of symptoms and route of admission. It was observed that the duration of symptoms for emergency room visits was more than seven days in 74 (34.3%) of the 214 children admitted through that route. Among children who were admitted through the other clinics, there was also delayed presentation as most of them presented to hospital after seven days of ill health.

Table I: Age and sex distribution of the children studied.

Age (years)	sex		Total	%
	M	F		
<1	50	47	97	28.8
1-2	40	29	69	20.4
3-4	22	16	38	11.3
5-6	23	14	37	11.0
7-8	19	17	36	10.7
9-10	17	14	31	9.2
>11	17	12	29	8.6
Total	188	149	337	100

Table II: Social class distribution of children

Socioeconomic class	M	F	Total	%
I	6	7	13	3.9
II	24	17	41	12.2
III	37	41	78	23.1
IV	81	64	145	43.0
V	40	20	60	17.8
Total	188	149	337	100

Table III: Route of admission into the ward for the 337 children studied.

Route of Admission	M	F	Total	%
CHER	117	97	214	63.5
CHOP	48	39	87	25.8
CC	23	13	36	10.7
Total	188	149	337	100

CHER = Children Emergency Room.

CHOP = Children Outpatient Clinic

CC = Consultant's Clinic

Table IV: Duration of symptoms before presentation according to social class

Social class	Duration of symptoms (days)				Total
	<2 days	3-7	8-14	>15	
Upper	7	34	11	2	54
Middle	3	35	29	11	78
Low	14	96	48	47	205

Upper Vs low	2 = 12.722	p=0.005
Upper Vs middle	2 = 11.978	p = 0.007
Middle Vs low	2 = 6.965	p = 0.073

DISCUSSION.

Most of the children who were admitted into the wards of the UNTH, Enugu came from the low social classes. This has been the observation by Oyediji¹¹ in Ife- Nigeria and Cooper et al¹² in Britain. The reasons for admitting such classes of children could be that parents in the upper classes were able to afford the relatively high medical bills obtained in private hospitals and hence were able to patronize them. Our study was conducted in a government owned establishment.

It is also known that parents in the upper social class object to their children being used for clinical teaching and thus the quest for privacy makes private hospitals more attractive to them. Besides some administrative bottlenecks are believed to be frustrating to patients attending to public hospitals. Children from low social classes do not have alternative to these observations and so may continually patronize government hospitals.

It is also noted that most admissions into the paediatric wards were made through the emergency rooms. This indicates that medical assistance is sought for at periods when they needed urgent attention. Reasons for the delay ranged from poor finance to seeking for help from patent medicine dealers, prayer houses or traditional or unorthodox dealers -a reason that has been documented by earlier studies^{7,8,9}. Sometimes they engage in home management.¹⁰ This home treatment may be a way to reduce the biting effects of the difficult economic circumstances they find themselves in. The practice of self medication among parents has been documented in a study.¹⁰ This tendency to be admitted via the emergency room commonly appears in all the social groups. However, the difference between children in the upper group as against the other groups lies in the duration of symptoms before presentation. While children of upper classes presented early, those in the lower classes presented late p=0.005. This can be attributed to the improved perception, in the former group, of their children's illnesses and a fore knowledge of the attendant consequences of late presentation. This perceptive difference is said to be better in the educated groups^{6,13,14}. Similarly the upper group performed better than the middle group in terms of promptness of attending hospitals p=0.007. However, the lower social group performed better than their middle counterparts though not to a significant extent p=0.073. Probably, the difficult economic situation appears to affect the middle class who are very busy with their art or trade. The lower classes are full time house wives, and sometimes unemployed persons and may have enough time to spend with their children. Such parents need assistance such as financial or an enrollment into a program that will enable them cope with the stresses and strains in which they have found themselves. This, in addition to health education is needed especially in those children whose symptoms lasted for more than two weeks. before presenting to the children emergency rooms.

A review of the percentage bed occupancy shows a declining trend. About three decades ago, in the same hospital, a near 100% bed occupancy was achieved as treatment of childhood illness was free¹⁵ and thus admissions, then, were restricted to very severe cases. The observation from this study is a drastic fall to about 50% or less. This is due to difficulty in affording to pay the high medical bills. There is, therefore, the need to revise medical bills paid by children. This will encourage parents/guardians to bring their children/wards early enough for treatment thus reducing the adverse effect of late presentation. It is believed that the National Health Insurance Scheme (NHIS), if implemented, will considerably address this problem of poor hospital attendance, among very ill children, arising from paucity of funds.

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