

Lost to follow up

A study of nonattendance at a general paediatric outpatient clinic

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SUMMARY 50 children defined as persistent outpatient nonattenders were compared with 50 children who regularly attended the same clinics. Several factors were more often found in the group of nonattenders: (a) initial referral via casualty without a letter from the family doctor, (b) hospital admission before the first outpatient appointment, (c) recognition of multiple medical problems, and (d) evidence of diffuse social problems affecting the family. 34 of the nonattenders had at least 2 of these factors, compared with only 9 children in the other group. Many of these problems can be identified at the initial consultation, and perhaps other methods of continuing health care should be provided for these children.

One traditional way that continuing paediatric care is given is by way of a hospital outpatient department, but nonattendance at such clinics is common (Drachman *et al.*, 1969; Alpert *et al.*, 1970; Anderson *et al.*, 1971).

This study examines the problem of nonattendance at a general paediatric outpatients department and investigates whether the persistent nonattenders form a clearly defined group. The clinics from which the patients came were those held in the main outpatient department of a busy teaching hospital serving a typical inner city area with poor social and environmental conditions, a high rate of unemployment, and a large immigrant population. Within the hospital there is a paediatric casualty department and traditionally this is seen by the local population as a source of primary health care. The study was performed at a time of year, April to June, when neither poor weather conditions nor holidays could be blamed for a low attendance.

Patients and methods

During the study period 600 appointments were made for children at Guy's Hospital general paediatric outpatient clinics. These clinics took place on Wednesday, Thursday, and Friday mornings each week. The overall nonattendance rate was 25%. About one-third of these were persistent non-

attenders defined as those children who failed to attend on a particular day, who had been given at least 4 appointments, and failed 2 consecutive appointments, or more than 25% of them. Most nonattenders came from Lambeth, Southwark, or Lewisham AHA (T), and this study was restricted to children whose families were resident in these areas. A group of 50 nonattenders was compared with a group of 50 regular attenders. The regular attenders had been given appointments on the same days as the nonattenders, and had previously been given 4 or more appointments, attending more than 75% of them, and never missing 2 consecutive appointments.

Information about the children was obtained from hospital records including neonatal, paediatric, casualty, and social work notes. We obtained information about social and family background, and looked in detail at the child's medical history, and at the family's current and past social problems. If appropriate, further information was obtained from the Social Services Department, the Community Health Services, or directly from the parents. Several home visits were made to gain further information and to discuss possible reasons for nonattendance.

Statistical evaluation was carried out with the χ^2 test.

Results

Child.

Sex

There were 32 boys in the group of nonattenders compared with 30 in the control group.

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Age

There was little difference between the ages in the two groups. Nearly half the children in both groups were under 5 years.

Length of follow-up

The length of follow-up varied from a few months to several years. The slightly higher proportion of nonattenders (64%) followed up for less than 12 months, compared with 42% in the other group did not reach statistical significance ($\chi^2 = 4.86$, $P > 0.02$).

Family background

Social class

In both groups most of the families were in social class IV or V (Registrar General's classification). There was little difference between the numbers of unsupported mothers in the two groups. However, all the 6 unemployed fathers belonged to families of nonattenders (Table 1).

Ethnic group

24% of nonattenders and 12% in the control group had parents whose country of origin was outside the United Kingdom and Ireland (Table 2).

Housing

70% of families in both groups were living in local authority housing. This is only slightly higher than the rate for the local population.

Family structure

The families of both groups were of similar sizes (Table 3). There were 124 children in the families of nonattenders and 126 in the other group (Table 4). The control group families appeared to have a higher proportion of children over age 16 years:

Table 3 Number of children in family

Group	No. of children			
	1	2	3	4 or more
Nonattenders	16	12	11	11
Control	12	18	7	13

Table 4 Ages of children in family

Group	0-5 years	6-15 years	16 years	Total
Nonattenders	38	70	16	124
Control	32	66	28	126

22% compared with 13%. Three nonattenders and 2 children in the control group each had 2 siblings under 5 years.

Contact with the hospital.

Method of referral

For 64% of the nonattenders the initial contact with the hospital had been in the casualty department without a referring letter. Significantly fewer (22%) of the control group presented in this way ($\chi^2 = 17.99$, $P < 0.001$). The casualty attendance led to the child being admitted for 25 nonattenders and 6 control children. The majority (64%) of the control group had been referred to the hospital by their family doctors and, with the exception of 2, directly to the outpatient department.

The routes of initial referral to outpatients are summarised in Table 5. Far more (50%) of the nonattenders had their first outpatient appointments made as the direct result of admissions to hospital ($\chi^2 = 11.57$, $P < 0.01$).

Initial referral diagnosis

There was no great difference between the two groups in the reason for referral. More than 30% of

Table 1 Social class*

Group	Nonmanual	Manual	Others†	Unemployed	Unsupported	Not known
Nonattenders	6	16	2	6	8	12
Control	10	24	1	0	10	5

*Registrar General's classification, father's occupation.

†For example, the Forces.

Table 2 Ethnic group

Group	UK/Irish	W. Indian	African	Indian subcontinent	Cypriot	Far Eastern	N. African	Mixed
Nonattenders	38	4	0	2	3	0	1	2
Control	44	4	1	0	0	1	0	0

Table 5 Method of referral

Group	Casualty	Casualty and ward	GP	GP and ward	Labour ward	Other hospital
Nonattenders	7	25	15	0	3	0
Control	5	6	30	2	3	4

children in both groups were referred because of respiratory tract disorders. 13 nonattenders were admitted with respiratory tract disorders compared with only 3 children in the control group.

Subsequently identifiable problems

During the period of hospital contact 22 nonattenders were recognised as having further medical problems, compared with only 8 children in the other group ($\chi^2 = 9.33$, $P < 0.01$). Nearly half of these problems were either of a psychiatric or a psychosocial nature—for example behaviour problems, enuresis, school refusal.

Of the 22 children with subsequently identifiable problems, 5 were found to have multiple problems during the follow-up period. For example, one child was first seen in outpatients department after hospital admission for an episode of wheezy bronchitis at age 4 months. During the period of intermittent attendance further problems became apparent: failure to thrive, behaviour problems, and the possibility of child abuse.

Hospital admissions

There was no difference in the number of hospital admissions for the two groups of children during the period of outpatient follow-up. More than 40% of children in both groups were admitted to hospital during this period. Of these, about a quarter had at least 4 admissions.

Casualty attendance

60% of nonattenders and 62% of the control group did not visit the casualty department during the last 3 years of follow-up. 8% in both groups made at least 10 visits.

Growth

There was no difference in the weight or height of the children in either group. Approximately 15% of children were <10th centile for either height or weight.

Neonatal concern

Records were examined to see if any medical concern had been noted in the neonatal period—for example admission to a special care baby unit, low birth-weight, prematurity, prolonged jaundice, apnoeic attacks.

Although there was a suggestion that more nonattenders (14) had neonatal problems than control children (9), this was not significant.

Contact with social services.

74% of families from the group of nonattenders were known to the social services, either within the hospital or in their local area, during the period of follow-up. Many were actively concerned with the social services at initial referral. Only 38% of families from the control group were in contact with social services ($\chi^2 = 13.15$, $P < 0.001$).

Social work problems can be divided into defined and diffuse (Lynch *et al.*, 1976). Defined problems are isolated ones in otherwise stable families—for example housing, practical help with the care of the children, assistance with the emotional difficulties of the child's illness. Diffuse problems are those in which a number of long-term problems beset the whole family. For example, one family was being helped by the social services because of poor housing conditions. However, it soon became apparent that there were numerous other problems. The father had been unemployed for 2 years, there were massive rent arrears, a sibling of the nonattender was a school refuser, and when one of us (N.A.C.) visited the family he found the outpatient appointment cards propping up the hi-fi record deck.

Using this classification, families known to social services were allocated to either a defined or diffuse category. 78% of the families of nonattenders and 42% of the control group receiving social work help were considered to have diffuse social problems ($\chi^2 = 7.37$, $P < 0.01$). Thus 58% of all the children who were nonattenders came from families who had diffuse social problems while only 16% of the control group came from such backgrounds ($\chi^2 = 18.98$, $P < 0.001$).

Two of the children in the group of nonattenders were on the 'at risk' register at the time of failed follow-up.

Adverse factors.

Four factors were significantly more often present in the group of nonattenders: (a) initial referral via casualty, without a letter from the family doctor, (b)

Table 6 Total number of adverse factors

Group	0	1	2	3	4
Nonattenders	8	8	13	12	9
Control	30	11	6	2	1

hospital admission before the first outpatient appointment, (c) recognition of multiple medical problems, (d) evidence of diffuse social problems affecting the family. The distribution of these factors is shown in Table 6. There is a pronounced accumulation of 'adverse' factors in the group of nonattenders, 34 children having at least 2. Only 9 control children had more than one factor.

Discussion

American studies suggest that nonattendance at outpatients departments is common (Drachman *et al.*, 1969; Alpert *et al.*, 1970; Anderson *et al.*, 1971). It would seem that this is equally true here in an inner-city area, with 25% of appointments not being kept. However, this is still better than the nonattendance rate in general paediatric clinics in the USA, where 40% of appointments are missed (Anderson *et al.*, 1971). One-third of the nonattenders at the Guy's clinic persistently failed to appear. This persistent failure to attend was unrelated to the child's age, sex, ethnic origin, or the family's social class. However, all the children with unemployed fathers were nonattenders.

A large young family is likely to make it more difficult for a parent to bring a child to the outpatients department. While there were no fewer preschool siblings in the control group, there was a suggestion that overall these families, while being of similar size, were older as 22% had at least one child over age 16, compared with 13% in the families of nonattenders. Unfortunately parental ages were not always recorded but it may well be that the parents of persistent nonattenders were younger and less experienced. Many of the nonattenders (64%) were referred from casualty without referral letters from their family doctors, and half of them were admitted to hospital before their first outpatient appointments. This suggests that these parents only seek urgent medical advice when their children have acute illnesses. The fact that many of the diagnoses on admission were of illnesses often treated at home—for example otitis media, upper respiratory tract infections, mild wheezy bronchitis—suggests that other factors may have influenced the decision for admission. In a recent survey in Nottingham, lack of home facilities and parental capacity was

judged to be the main factor in the decision to admit a child in 20% of cases (Wynne and Hull, 1977).

Although the initial diagnoses were similar in the two groups, there was evidence that the families of nonattenders subsequently developed multiple problems of both a medical and psychosocial nature. Although unrecorded at the time it seemed that many of these problems were present at the initial referral.

The children who persistently failed to attend not only had multiple medical problems, but also came from families with diffuse social problems (58%). Many of these children were already known to the social services at the initial referral, and this may have influenced the decision to admit to hospital when first seen in the casualty department.

Many of the nonattenders needed continuing health care, as shown by the number of admissions to hospital during the follow-up period. This was very similar in both groups with 10% of children requiring at least 4 admissions.

It appears from the evidence presented in this study that children who persistently fail to attend outpatients form a definable group. They tend to have diffuse medical and social problems, and their parents tend to view minor acute illnesses as requiring urgent medical attention, yet fail to seek long-term medical care. There is a need to explore other ways of providing health care for children whose parents persistently fail to bring them to hospital for follow-up.

It has been suggested that if a visit is made to the home shortly before the hospital appointment the child is more likely to attend, but this appeared to be partly related to providing transport to the hospital (Anderson *et al.*, 1971). Of 12 families visited at home in this study, none viewed transport as a major obstacle to their ability to attend, and indeed many resided within easy walking distance of the hospital. A social worker could well help to plan the family's visit to the hospital and might improve attendances and give a valuable opportunity for a joint discussion of the family's interrelated medical and social problems.

It has been shown that nonattenders at community child health clinics are similar to those described here (Ford, 1976). However, in this sample several families attended child health clinics or used a day nursery although they failed to use either hospital services or their family doctors on a regular basis. Follow-up might well be successfully carried out in the community with help from the health visitor and social worker. A united effort by both community and hospital services to encourage parents to take their children to a single clinic is likely to be much more successful than uncoordinated attempts to make them attend a variety of different agencies.

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