

Paediatric primary care in Inner London

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SUMMARY. A week's census was taken of children attending family doctors or hospital accident and emergency departments in an inner city area of London. Most attendances at general hospitals were for cases of trauma while the children's hospital was used mainly by the very young, coming from a wide catchment area. An over-emphasis on hospital-based primary care would not be appropriate in this area and would run counter to the whole philosophy of British medical practice.

Introduction

PRI-MARY care in Britain is based upon the family doctor, who is expected to be the entry point into the health system and to provide continuous and integrated first-line care for patients on his list.

There has been a sharp decline in demand for hospital-based primary care for patients with non-traumatic conditions since the Platt Report (Ministry of Health, 1962) recommended that accident and emergency departments should be modernized, their role redefined, and attendance there by 'casuals' should be discouraged (Blackwell, 1962; Morgan *et al.*, 1974). By contrast, in the United States there has been a continuing upward trend in hospital emergency room attendances for all types of case (Shortliffe *et al.*, 1958; Davidson, 1978).

Use of hospitals can be related to a number of different factors such as poor accessibility or availability of family doctors (Davidson, 1978) or a preference for hospital care, particularly by disadvantaged people such as those of lower socio-economic status or of ethnic minorities living in poor inner city districts (Weinerman *et al.*, 1966; Shortliffe *et al.*, 1958; Alpert and Feinbloom, 1974; Elling and Martin, 1974). Other factors include the distance from alternative sources of care (Dixon and Morris, 1971; Shannon *et al.*, 1973); time of day or day of week (Lees *et al.*, 1976); the effects of holiday periods and the weather (Noble *et al.*, 1971); the type of case (Robinson *et al.*, 1977); the severity and

duration of the condition (Lees *et al.*, 1976); the individual's age and sex (Russell, 1977); history of past attendance at hospital (Russell, 1977); or attitude towards hospital care (Komrower, 1977).

In areas of social disadvantage facilities for general practice tend to be poor and access to hospitals relatively unrestricted. Doctors are not encouraged to live near their work so that many own lock-up surgeries, have no attached ancillary staff, and use deputizing services excessively. Jefferys and colleagues (British Medical Association, 1970) thought that a hospital-based primary care system might be preferable in these areas, for instance in inner metropolitan districts where a high proportion of householders live alone, the turnover in properties is very high, and where downward social drift is evident.

A study of paediatric primary care in a deprived inner city area of London was undertaken in 1975 to test the hypothesis that there would be a high level of demand for hospital-based primary care (Jackson, 1977). The two districts chosen for the survey showed several features of social disadvantage: a high proportion of workers were in semi-skilled or unskilled occupations; many people lived in homes which were overcrowded, had shared facilities, or were in high-rise council blocks prone to vandalism; there was a declining and relatively elderly population, high unemployment, and a large number of immigrant families. General practitioners in this neighbourhood were more likely to be elderly, to have trained abroad, and to work in small single-handed practices from small old-fashioned premises with few or no ancillary staff.

There were four local general hospitals, all easily available and accessible. Thus parents might be expected to take their children to hospital for most paediatric problems and not just for cases of accident or emergency. The presence of a specialist children's hospital in the neighbourhood might reinforce further a movement away from family doctors.

Method

The study was confined to children aged 0 to 14 years seen during one week in January 1975 by general practitioners based in two working class residential districts of London (Bethnal Green and Haggerston in

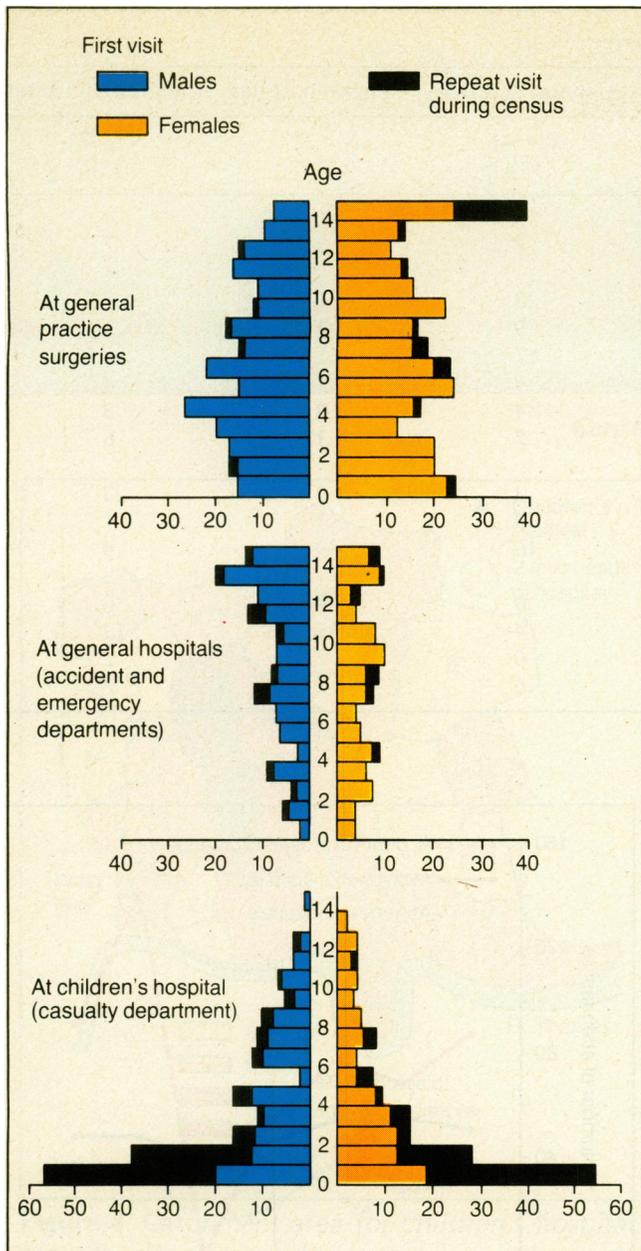


Figure 1. Attendances by age and sex at different sources of primary care.

E2 and the Isle of Dogs in E14) and those attending accident and emergency departments in four local general hospitals and the children's hospital. Only one of the 25 general practitioners (in 13 practices) did not participate. Child health clinic attendances were for immunization or developmental assessment rather than for primary medical care and were omitted.

Details regarding age, sex, address, diagnosis, treatment, and referral were recorded on census forms by family doctors and hospital staff. Further information about past history and family background was sought through parental self-administered questionnaires.

Results

The sample consisted of 988 children seen at least once during the week. There were 1,144 total attendances,

over half of them at general practice surgeries (514 index and 32 repeat), one third at the children's hospital (272 and 99) and the rest at the general hospitals (202 and 25). Parents of all children seen at hospital and 390 of those attending general practice surgeries (residents of E2 or the Isle of Dogs) were invited to complete questionnaires; the overall response rate was 72 per cent. The children attending general practice surgeries differed in several ways from those seen in hospital.

Age and sex

There was a fairly even distribution by age of those attending the general practice surgeries. Few young children were seen at the general hospitals (eight or four per cent under two years old and 23 per cent under five) in marked contrast to the children's hospital where 62 index cases (23 per cent) were aged under two years and 186 (69 per cent) were under five. In the whole study there were almost equal numbers of boys and girls but more of the boys were taken to hospital and more girls to their general practitioners (Figure 1).

Diagnosis

Nearly half the total attendances at general practice surgeries were for respiratory disorders and the rest mainly for general medical problems. Very few were for injuries compared with three quarters of those seen in general hospitals. Children's hospital diagnoses were divided mainly between respiratory disorders, symptoms including gastro-enteritis, and injuries (Table 1). Apart from one child with a genito-urinary disorder seen several times, there were few repeat visits to general practitioners. Most repeat visits at the general hospitals were for injuries (20 or 80 per cent) while those at the children's hospital were mainly for respiratory infections (13 or 13 per cent) or gastro-enteritis (49 per cent).

Management

Nearly all the children seen by general practitioners (85 per cent) were given prescriptions compared with 44 per cent at the children's hospital and 22 per cent at the general hospitals. Medical or surgical procedures were performed rarely by general practitioners (one per cent) or at the children's hospital (13 per cent), commonly at the general hospitals (62 per cent). General practitioners referred only nine children (two per cent) onwards to hospital casualty departments, two of them for admission, and 24 (five per cent) to outpatient departments; of those seen at general hospitals 11 (five per cent) were admitted compared with 45 (17 per cent) at the children's hospital. The proportions requiring follow-up appointments varied from 13 per cent of those seen by general practitioners to 32 per cent at the children's hospital and 49 per cent at the general hospitals. Hardly any children seen first at hospitals were referred back to their general practitioners for follow-up. Very few at any source of care had urine tests, blood tests, preventive care, or advice during their attendance.

Table 1. Total percentage attendance by diagnostic group and source of care.

International Classification of Diseases Code	Diagnostic group	General practice	General hospital	Children's hospital
		N = 546 (15)*	N = 227 (11)*	N = 371 (15)*
1.	Infective, parasitic	5	1	4
6.	Central nervous system, special senses	7	3	7
8.	Respiratory disorders			
	URTI	28	1.5	9.5
	Pharyngitis, tonsillitis	9	2	2
	Bronchitis, croup, etc.	11	1.5	8.5
9.	Gastro-intestinal	3	2	4
10.	Genito-urinary	4	0	3
12.	Skin, subcutaneous	7	3	6
16.	Symptoms			
	Gastro-enteritis, diarrhoea and vomiting, etc.	3	0	23
	Abdominal pain	3	3	1
	Other symptoms	10	3	4
17.	Injury, external causes			
	Fractures	0	9	6
	Lacerations, sprains, etc.	4	65	13
	Ingestion of tablets, etc.	0	2	2
Other		6	4	7

*Not stated.

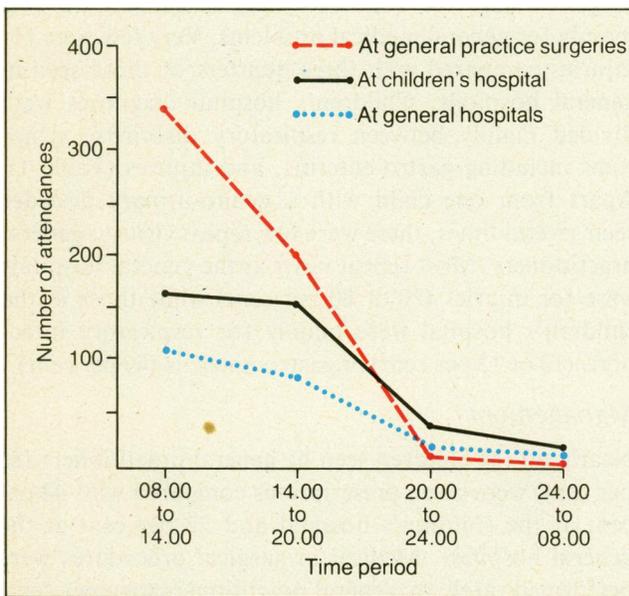


Figure 2. Attendances by time of day at different sources of primary care.

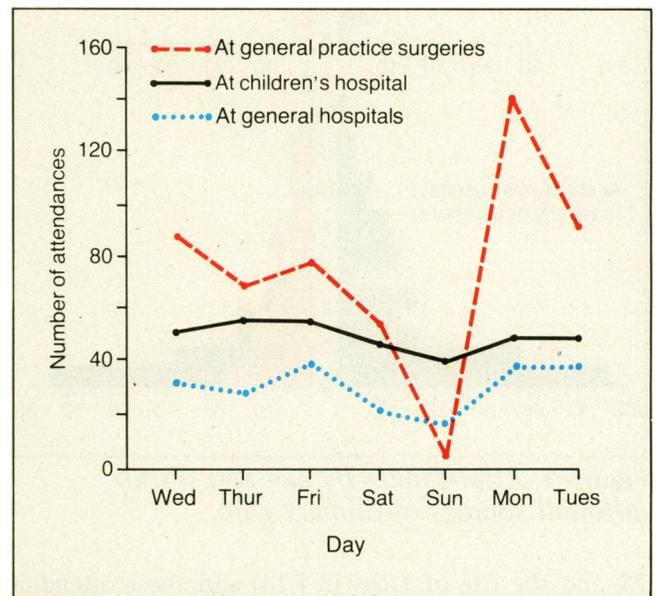


Figure 3. Attendances by day of week at different sources of primary care.

Time and day

During the census week most of the workload occurred in the early part of the day (08.00 to 14.00 hours). Attendance fell overall at the weekend, markedly so at the general practice surgeries where there was an exceptionally heavy load on Monday. There was no apparent compensatory rise in hospital attendances when those at general practice surgeries were low (Figures 2 and 3).

Distance from source of care

Nearly all children attending general practice surgeries lived in the same postal district as their doctors or else

had travelled less than one mile. Hospital catchment areas were larger though nearly all of those attending general hospitals had travelled less than two miles and very few over five. However, while half of those at the children's hospital lived within two miles the rest came from a number of districts in North East London (Figure 4).

The original hypothesis was that there would be a high level of local demand for hospital-based primary care. This was tested by taking a small sample of young children who seemed to have equal access to hospitals or to general practitioners. There were 211 children aged

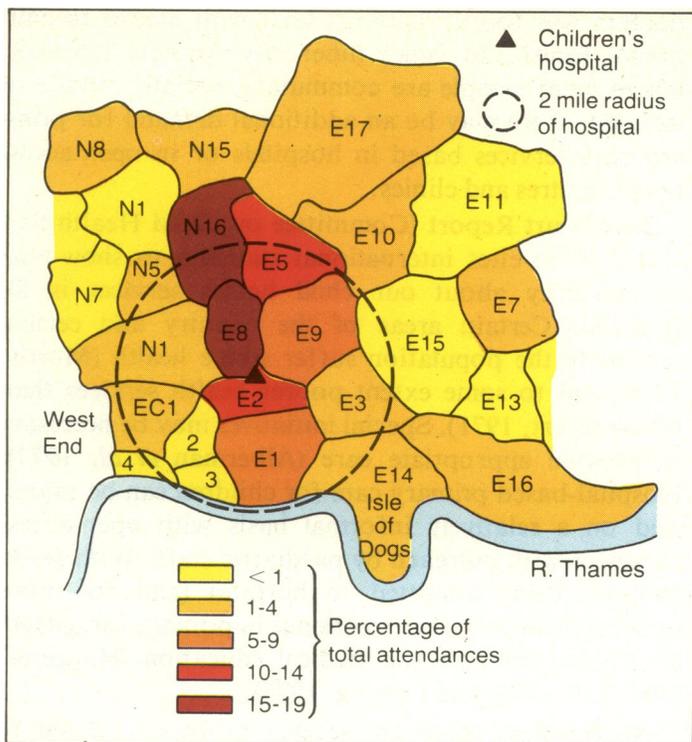


Figure 4. Catchment area for children's hospital casualty department during census week.

less than five years who attended general practice and the local hospitals with a new complaint in one district (E2) between 08.00 and 20.00 hours on weekdays and 08.00 hours to 14.00 hours on Saturday. Only three attended general hospitals, so were excluded. Of the remaining 208 children, 104 were E2 residents who presumably had equal access to different sources of care. However, 89 of these 104 (86 per cent) were taken to general practices rather than to the children's hospital in spite of the open-door policy of the latter.

Family background

Further information was available from parental questionnaires about 623 children. This suggested that children seen in general practice surgeries lived in relatively good housing conditions, mainly in council flats. Those seen at the children's hospital were as likely to live in privately-owned or rented accommodation, sometimes

in poor condition. Parents of children attending general practices were more likely to have been born in Britain compared with parents of those seen in hospitals, a proportion of whom spoke little English (Table 2).

Parental opinion

Parents completing full-length questionnaires (510) were asked who in their opinion would be the best person, if available, for the present complaint of their children. Parents of children seen by general practitioners opted overwhelmingly for the latter; over half of the parents of hospital children sampled thought the 'casualty doctor' would be best but nearly one third thought a family doctor would have been best if available (Table 3). When asked why some parents might take children to hospital with problems that were neither accidents nor emergencies the most common reasons offered were unavailability of general practitioners, better training and skill in hospital doctors, faster care and attention, and better facilities in hospital.

Discussion

Several factors may encourage the use of hospitals for primary care. Many teaching hospitals continue a traditional dispensary system with assumed benefits both to medical education and to patients. These may include local residents, visitors, or commuters who can choose their medical care from a wide range of high quality alternatives (Wilkinson *et al.*, 1977). If a specialist children's hospital is easily accessible a number of children with problems more appropriate to general practice will be brought instead to the accident and emergency department (Committee on Child Health Services, 1976). Gampel (1965) found in two London children's hospitals in 1962 that about half the new casualty attendances were for such cases; many children had mothers who worked away from home and a number had non-English parents. Holohan (1976) followed up self-referred people with non-traumatic disorders attending an accident and emergency department. Apart from hospital staff, the others in the group

Table 2. Features of family background (percentages) by source of care (from parental questionnaires).

	Families attending general practices N = 310	Families attending general hospitals N = 131	Families attending children's hospitals N = 182	Significance level (χ^2)
Council flat/house	82	72	51	p < 0.001
Overcrowded home (more than 1½ persons per habitable room)	4	5	15	p < 0.001
Households sharing bath	11	18	28	p < 0.001
Parents both born:				
In London	50	46	29	p < 0.001
In rest of UK	21	16	22	
Main language at home not English	4.5	6.5	14.5	p < 0.001

Table 3. Parents' opinion as to best person for child's problem (in percentages) by source of care.

	General practice	General hospital	Children's hospital
	N=268 (10)*	N=101 (8)*	N=141 (7)*
Family doctor	93	31	29
Casualty doctor	2	58	54
Clinic doctor	1	1	2
Other doctor	1	2	6
Nurse	1	0	0
Other non-medical	1	0	1
Several people	1	8	8

*Not stated.

were from social classes 4 or 5. The children came from deprived homes or their mothers appeared to be relatively isolated people who found it easier to talk to hospital staff than to their general practitioner.

In this study two of these factors applied. There was easy access to a specialist children's hospital and also a large proportion of the families were in social classes 4 or 5 (36 per cent), as in the local population, in contrast to the national average of 25 per cent. The survey gave an overall picture of the expressed demand for paediatric primary care in one part of East London during a week in winter. It seems that parents took their children to the source of care most appropriate to their perception of the diagnosis though there were other important factors such as the age of the child, the distance to be travelled, the day, and the time. During normal working hours local parents had a choice of options for primary care; family doctors were there for everyone while hospital-based services were easily available. It was expected that general practitioners would be very under-used with a correspondingly high demand for hospital care but this did not occur.

General practitioners coped with a wide variety of problems and referred very few children to hospital. When general practitioners were not easily available most parents were prepared to wait overnight or over the weekend to see them rather than take their children to hospital. General practitioners appeared to be seen as appropriate sources of care except for accident or emergency cases or for very young children with gastroenteritis or respiratory infections. Some parents, however, from other districts of North-East London (where specialist paediatric care may have been less easily available) brought their children to the children's hospital; some of these parents were born abroad and spoke little English.

The survey took place in a long-established inner city working class residential area characterized by urban blight where high use of hospital primary care might be expected. Instead, a traditional loyalty towards family

doctors was found there, at least with regard to children's health. In other inner city districts however, where many people are commuters, socially mobile or isolated, there may be an additional demand for primary care services based in hospitals or in open-access health centres and clinics.

The Court Report (Committee on Child Health Services, 1976) cites international statistics to show that complacency about our child health services is ill-founded. Certain areas of the country and certain groups in the population suffer worse health (Morris, 1975) and to some extent poorer health services than others (Hart, 1971). Special initiatives may be necessary to provide appropriate care (Alberman *et al*, 1977). Hospital-based primary care for children can be organized on a relatively informal basis with open-access clinics or with outreach by paediatric staff. With fewer children being admitted to hospital (and for more unusual disorders) this experience in primary care offers a valuable resource for medical education (Haggerty, 1968; Lillystone and Lessing, 1975).

Nevertheless there are several problems related to extending the hospital role: if the clinic is part of an accident and emergency department the ambience may be inhibiting or frightening; the quality of care may not be high owing to the inexperience of overworked or unsupervised junior staff (Dugdale, 1975); communication between hospital staff and those in the community is often poor; clinicians may be over-possessive about their patients and reluctant to refer them back to their family doctors. Formalizing paediatric primary care through hospitals would cream off about a quarter of the usual work of each general practitioner and operate against the whole basis of a family health service. Parents then would come to think that their children's problems could be solved only by hospitals and specialists (*Journal of the Royal College of General Practitioners*, 1975).

The more emphasis that is placed on developing hospital-based primary care the more families and general practitioners will come to rely on it. Rather than diminish the role of family doctors, it is more important to raise the level of interest in paediatrics and develop high quality care in every community (RCGP, 1978).

Given rising living standards, the health of children in Britain should continue to improve. Some people, though, will remain at social and physical disadvantage and will require some effort at positive discrimination (Wedge and Prosser, 1973). If they prefer to attend hospitals rather than general practice surgeries, facilities could remain available to them in certain districts. On the basis of this study in a working class area of London, however, there appears to be no evidence of a general movement away from family doctors towards hospital-based primary care for children. This suggests that it is more important to encourage good general practice than to seek for alternative methods of providing primary care.

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General practitioners and alcoholism

There is no intention in this statement to convey the impression that all the general practitioner should do is to pass on patients to someone else. On the contrary, it is our feeling that he or she should remain fully involved with whatever rehabilitation programme is decided upon, being available for consultation and support whenever required. In spite of what we consider to be the often inappropriate referral to psychiatrists of people with alcohol-related problems at least, it appears to us, there is the possibility that some liaison will be set up between the general practitioner and the hospital concerned and that the client will not be cast adrift as appears to be a possibility when so much uncertainty pervades all levels of the present scene.

Ideally, we see representatives of general practitioners playing a full part in the setting up and maintenance of

services as envisaged above and as a result of this, we believe, a greater awareness of what is possible within the constraints of available resources will break down the barriers of uncertainty and false expectation which exist in certain places at present.

It appears to us that as part of this improved situation, general practitioners themselves must be willing to receive wider education on all aspects of alcoholism rather than focussing merely on late somatic manifestations of the condition. Education should also concentrate on the development of skills of recognition, which we have found helpfully described by Wilkins (1974).

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