General Practice Observed

Consultant paediatric clinics in group practice

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Although consultant outpatient clinics in group practices, health centres, or community hospitals have been advocated for several years,¹⁻⁵ relatively few reports of their implementation have been published.⁶⁻⁹ The hypothetical advantages of this type of consultation¹⁰ include benefits to the patient in terms of convenience and peace of mind and improvements in the quality and continuity of care, based on better communication between practitioner and specialist. Disadvantages may include difficulty in securing consultant co-operation, time wasted in travelling, and absence from hospital should emergencies arise. The convenience of the clinic may increase referral rates to the detriment of hospital waiting lists and the system can diminish the traditional right of the general practitioner to select his own consultant. It has also been suggested that consultants find it difficult to work without their hospital team and without diagnostic facilities, leading to the subsequent attendance of most patients at hospital.

A fundamental problem is that of scale. Although it has been suggested¹¹ that a population of 50 000 would support one or two paediatric clinics a month, few practices are of this size. If peripheral clinics are to be established soon they must therefore be based in more typical practice units.

We describe here the effects of establishing a paediatric clinic in a central urban group practice of eight doctors serving a population of 17 500.

Method

Data on the management of all children referred from the practice to hospital outpatient departments over one year had been recorded as part of a general practice/hospital relationship study¹² and constituted phase I of the present project. Phase II consisted of a year when paediatric clinics were held in the practice about once a fortnight. After an interim review, which confirmed many of the expected advantages but suggested that fortnightly clinics were not economical

of the consultants' time, the number of clinics was reduced to one a month in phase III.

During phase II the pattern of consulting had developed informally. In an attempt to make the most effective use of the clinic we decided to establish ground rules in phase III. The practitioners defined their expectations of the consultation, and the paediatricians were critical of the quality of the problems referred and, unless there were overriding reasons for follow-up by the paediatrician, returned the care of the child immediately to the general practitioner. During phases II and III data were collected which described the logistics of the exercise and its educational content. Parental reaction, which had been regarded as favourable during Phase II, was assessed formally by questionnaire in phase III.

Results and comment

During the first year of the clinic the number of children seen by the paediatrician increased by about 60% while those referred to other departments fell (table I). The most significant increase was in the group of children with behavioural or developmental disorders, but the paediatricians also began to be used as convenient second opinions for other more specific problems. This was indicated by the proportion of children they subsequently referred to a second specialist—20 (23.2%) during phase II compared with 5 (9.6%) in phase I. Although in phase III the total number of referrals reverted to their previous level the proportion of secondary referrals did not. While most of these referrals were of children with surgical conditions confirmed by the paediatrician and referred for operation as many with similar problems were returned to the practitioner for more conservative care.

TABLE I—Pattern of referrals

	Phase I	Phase II	Phase III
<i>Referrals to paediatrician</i>			
Medical... ..	24	35	24
Surgical... ..	16	22	13
Behavioural and developmental	6	28	8
Other... ..	7	1	2
Total	53	86	47
<i>Referrals to all other departments</i>			
	95	72	97
Grand total	148	158	144

Investigations—One of the hypothetical disadvantages of peripheral clinics is the absence of hospital facilities, particularly radiology. Table II specifies the number of investigations ordered by the paediatrician which required hospital attendance. In phase I most of these investigations would have been carried out on the first visit, although five children had to attend hospital subsequently. In phases II and III all of those who attended hospital did so by appointment. Had their initial consultation been in hospital four in each phase would have required a second visit. Thus although 30-35% of children who consulted the paediatrician did require special investigation the process for them was simplified and the remainder were spared a hospital visit completely. As the practitioners became familiar with the paediatrician's routine, it might have been expected that more preliminary investigations would be arranged, but this did not occur. About 25%

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of children in each phase were the subject of side-room or laboratory tests before referral but none of open access radiological or other investigations.

TABLE II—Paediatrician investigations requiring hospital attendance and proportion of referred children attending hospital

	Phase I	Phase II	Phase III
X-ray examinations	25	30	18
Electrocardiograms	3	5	3
Electroencephalograms ..	3	1	3
No (%) of children attending hospital	53 (100)	30 (35)	14(30)

Pattern of management—The most significant change between phase I and phases II and III was in follow-up routine. Table III shows that the proportion of children followed-up by the paediatrician fell from 58% in phase I to 10% in phase III while the proportion returned to the care of the practitioner rose from 23% to 59%, including in phase III five children who were "followed up by proxy" during a subsequent practice visit.

TABLE III—Management at initial consultation

	Phase I	Phase II	Phase III
No attending	53	86	47
Follow-up by paediatrician ..	31 (58.5%)	21 (24.4%)	5 (10.6%)
Returned to practitioner:			
With treatment	5	36	17
Without treatment	7 } (22.6%)	5 } (47.7%)	6 } (59.6%)
With "proxy follow-up" ..			5
Referred to 2nd specialty ..	5 (9.4%)	20 (23.3%)	14 (29.8%)
Waiting list	5 (9.4%)	4 (4.7%)	0

Quality of referral—Referrals were evaluated retrospectively as necessary, probably necessary, and unnecessary. In Phase II 48 (62%) out of 77 referrals were regarded by the practitioners as necessary, 22 (28%) as probably necessary, and 7 (9%) as unnecessary. The paediatricians evaluated all 86 referrals and classified 70 (81%) as necessary, 13 (15%) as probably necessary, and only 3 (3.5%) as unnecessary. Two that were considered unnecessary by the paediatrician were regarded as necessary or probably necessary by the practitioner and paradoxically 4 of the 7 considered by the practitioner to be unnecessary were regarded by the paediatrician as necessary, 2 as probably necessary, and only 1 as unnecessary. Of the 47 referrals in phase III, the practitioners classified 19 (48%) as necessary and 20 (52%) as probably necessary. The paediatricians classified 46 (98%) as necessary and only one as probably necessary.

Educational content—Each consulting session was followed by an informal case conference lasting 20-25 minutes at which the paediatrician and five or six of the practitioners discussed the management of children seen that day or previously. A more general debate usually followed and the topics during the two years of the experiment included: Admission avoidance (discussed three times), antibiotic treatment, asthma, BCG vaccination, bronchitis, battered baby syndrome (twice), cold limbs, enuresis, febrile convulsions, fibrocystic disease, hydronephrosis, hydrocephalus (twice), hypoparathyroidism, Intal (sodium cromoglycate), indications for intravenous pyelography, immunisation levels, laboratory specimens, leukaemia (twice), nebulisers, nappy rash, normal development (twice), obesity (twice), paediatric surgery, percentiles, pyloric stenosis, precocious puberty, slipped epiphysis, striae, still's disease, sleep and sedation (twice), transposition of the great arteries, undescended testis, and vaccination.

Parents' reactions—During phase III the parents of 30 children were interviewed using a semi-structured questionnaire. Twenty-two of the 30 had been to hospital before and their parents could compare the alternative methods of care. With one exception all preferred the practice setting, the major attraction being the efficiency of the appointment system. For many parents there was no waiting and the average was only 11 minutes: "It's much quicker than in hospital," "It's marvellous. You don't feel there is any rush," and "It's much easier not having to wait" were typical remarks. The familiarity of the building and the staff were regarded as additional advantages, particularly in creating a relaxed atmosphere. None of the children were upset by the consultation and "We are delighted," "We have had excellent attention," and "A very good idea," summarised the

parents' views. Travel was not a problem as the hospital and the practice were equally accessible to most parents, although for some attendance at hospital had been less convenient in the past because of difficult bus routes.

Logistics—The feasibility of peripheral clinics ultimately depends on some form of cost benefit analysis. While work load inevitably varied the average practice clinic was attended in phase II by 3.3 new patients and in phase III by 3.5 new patients and 2.5 returns; it lasted an average of two and a half hours, of which 1 hour 50 minutes was spent in consultation and 35 minutes in case conference. In a series of comparable three and a half hour sessions in hospital the paediatricians booked an average of 2.9 new and 15 return cases. Although the work load in the practice was therefore much lighter than in hospital this was due to the lower follow-up rate, and more new patients were actually being seen. A review of return patients attending hospital found very few who could not have been managed as well in a practice.

Discussion

Unlike earlier experiments in which practitioners and specialists consulted together⁶ we studied clinics to which patients were referred by letter and in which they were seen by the specialist alone. There is little doubt that the hypothetical advantages were confirmed: patient, practitioner, and paediatrician all preferred the practice clinic to the conventional out-patient visit, with the relaxed and familiar atmosphere of the practice being particularly suited to the needs of children and their parents. The availability of practice records and the case conference after the consulting session emphasised the inadequacy of letters as a means of communication. These conferences and the informal seminars into which they developed probably modified the behaviour of both practitioners and paediatricians. The initial increase in the referral rate, particularly of children with behavioural and developmental problems, reverted within a year, while the paediatric follow-up rate diminished as the paediatricians accepted that the practitioners could provide effective continuing care.

Of the hypothetical disadvantages consultant collaboration was clearly no problem. Travelling to an urban practice was minimal, and urgent attendance at hospital, had it been necessary, could have been achieved easily. The absence of special diagnostic facilities did not create practical difficulties though some children attended hospital later by appointment.

Although superficial assessment may suggest that practice clinics are uneconomical in their use of specialist time, the reduction in follow-up visits, allowing the consultants to concentrate on new patients, may be sufficient justification alone. Such clinics introduced on a wider scale would probably lead to greater practitioner concern in the after care of children referred to a paediatrician, which would reduce rather than increase waiting times for those who do require hospital investigation or treatment. If the benefits of greater patient satisfaction, improved communication, mutual education, and closer professional relationships are taken into account the case for the development of specialist clinics in general practice becomes substantial.

Ideally a practice-based paediatric clinic would see six new and four return patients, and occupy two and a half to three hours of consulting time, leaving half an hour free for a case conference. Such a work load would be produced by a practice population of 25 000-30 000. Until practice or health centre populations of this size are achieved peripheral clinics may be justified because they develop a more effective partnership between general practitioners and specialists and because they may provide higher standards of patient care.

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Occasional Survey

Hospital admissions for peptic ulcer during 1958-72

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Summary

Unpublished data from the Hospital In-patient Enquiry in England, Wales, and Scotland between 1958 and 1972 show that the frequency of admissions to hospital for peptic ulcer, particularly gastric ulcer, has fallen. This seems more likely to have been due to a true fall in the incidence of ulcer than to changes in treatment. Some three times as many people are admitted to hospital with duodenal ulcer in the north as in the south, but the frequency of admissions for gastric ulcer seems to vary little. The reasons for these differences are not understood.

Introduction

This paper examines unpublished data on hospital discharges and deaths in England, Wales, and Scotland of patients with peptic ulcer from the Hospital In-patient Enquiry in England and Wales and the Scottish Hospital Inpatient Statistics. The Hospital In-patient Enquiry records a one-tenth sample of all hospital discharges and deaths except those of psychiatric and private patients, while the Scottish Hospital Inpatient Statistics now include all discharges from and deaths in NHS hospitals.

Disease classification and analysis of data

Diagnoses had been coded according to the seventh¹ (1958-1967) and eighth² (1968 onwards) revisions of the *International Classification of Diseases*. In both classifications perforated ulcers are coded separately from non-perforated ulcers, but bleeding ulcers are not distinguished from those that have not bled. In the seventh revision peptic ulcers whose site is "not otherwise specified" are included under "ulcer of

the stomach," whereas the eighth revision includes the new category "peptic ulcer, site unspecified."

From the data we have calculated the total number of discharges and deaths (described here as admission rates) and analysed them by sex, age, and hospital region.

Results

During 1958-72 admissions to hospitals in England and Wales of patients aged 15 years or more with gastric ulcer (GU) and duodenal ulcer (DU) declined steadily, the decline being greater in the case of gastric ulceration and similar for both perforated and non-perforated ulcers (table I). The introduction of the category "peptic ulcer, site unspecified" (PUSU) in 1968 caused a sharp fall in admissions for GU in that year, but the sum of the figures for GU and PUSU was similar to that for GU alone in 1967, suggesting that the change in classification had worked correctly. We have therefore compared the numbers of admissions for GU during 1958-67 with the numbers for GU and PUSU combined during 1968-72.

TABLE I—Total admissions to hospitals in England and Wales during 1958-72 of patients aged 15 years and over with peptic ulceration. From Hospital In-patient Enquiry data

	Patients with non-perforated ulcer				Patients with perforated ulcer			
	DU	GU	PUSU	GU and PUSU	DU	GU	PUSU	GU and PUSU
1958	34 083	24 109			5587	2346		
1959	32 427	24 206			5677	2533		
1960	32 572	25 378			5796	2826		
1961	33 671	23 751			5502	2590		
1962	33 691	23 074			4744	2320		
1963	32 973	21 023			5659	2112		
1964	33 501	19 336			5438	1677		
1965	32 807	18 770			5199	2123		
1966	31 425	18 920			4788	1637		
1967	32 842	19 177			5071	1767		
1968	33 223	13 454	4642	18 096	6017	1111	682	1793
1969	32 196	12 250	4533	16 785	5256	1252	637	1889
1970	29 112	11 806	4116	15 922	4692	863	487	1350
1971	30 816	11 627	3720	15 347	5282	1030	376	1406
1972	29 988	11 918	4005	15 923	4756	1020	558	1578

DU = Duodenal ulcer. GU = Gastric ulcer. PUSU = Peptic ulcer, site unspecified.

For both GU and DU without perforation the fall in admission rates per 100 000 population was similar for men and women (table II). By contrast admission rates for perforated ulcer fell more among men than among women, those for perforated GU in men falling by over half. Among women there was a small rise in the admission rate for perforated DU.

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