TALKING POINT

What do community health doctors do? Survey of their work in the child health service in Nottinghamshire

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Introduction

There has been considerable national debate recently about the future of community health services and of the community health doctors who work in them. Although much rhetoric has been exchanged, the progress of the debate both locally and nationally has been limited by the lack of data describing either the workload of these doctors or the outcome of their activities.

Since community health doctors generally fulfil a preventive, diagnostic, and supportive role, rather than supply a treatment service, collection of relevant workload data on a routine basis has proved difficult. The Körner steering group has recognised this lack of information and, in its fifth report, has pointed to a need for "a sample inquiry to be carried out in each district to determine the proportion of time spent by community health staff on different types of activity."¹

In Nottingham in 1983 the impending change from a county wide to a district based community child health service provided the impetus for a critical review.

Method

The week of 10-14 October 1983 was selected for the survey since it did not cover any school holiday or examination periods and was, therefore, likely to contain a useful sample of school health, as well as preschool work. All doctors working in the community child health service in Nottinghamshire, whether on a contractual or sessional basis, were asked to maintain careful records, on a printed proforma, of each patient contact that took place during the survey week. In addition, for each session doctors were asked to complete a single sheet recording general details of the nature and location of the session. On completion of the survey the results were analysed by computer using the Statistical Package for Social Services.

Results

RESPONSE AND SESSION TYPE

Thirty eight doctors completed data for a total of 188 sessions in the week representing a 98% response rate. Using the results of the Nottinghamshire County Council Deprived Area Study, undertaken in 1983, all sessions other than immunisation sessions were coded

according to the extent of social disadvantage in their catchment population.² Four grades of disadvantage were identified:

Grade 1—Extreme disadvantage	} "above average" disadvantage
Grade 2—Severe disadvantage	
Grade 3—Moderate disadvantage	
Grade 4—Below average disadvantage	

Table I shows the distribution of the children seen by session type and by disadvantage grade. This confirms that the sample included a wide range of types and location of session. Each disadvantage grade covered a variety of setting for patient contact, the only notable anomaly being the lack of senior school medicals on the most severely disadvantaged grade during the week of the study.

In some parts of Nottinghamshire the community health services have traditionally provided facilities for the immunisation of young children only at clinics programmed exclusively for that purpose. Similarly, some of the sessions in the survey were designated for the provision of immunisations to school children on school premises. Immunisation sessions such as these differ in their nature and their objectives from the other types of session surveyed and they were, therefore, analysed separately. Several children did attend for immunisation at open access child health clinics and these are included in the general analysis.

In total 1460 children were seen by medical officers at "immunisation sessions" and 1699 at other types of session during the study period.

SOURCE OF REFERRAL

Eight per cent of the children were seen at the request of parents; 20% were seen for treatment or review after a previous routine medical examination; 20% were seen at the request of a health visitor; 56% attended for routine medical examinations; 3% of the children were seen at the request of their teachers at a time when they were not due for a routine medical; 3% were seen at the request of a school nurse. Only 10 children had requested an appointment for themselves and only eight were referred by general practitioners.

PROBLEMS IDENTIFIED

The community health doctor identified 1623 problems that required action. Of these, 708 were "new problems"—that is, problems that had not previously been presented to any other doctor. Table II shows the distribution of new problems by type of session. The relatively low figures for junior and senior school medicals probably reflect the Nottinghamshire policy of offering selective medicals at these ages to children whose teachers request a medical or who have been identified in the past as having a health problem that requires review.

The distribution of identified problems between areas of different levels of social disadvantage is shown in table III. These figures seem to show an upward trend in both total and new problems per patient with increasing disadvantage of the locality. The differences only reach a level of statistical significance ($p < 0.05$), however, when areas of extreme disadvantage are compared with those of below average disadvantage. Even in areas of below average disadvantage new problems requiring action were identified in two out of every five patients seen.

Table IV shows the distribution of broad categories of new problems between session types. Hearing and other ear, nose, and throat

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TABLE I—Session types and No of patients seen by grade of disadvantage of locality

	Grade of disadvantage				
	1	2	3	4	Unknown
Child health clinic	117	115	166	285	—
School clinic	55	30	17	57	17
Routine medical: infants	134	13	120	115	7
Routine medical: junior	16	83	48	72	—
Routine medical: senior	—	—	24	92	12
Routine medical: special	—	5	20	13	66*
Total	322	246	395	634	102

*The 66 children seen at a special school with a wide catchment area were classified as "unknown" in terms of disadvantage grade.

TABLE II—Distribution of new problems by type of session

Session type	New problems	New problems/patient
Child health clinic	289	0.42
School clinic	113	0.64
Routine medical: infants	170	0.44
Routine medical: junior	47	0.21
Routine medical: secondary	37	0.29
Routine medical: special school	49	0.47

TABLE III—Distribution of identified problems between areas of different levels of social disadvantage

Grade of disadvantage	Total problems	Total problems/patient	New problems	New problems/patient
Extreme	363	1.1	160	0.48
Severe	247	1.0	98	0.40
Moderate	360	0.91	151	0.38
Below average	549	0.86	247	0.39

TABLE IV—Types of problem identified

Problem type	New problems by sessions type							Old and new problems	
	Child health clinic	School clinic	Routine medical: infant	Routine medical: junior	Routine medical: senior	Routine medical: special	Total (%)	Total (%)	
Hearing and ear, nose, and throat	39	31	40	10	7	15	142 (20.1)	331 (20.2)	
Speech/vision/developmental delay	29	3	30	9	6	6	83 (11.8)	271 (16.5)	
Skin	37	66	8	1	4	2	118 (16.7)	143 (8.7)	
Other physical problems	134	8	53	15	15	19	244 (34.6)	594 (36.2)	
Behaviour (including enuresis)	18	2	29	8	1	4	62 (8.8)	182 (11.1)	
Other	32	3	10	4	4	3	56 (7.9)	105 (6.4)	

TABLE V—New problems identified in areas of known "disadvantage" level

Problem type	Disadvantage				Total
	Extreme	Severe	Moderate	Below average	
Hearing and ear, nose, and throat	41	21	20	46	128
Speech/vision/developmental delay	22	11	11	35	79
Skin	27	11	17	61	116
Other physical	43	39	70	72	224
Behaviour	14	7	15	20	56
(Total No of children seen in this group)	(322)	(246)	(395)	(634)	

TABLE VI—Action taken concerning all identified problems

Noted only	100	Referred to:	
Treatment	200	Children's hearing assessment	70
Counselling	598	centre	33
Immunisation	104	Chiroprapist	12
Discussed with:		Dentist	1
Health visitor	188	Dietician	8
School staff	214	Hospital enuresis clinic	3
General practitioner	112	Family planning clinic	104
Consultant	11	General practitioner	16
School nurse	261	Health visitor	61
Social worker	19	Hospital consultant	27
Other persons	48	School clinic (initial appointment)	117
Completion of statutory forms:		School clinic (follow up)	96
Education Act	14	School nurse	4
Adoption forms	2	Social worker	20
Referred to:		Speech therapy	587
Child health clinic (initial appointment)	4	Review at next routine medical	28
Child health clinic (follow up)	126	Other	

problems formed a large proportion of the new problems identified in all settings. Skin problems were prominent in the child health clinics where they ranged from a mild nappy rash to severe eczema, and in school clinics where they included a large number of plantar warts. Analysis of all (as opposed to "new") problems showed a broadly similar distribution in which skin problems featured less prominently and the proportions of attendances for behaviour problems and for review of developmental delay were increased.

The distribution of new problems between areas of different social disadvantage (table V) shows little significant difference between the groups. Hearing and ear, nose, and throat disorders were more common in grade 1 than in grade 4 areas ($0.05 > p < 0.01$) although, if the results for all areas of above average disadvantage are combined and compared with those below average, no statistically significant difference between the two groups can be shown.

ACTION TAKEN

The study permitted medical officers to describe several actions relating to any one problem. Table VI shows the range of activity undertaken: 598 (37%) required "counselling," while 200 (12%) received physical treatment such as simple skin preparations, nasal decongestants, or ear syringing. The figures indicate that the community health doctors consulted widely with other agencies and individuals concerned with children's care, although only 8% of problems were discussed personally with the child's general practitioner.

SPECIAL SCHOOLS

The mean time per consultation in special schools was almost twice that at other types of session. Ninety per cent of children in special schools were found to have problems that required action by the medical officer concerned. At least 40% had one or more problems re-

quiring action, which had not previously been identified by any doctor. Almost all the health problems identified were likely to have a direct effect on the child's ability to benefit from his time at school. Most of these children were being seen for routine annual surveillance checks, it being the policy of the service that all children with special educational needs should be reviewed annually by a community health doctor. Since only nine of the children were seen at the specific request of their teachers, parents, or the child himself, the results suggest that many of the children's problems would have remained without attention if the policy of active surveillance had not been in operation.

PROPORTION OF TIME SPENT ON DIFFERENT ACTIVITIES

Seventy three per cent of the time recorded in the survey was spent in contact with patients; 14% in discussion with other careers;

11% on administration, and 2% on other activities such as health education sessions. At the subsequent discussion of these results medical officers pointed out that they all, whether in full or part time employment, spent approximately one evening a week completing administrative tasks related to their clinical work. This "out of hours" work was not included in the survey data.

Observers were present at 32 (17%) of sessions. Most of these were student nurses, trainee health visitors, and pupil midwives; one was a paediatric senior house officer and two were medical students. These results show an important teaching role.

Discussion

The range of problems identified was similar to those recorded in several previous studies.³⁻⁵ From these results it seems that, although traditionally regarded by many as a "screening" service,⁶ community health doctors are being used by parents, by teachers, and by other health care professionals as a source of assessment, treatment, and advice. Their popularity despite, or perhaps because of, their apparent emphasis on counselling and advice as opposed to physical treatment suggests that they are perceived as providers of a service that is both complementary and supplementary to those provided by the general practitioner and consultant medical services. Our results suggest that this applies both to the preschool and to the school health services. The role of the doctor as counsellor is not a new concept in medical care, yet those who practise medicine in this way are increasingly being called on to justify their activity. Such justification is not an easy task: how do you begin to measure the "effectiveness" of reassurance and advice? Bax has emphasised the importance of taking account in service planning of the needs perceived by mothers and their children.⁹ Perhaps, then, this is one occasion on which the measurement of demand for a service, in terms of attendance, may serve as a useful indicator of service need.

That medical officers spend 14% of their time in consultation with schools, social services, and health care personnel, and 11% on administration, indicates an extensive role as coordinators of services for individual children. They also have a key role in the regular review of children currently attending special schools. The need for the maintenance of this coordinating function is likely to expand as more children with handicapping conditions are accommodated in schools whose staff may have had little experience in providing for such children and their needs.

The results of the present survey provide no evidence for the hypothesis that community child health doctors may only have a crucial role to play in the areas of relatively high social deprivation. This is not to say that service needs are equal; our data relate only to attenders and cannot be taken as reliable indicators of service need, particularly in settings outside the school. None the less, the substantial number of problems identified as requiring action in areas of below average disadvantage suggests that proposals to reduce or even to remove the services provided by community health doctors in these areas may be misguided.

Hendrickse apparently equated the role of the child health clinic with the detection of abnormalities on screening.⁷ The Royal College of General Practitioners and the General Medical Services Committee, in their recent treatise on paediatric surveillance seem to take an equally limited approach.⁸ It is not unlikely that many others similarly fail to appreciate the extent of community child health activity. Our results show that to regard the community child health service solely as a screening service is to underestimate seriously its potential. Again, this is not a new concept. Sixty years ago, the then chief medical officer wrote:

"There must be coordination of the means of treatment and there must be steady cooperation of the persons engaged in the treatment. . . . The task of the school doctor for the future should be (i) to spread downwards among the population a knowledge of the imperative need for early attention to the physical

defects of children, (ii) the advocacy of a healthy way of life which shall prevent such defects, and (iii) the reduction of the 'leakage' of cases which need treatment and yet do not receive it."⁹

How is it, then, that many of their medical colleagues still fail to understand fully the community health doctors' role? The answer may lie partly in undergraduate medical education, since community child health has only relatively recently found a place in the curriculum and there are still some medical schools where its place is small. Formal postgraduate education has also traditionally paid little attention to community child health work, although the advent of the Diploma of Community Child Health and of proposals for a training scheme for community health doctors, which links closely with the vocational training scheme, are signs that the climate has now changed.

There remains, however, one further opportunity that may have been missed. The data presented in this paper suggest that, although community health doctors communicate well with members of other professions, they perhaps do not always communicate with general practitioners as often as they might. Although this may result partly from practical difficulties, further examination of the results indicates that the proportion of cases discussed with general practitioners varies widely between individual community health doctors. It seems, therefore, that such difficulties may not always be insurmountable. A more positive attempt to establish close working relationships with local medical practitioners may bear dividends in increasing awareness of, and confidence in, the activities and skills of the community health doctor. Whitmore and Bax have eloquently argued the case for closer liaison of this kind.¹⁰ Many community health doctors have already adopted this approach and useful working relationships both with primary care teams and with hospital staff have been established as a result, although such initiatives have generally received little publicity.

We have shown that the analysis of a substantial sample of community health doctors' activity is both feasible and useful. A survey such as this, taken over a short time, can only provide a "snap shot" view of activities in one part of the country. It has an obvious disadvantage in that activity patterns are different in, for example, school holiday periods when more domiciliary visits are undertaken. Furthermore, it can evaluate service only in service terms: linkage of service input with health status outcome in a survey of this scale would be a formidable task. None the less, this study has shown clearly the range of activities undertaken and has also indicated some areas that now merit more detailed consideration, particularly by those with responsibilities, whether at national or at local level, for the planning of child health services.

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