

# What do health visitors contribute to the care of children? A study in the north of England

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**SUMMARY.** *All the health visitors in the north of England, and more than half the general practitioners, were sent questionnaires about the primary health care of children. More than 90% of the health visitors responded. Most of them took part in developmental screening and considered it primarily their responsibility; some conducted developmental or well baby clinics with no other professionals present. Clinics run by health authorities often occupied several hours per week, and were more frequently attended by health visitors than clinics run by general practitioners. Almost all the health visitors' remaining time was spent in attached practices, despite the fact that more than half said they had neither office nor clinic space of their own on practice premises. A high proportion of time was spent on clerical work; more help with this could free the health visitor to provide better developmental care for all children.*

## Introduction

THE government's green paper on primary health care<sup>1</sup> stated that 'Primary health care is best provided when family doctors, community nurses and practice nurses work together as members of a primary health care team'. The simultaneous report on neighbourhood nursing,<sup>2</sup> while agreeing in principle, found that such teams do not work well unless all members understand and respect the roles of other members, and noted that full use is not always made of all the health visitor's skills. To this end, a report by the Royal College of General Practitioners,<sup>3</sup> and a handbook published jointly with the British Medical Association,<sup>4</sup> both make suggestions for improving teamwork, including regular meetings between team members, and good facilities and records.

Although the importance of health visitors in developmental screening is frequently acknowledged, there has been little research into how they view their work and responsibilities. The present study undertook simultaneous surveys of health visitors and general practitioners in the north of England. This paper describes health visitors' perceptions of their role in the provision of paediatric developmental care within general practices, and their work outside these practices. An earlier paper<sup>5</sup> reported on the survey of general practitioners and on some comparisons between the two surveys.

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## Method

In May 1985, an eight-page questionnaire was sent to all health visitors in the Northern region of England. Three weeks later, another questionnaire was sent to those who had not replied. A second reminder was sent after a further three weeks, with a few 'key' questions highlighted for health visitors not wishing to fill in the whole questionnaire. During the same period, a complementary questionnaire was sent to a sample of general practitioners in the region, including at least one from each practice.<sup>5</sup>

The lists originally supplied by health authorities contained 697 health visitors known to work with children. By the completion of the survey, however, this had been reduced to 663 by the loss of 34 health visitors who had left, retired or taken maternity leave. Five hundred and ninety nine (90%) completed questionnaires and 13 (2%) partly completed questionnaires were returned.

Each questionnaire contained four sections, of which most respondents needed to fill in only two. The first section asked for the health visitor's qualifications, opinions on developmental screening, time spent on different types of work, and attendance at health authority clinics. The next two sections were addressed to health visitors attached to practices; the first of these related to the practice with which they spent most time, and the second to the practice with which they spent next to most time. The final section was addressed to unattached health visitors.

Questionnaires were analysed on the Newcastle University mainframe computer by the statistical package SPSSX.<sup>6</sup> Health visitors and their activities were analysed rather than practices. Thus for the 142 health visitors who worked with two or more practices, it was often necessary to derive a single answer from separate answers to the two practice-specific sections. For the number of hours worked, home visits or referrals, the sum of the two practice-specific answers was used; for the number of years spent in the practice, the average of the two practice-specific answers was used; and a practice clinic was considered as 'available' if it existed in at least one of the two practices.

The denominator for percentages was taken as the number of responses to the given question. As the distributions of the numbers of hours worked, home visits and referrals were all skewed, medians are used to describe the typical health visitor; means are used to summarize the number of hours worked, since they give useful extra information. Statistical significance was tested by the chi-squared test; where appropriate, the variant known as McNemar's test was used.<sup>7</sup>

## Results

### *Numbers and qualifications*

Five hundred and seventeen (84%) of the respondents were full-time and 95 (16%) part-time. After correcting for non-response, it was estimated that there were 608 whole time equivalent health visitors in the region working with children. As the estimated population of the region was just over three million, including 1450 whole time equivalent general practitioners, there was one health visitor for about 5000 people, or for 2.4 general practitioners.

Of the 612 respondents, 127 (21%) qualified as health visitors before 1970, 248 (41%) qualified between 1970 and 1979, and

224 (37%) qualified in 1980 or later. Five hundred and seven-teen (84%) had at least one additional qualification (Table 1).

### Responsibility and role

An earlier paper<sup>5</sup> contrasted the opinions of general practitioners and health visitors on who should be primarily responsible for developmental screening. The most common response from both was an equal partnership of general practitioner and health visitor. However, health visitors were more likely than practitioners to assign primary responsibility to the health visitor, alone or in partnership with a clinical medical officer; very few assigned responsibility only to a general practitioner.

Table 2 contrasts the health visitors' present and ideal roles in developmental screening. Almost all were conducting hearing tests and weighing, and organizing clinics, although some thought that the last two should not be their responsibility. However, the main discrepancy between the present and ideal roles was in vision tests; nearly a quarter of all health visitors would have liked to do these but did not.

### Work of the health visitor

Most respondents (446, 74%) were attached to only one practice, but 122 (20%) were attached to two practices, and 20 (3%) to three or four practices; however, the latter were asked for details of only two. The remaining 14 (2%) were not attached and worked only on a geographical 'patch'. Of those attached to practices who responded to the question, 566 (98%) said that their work within the practice included work with children under 12 years old, 499 (87%) said it included antenatal care, and 487 (85%) said it included preventive work with adults.

Health visitors were asked to estimate how many hours per week they spent on different types of work, both as part of their

**Table 1.** Qualifications of respondents.

	Number (%) of health visitors (n = 612)
State certified midwife	314 (51)
Fieldwork teacher	138 (23)
Family planning certificate	114 (19)
District nurse training	71 (12)
City and Guilds further education certificate	33 (5)
Registered state children's nurse	29 (5)
Obstetric course	29 (5)
Health education certificate	25 (4)

NB: 41 other qualifications were mentioned 154 times by 145 health visitors.

**Table 2.** Health visitors' present role and perception of ideal role in child surveillance.

	Number (%) of health visitors		Significance level of difference (McNemar's test)
	Present role <sup>a</sup> (n = 602)	Ideal role <sup>a</sup> (n <602)	
Testing hearing	584 (97)	570 (98)	NS
Weighing	568 (94)	498 (86)	P<0.001
Organizing clinics	557 (93)	499 (86)	P<0.001
Testing vision	349 (58)	476 (82)	P<0.001
Carrying out all developmental screening	168 (28)	198 (33)	P<0.05

<sup>a</sup> Key question. NS = not significant.

practice attachment and otherwise. Table 3 presents the corresponding means and medians, after exclusion of inconsistent responses. Almost all (87%) full-time health visitors worked 37 or 38 hours per week; most of the rest worked about 40 hours. Forty two per cent of part-time health visitors worked half-time; the rest were evenly spread between 15 and 32 hours per week. Although health authority clinics provided the majority of unattached work, 63% of full-time and 39% of part-time health visitors did other unattached work.

Table 4 summarizes the number of home visits and referrals health visitors made in the week preceding their response. It also

**Table 3.** The working day of the health visitor.

	Number of hours worked by:			
	Full-time health visitors (n = 472)		Part-time health visitors (n = 82)	
	Mean	Median	Mean	Median
<i>Work with attached practices</i>				
Work with children under 12 years <sup>a</sup>	15.5	16	11.1	11
Antenatal care <sup>a</sup>	2.1	2	0.9	1
Work with adults <sup>a</sup>	3.8	4	2.2	2
Other, including clerical and meetings <sup>a</sup>	8.4	9	5.0	5
Total work in practices	29.8	31	19.4	19
<i>Other work</i>				
Work on a geographical 'patch' <sup>b</sup>	0.6	0	0.7	0
Health authority clinics	4.4	4	2.7	2.5
Hospital liaison	0.8	0	0.2	0
School health service	0.4	0	0.2	0
Other	1.8	0	0.5	0
Total work per week	37.7	37.5	23.9	23

<sup>a</sup> Excludes 175 full-time and 35 part-time health visitors whose responses for different types of work within the practice(s) were missing or inconsistent. <sup>b</sup> Mainly by 14 unattached health visitors, although 13 attached health visitors also spent part of their time working on a 'patch'.

**Table 4.** Home visits and referrals by health visitors in last five working days.

	Median number per health visitor	Total number by all respondents (n <585)	Estimated number for 663 health visitors in northern region
<i>Child health surveillance visits</i>			
First postnatal	2	1367	1600
Other routine	13	8812	10000
Non-routine or requested	5	4294	4900
Other visits (including adult)	4	3015	3400
Total visits	28	17488	19900
<i>Referrals to:</i>			
Doctor in practice	2	1240	1400
Hospital	0	138	160
School health service	0	424	490
Other professional	1	1054	1200
Total referrals	4	2856	3250

estimates totals for the region, after correcting for non-respondents. All distributions were skewed with a few large responses; for example, 18 health visitors made more than 60 visits, and 15 more than 14 referrals.

### Attendance at clinics

Details of health authority and practice clinics attended by each health visitor are given in Table 5. With the exception of antenatal and postnatal clinics, more health visitors attended health authority clinics than the corresponding practice clinics. Health authority doctors and general practitioners were usually present at health authority and practice clinics respectively; in addition 87 (16% of 533) health visitors were accompanied by a practice doctor at at least one health authority clinic, and 82 (18% of 455) were accompanied by a health authority doctor at at least one practice clinic. The only other profession attending frequently were midwives, typically at antenatal, postnatal and mothercraft clinics. In more than 10% of the developmental clinics they attended (except six-week clinics), health visitors were not accompanied by other professions.

### The health visitor within the practice

Our survey of general practitioners<sup>5</sup> showed that virtually all practices (97%) had at least one attached health visitor. Of the health visitors attached to only one practice, 114 (26%) were alone, 189 (44%) had one health visitor colleague, and 132 (30%) had two or more health visitor colleagues. Of the health visitors attached to two or more practices, 39 (29%) were alone in both practices, 57 (43%) shared both practices with at least one other health visitor and 38 (28%) were the only health visitors in one practice but not both. Of the health visitors with at least one

colleague, 231 (56%) worked with all patients in the practice, 143 (34%) with all patients in an area, and 41 (10%) with a subgroup of patients not defined geographically.

Two hundred and sixty nine (47%) health visitors had been in their present practice(s) for three years or less, 137 (24%) for between four and six years and 171 (30%) for seven or more years. Table 6 presents health visitors' reports of facilities and communications within practices. Our earlier paper<sup>5</sup> compared these with the general practitioners' reports: practitioners were more likely than health visitors to say that facilities were available and that discussions took place.

### Unattached health visitors

The fourteen respondents who had no practice attachment worked with patients from between three and 20 practices. Six other health visitors completed the questionnaire sections relating to both a specific practice and a specific geographical 'patch'; seven more said they did some work on a 'patch'. The number of hours the 14 unattached health visitors spent on work with children under 12 years old, antenatal care, work with adults and clerical work were similar to those given for attached health visitors in Table 3. However, they referred fewer patients to general practitioners, and did fewer first postnatal and other routine visits. Nine of them discussed patients 'only occasionally' with their general practitioners; the other five discussed patients regularly with some, but not all, the relevant practitioners.

### Comments

Finally, one hundred and eighty five health visitors (31%) added comments ranging from one sentence to three pages in length. The most common topics were difficulties in liaising with general practitioners (56), general practitioners' lack of understanding of the health visitor's role (27) and the questionnaire (24). However, 35 made favourable comments about the practice or its doctors.

### Discussion

#### The responding sample

More than 90% of health visitors responded, many with careful and helpful comments. Lack of previous research probably contributed to this excellent response rate; unlike general practitioners, health visitors are not inundated with questionnaires and other unsolicited mail. The structure of the profession may also have improved the response; directors of nursing services and nursing officers were very helpful, some even distributing questionnaires and monitoring the response.

A relatively large proportion of health visitors (5% compared with 1% of the similarly managed general practitioner sample<sup>5</sup>) had left, retired or taken maternity leave between the compilation of the sampling frame and the return of questionnaires. Furthermore, a high proportion of respondents (37%) had qualified since the beginning of 1980 and even more (47%) had spent less than four years in their present practice. We are concerned that frequent changes of health visitor, coupled with their relative inexperience, may have a deleterious effect on relationships and thus on the effectiveness of child care within the practice. Indeed, several respondents commented that educating the general practitioner about the proper role of the health visitor was a long term process.

The profession remains overwhelmingly female; will 'equal opportunities' policies change this in the future? Half our respondents had a midwifery qualification, one fifth a family

**Table 5.** Health visitors' attendance at paediatric and related clinics.

	Number (%) of health visitors attending health authority clinics (n = 599)		Number (%) of health visitors attending practice clinics (n = 599)	
	Total	Alone or with other HVs only	Total	Alone or with other HVs only <sup>a</sup>
<i>Developmental screening clinics</i>				
6 weeks	393 (66)	8 (1)	231 (39)	7 (1)
6-8 months	309 (52)	93 (16)	191 (32)	66 (11)
1-1.5 years	281 (47)	39 (7)	164 (27)	31 (5)
2-3 years	316 (53)	28 (5)	182 (30)	29 (5)
Pre-school	230 (38)	37 (6)	133 (22)	27 (5)
At least one developmental clinic	437 (73)	108 (18)	288 (48)	75 (13)
<i>Other clinics</i>				
Well baby	482 (80)	47 (8)	294 (49)	64 (11)
Immunization	297 (50)	3 (1)	293 (49)	10 (2)
Mothercraft	237 (40)	11 (2)	89 (15)	4 (1)
Antenatal or postnatal	101 (17)	5 (1)	262 (44)	0 (0)
Family planning	37 (6)	3 (1)	17 (3)	0 (0)
At least one clinic	533 (89)	147 (25)	455(76)	105 (18)

<sup>a</sup> Health visitors attached to two or more practices are included in these numbers if they attend the relevant clinic in either of the two practices for which they gave details.

**Table 6.** Facilities and communication within practices.

	Number (%) of health visitors				
	Attached to one practice only ( <i>n</i> <436)	Attached to two or more practices ( <i>n</i> <137)			
		Both practices	One practice only	Neither practice	All
<i>Facilities</i>					
Office on practice premises	190 (44)	28 (20)	27 (20)	82 (60)	
Office for HVs only	136 (31)	14 (10)	26 (19)	97 (71)	
Clinic area for HVs only	96 (23)	8 (6)	23 (17)	104 (77)	
Preventive care card for all children under 5 years	390 (91)	114 (84)	11 (8)	11 (8)	
<i>Communication</i>					
Formal policy discussions	96 (22)	3 (2)	24 (18)	110 (80)	
Informal policy discussions	326 (75)	69 (51)	28 (21)	38 (28)	
Frequency of discussions with GPs about patients:					
At least weekly (in both practices)	328 (75)				51 (37)
Weekly to monthly (in both practices)	86 (20)				51 (37)
Less than monthly (in at least one practice)	22 (5)				32 (26)

planning certificate, and one fifth were fieldwork teachers. Although many other qualifications were reported, additional paediatric training was not prominent.

#### *The work of the health visitor*

Almost all respondents worked with children (the picture may have been different among the few non-respondents), typically devoting more than half the working week to their care. The region was firmly committed to the primary health care team; very few health visitors were not attached to practices. Although it was thus rare for health visitors to work unattached on a geographical 'patch', an analogous geographical zoning system was common among practices with at least two attached health visitors.

Home visits formed a major part of health visitors' work; their median of more than five paediatric visits per day was considerably more than that of their practitioner colleagues.<sup>8</sup> However, health visitors made few referrals; although this could indicate poor liaison, it is more likely that the health visitor felt capable of solving most problems without assistance. Regardless of whether their own practices held clinics, most health visitors spent several hours per week at health authority clinics. At present these perform a major role in developmental screening, but may decline in importance if practice provision improves.

Although a ratio of one health visitor to every 2.4 general practitioners may appear adequate for this work, this figure conceals wide variations between practices. There is scope for further research into the optimum provision of health visitors, especially if they are to take on preventive work with adults and work with the increasing elderly population. We judge that the four hours per week they currently spend on these two activities could be profitably increased.

#### *The independent professional*

More than two thirds of health visitors thought the primary health care team was the proper place for developmental screening,<sup>5</sup> and more than half of these considered that practitioners and health visitors should be equally responsible for it. Many health visitors were running developmental clinics without a doctor present. More than one third wanted to do all developmental screening; this could well become the norm in future, with a doctor available for exceptional cases.

Many health visitors felt undervalued by many of the general

practitioners they worked with. Although relationships between the two professions were generally good, health visitors' perceptions of these relationships were significantly worse than those of practitioners.<sup>5</sup> Nevertheless, they were content to work within the practice team, provided that their status as independent professionals, rather than practice employees, was recognized.

#### *The health visitor within the practice*

The health visitor's contribution to the practice team is hindered by poor facilities and organization. The recommendations of the Royal College of General Practitioners<sup>4</sup> to improve teamwork go largely unheeded, despite the need perceived by health visitors. Only a minority had an office of their own on practice premises; several commented that having these facilities would improve communication. Even fewer had a clinic area of their own. The virtual termination of the health centre programme some years ago, and the resulting reliance on the expansion of practice-owned premises, has deprived health visitors of the facilities they need. If practices do not provide these facilities, health visitors will increasingly look to clinical medical officers as their colleagues in developmental care. More than a quarter of them already favour this.

Few health visitors attended formal meetings to discuss practice policy, although many would have liked to do so. However, most had frequent informal discussions about policy and patients. Health visitors attached to only one practice were more likely to enjoy good facilities and communications than those attached to two or more practices.

The typical health visitor spends nine hours each week on clerical work and meetings. If more equipment, notably dictaphones, and clerical staff were available, the health visitor would have more time to spend on the work for which she was trained — improving developmental care through clinics and home visits.

#### References

1. Secretaries of State for Social Services, Wales, Northern Ireland and Scotland. *Primary health care: an agenda for discussion (Cmnd 9771)*. London: HMSO, 1986.
2. Department of Health and Social Security. *Neighbourhood nursing — a focus for care. Report of the community nursing review*. London: HMSO, 1986.

3. Royal College of General Practitioners. *Healthier children — thinking prevention. Report from general practice 22*. London: RCGP, 1982.
4. General Medical Services Committee and Royal College of General Practitioners. *Handbook of preventive care for preschool children*. (2nd edn). London: British Medical Association and RCGP, 1988.
5. Marsh GN, Russell D, Russell IT. Is paediatrics safe in general practitioners' hands? A study in the north of England. *J R Coll Gen Pract* 1989; 39: 138-141.
6. SPSS Inc. *SPSSX user's guide*. New York: McGraw-Hill, 1983.
7. Armitage P. *Statistical methods in medical research*. Oxford: Blackwell, 1971.

8. Whewell J, Marsh GN, McNay RA. Changing pattern of home visiting in the North of England. *Br Med J* 1983; 286: 1259-1261.

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