

Practice nurses: characteristics, workload and training needs

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SUMMARY

Aim. This study set out to identify the present and future training needs of practice nurses in South West Thames Regional Health Authority and to examine these needs within the nurses' current and changing workloads and social, educational and occupational profiles.

Method. A questionnaire was sent to 899 practice staff identified by family health services authority records whose salaries were in part reimbursed and in whose job title the word nurse appeared. The questionnaire enquired about personal and practice demography, tasks and activities currently undertaken, perceived role development and training requirements, and preferred organization of training.

Results. A total of 620 completed questionnaires were returned (69%). Nurses' work involved treatments, immunizations, investigations, administration, first contact with patients, support to the general practitioner and health promotion. The areas of role development selected most commonly by nurses were counselling skills (60%) and health promotion (54%); in terms of training the most popular areas were communication skills (62%) and the theory and practice of health promotion (48%). Fewer than one third of the nurses who were engaged in health checks for elderly people or the provision of diabetes care, asthma care or advice about the human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS) held an appropriate qualification.

Conclusion. Practice nurses in the region were engaged in a wide range of activities for which many have had little formal training; the majority wished to develop their role and undertake further training. If practice nurses are to play a key part in the development of primary care services they must be adequately prepared for their clinical and health promotion role.

Keywords: practice nurses; learning needs; practice staff training.

Introduction

THE recent rapid expansion in the number of practice nurses has come about as a consequence of government community care policies and changes in the contractual requirements of general practice towards health promotion. The number of practice nurses in England and Wales has quadrupled since 1986; in 1990 there were 8155 whole time equivalent practice nurses (Department of Health, unpublished figures).

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For some time there has been growing concern that not only are the role and knowledge base of practice nurses inadequately defined,¹ but also that educational opportunities are limited.^{2,3} Descriptive studies have shown that practice nurses perform a wide range of technical procedures,^{4,5} with an extending role in the area of preventive care.⁶⁻⁸

It is widely known that the training and education of practice nurses have largely been left to chance. Apart from a short course validated by the English National Board for Nursing, Midwifery and Health Visiting and designed for practice nurses at an early stage of their employment, opportunities for training have been haphazard and limited to single days.⁹ In spite of important developments for nurse education in some progressive family health services authorities, at present there is no standard agreement on the qualifications necessary for the job or on objectives for professional development. The initiative is left to individual nurses and their general practitioner employers. The English National Board, in a review of the education and training of practice nurses, has recommended the provision of education at different levels including 'employment led' induction programmes, and 'education led' advanced courses.⁹

There is a pressing need to develop an education strategy for practice nurses that will help them to meet the challenges of primary health care. This study aimed to identify the present and future training needs of practice nurses in South West Thames Regional Health Authority and to examine these needs within the nurses' current and changing workloads and social, educational and occupational profiles.

Method

The sample was derived from family health services authority records of all people whose salaries were in part reimbursed and in whose job title the word nurse appeared. A postal questionnaire was first sent to all practice nurses working in Merton, Sutton and Wandsworth in early 1991. After analysis of the results and subsequent additions to and modification of questionnaire items, the questionnaire was sent in May 1991 to nurses in the remaining four family health services authorities in the region: Kingston and Richmond, Surrey, West Sussex and Croydon. Some of the results presented here are based on questions addressed only to nurses outwith Merton, Sutton and Wandsworth.

The questionnaire was structured with a few open questions. It enquired about the type of work that practice nurses were currently undertaking, their views on role development and priorities for further training, and basic details concerning personal and practice demography. Non-respondents in both groups were mailed a second time approximately six weeks after the initial mailing. General practitioners were informed about the study through routine mailing.

Data were coded and analysed using the statistical package for the social sciences (SPSS/PC+). The significance of associations between variables was assessed by the chi square statistic. Analysis was focused on the relationships between occupational characteristics, activities undertaken and nurses' educational requirements. Associations with the demography of the practice and differences between family health services authorities are not addressed here.

Results

Demographic, occupational and educational profile

Of 156 questionnaires distributed in Merton, Sutton, and Wandsworth 108 were returned (69.2%), and 512 of 743 questionnaires in the remainder of the region (68.9%) — overall, 620 of 899 questionnaires were returned (69.0%). The number of respondents answering each question varied.

All the 620 respondents were women. The youngest was aged 20 years and five were over 60 years of age; 88.8% were over 30 years of age and 26.7% over 50 years of age ($n = 618$). Of 615 respondents 41.3% had been in their current post for one year or less. The most frequently reported working week was 16–20 hours (24.0%, $n = 617$), and only 17.2% of nurses worked full time (4.7% of nurses reported working nine hours or less, 17.7% 10–15 hours and 36.5% 21–35 hours). Most nurses worked with at least one other practice nurse colleague in the practice (86.5%, $n = 594$). Of 475 respondents outwith Merton, Sutton and Wandsworth 23.8% worked in practices with 5900 patients or fewer, 53.9% in practices with 5901–12 000 patients and 22.3% in practices with more than 12 000 patients.

Among 547 respondents 92.5% were registered general nurses and 7.5% state enrolled nurses. The practice nurses had a range of post-registration qualifications including midwifery (25.6%, $n = 620$), district nursing (12.6%), health visiting (5.8%) and psychiatric nursing (2.1%). Of the 620 respondents 48.5% had completed an English National Board course, the most popular being family planning (25.3%), and practice nursing (14.5%). Other English National Board courses reported included care of the elderly patients (1.8%), oncology (1.1%) and accident and emergency medicine (0.8%).

Work and responsibilities

The questionnaire asked nurses to record whether or not they had performed a list of tasks and activities in the last month. The majority of the 620 practice nurses reported undertaking treatments (for example, 91.5% carried out suture removal), immunizations (92.9% performed travel immunizations) and investigations (84.2% performed venepuncture). Administrative tasks, ranging from stocktaking (67.4%) and cleaning (69.4%) to record keeping (97.4%) and audit (1.3%), were also part of nurses' duties. Practice nurses were often the first point of contact with the public: the majority of the 620 respondents gave clinical advice over the telephone (92.1%), dealt with casual attenders (84.4%) and were the first contact in emergencies (71.1%). Of the 512 respondents outwith Merton, Sutton and Wandsworth 80.1% gave first aid. Many of the 620 respondents acted in a supportive role to their general practitioner, for example, 66.8% assisted with minor surgery and 62.7% acted as a chaperone.

For the purpose of this study independent nurses were defined as those who carry out initial prescribing within an agreed protocol, and do initial assessment home visits in place of the doctor. Nearly half of the 620 respondents conformed to these criteria (46.5%). Independent nurses tended to work longer hours than their colleagues, for example, 63.5% of independent nurses worked 21 hours or more each week compared with 45.3% of their colleagues ($\chi^2 = 28.1$, 6 degrees of freedom (df), $P < 0.001$).

Nurses were asked to indicate which health promotion activities they had undertaken in the last month from a list of 20 activities (Table 1). Two thirds of the 620 nurses (66.9%) were responsible for setting up a call/recall system for specific health promotion clinics as well as running the clinics. The number of different types of clinic run by any one nurse varied from one to seven, with 30.2% running a single type of clinic and 16.5% two types.

Those practice nurses working longer hours reported signifi-

Table 1. Health promotion activities undertaken by practice nurses in the last month.

Activity	% of nurses ($n = 620$)
<i>Primary prevention</i>	
Advice to travellers	91.9
Child immunization	76.0
Family planning	42.9
<i>Secondary prevention</i>	
Registration health check	78.4
Well woman check	70.8
Health check for 3 year adult non-attenders	69.4
Health check for 75+ year olds	68.5
Well man check	61.3
Cervical cytology	57.6
<i>Tertiary prevention</i>	
Coping with hypertension	77.9
Anti-smoking	70.6
Alcohol control	59.4
Coping with diabetes	57.4
Stress relief	49.8
Coping with asthma	48.1
<i>Other activities</i>	
Obesity control	86.6
HIV/AIDS advice*	26.2

n = total number of respondents. HIV = human immunodeficiency virus. AIDS = acquired immune deficiency syndrome. * $n = 512$.

cantly more health promotion activities than those working shorter hours ($\chi^2 = 68.6$, 18 df, $P < 0.001$), were more likely to organize call/recall clinics ($\chi^2 = 39.6$, 6 df, $P < 0.001$), and organized greater numbers of such clinics ($\chi^2 = 62.2$, 12 df, $P < 0.001$). For example, 31.9% of those nurses working 21 hours or more each week reported 14–20 health promotion activities compared with 16.1% of those working shorter hours. Similar associations held for the correlated category of independent nurses: independent nurses reported more health promotion activities than other nurses ($\chi^2 = 38.9$, 3 df, $P < 0.05$), were more likely to organize call/recall clinics (73.3% versus 61.2%; $\chi^2 = 9.2$, 1 df, $P < 0.05$), and organized greater numbers of such clinics ($\chi^2 = 16.4$, 2 df, $P < 0.05$). There was no significant relationship between the number and type of health promotion activities carried out and qualification in district nursing or health visiting, or practice list size.

Relationship between education and work

Analysis of the proportion of nurses undertaking health promotion activities who had an appropriate English National Board certificate or equivalent formal training showed the highest percentage for family planning where 164 of the 266 nurses engaged in that activity held an appropriate qualification (61.7%). Of the 425 nurses carrying out health assessments of elderly people 125 held an appropriate qualification (29.4%), as did 36 of the 298 providing asthma care (12.1%) and four of the 134 providing advice about the human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS) (3.0%). The lowest percentage was for diabetes care where only four of the 356 nurses providing health promotion in that area had completed a formally recognized course (1.1%).

Role development and training

The majority of the nurses reported that they were thinking about developing their role (85.5%, $n = 613$) and the areas of role

development selected by nurses on the questionnaire are given in Table 2. Older nurses were less likely than younger nurses to want to develop their role (70.8% of nurses aged 50 years and over compared with 91.1% of those aged 20–49 years) ($\chi^2 = 46.4$, 4 df, $P < 0.001$) as were nurses working fewer hours (71.4% of nurses working nine hours or less compared with 92.4% of those working 36–40 hours) ($\chi^2 = 17.0$, 6 df, $P < 0.01$). The independent nurses were more likely than those who were not independent to want role development in treatment protocols (49.6% versus 40.3%; $\chi^2 = 4.2$, 1 df, $P < 0.05$) and in counselling skills (70.3% versus 65.8%; $\chi^2 = 6.5$, 1 df, $P < 0.05$).

The majority of the nurses (91.9%) reported a need for further training opportunities and the areas of training selected on the questionnaire are shown in Table 2. A small number of practice nurses volunteered other areas of need for further training — family planning (8.1%), general updating (7.3%) and well women checks and cervical cytology (6.9%). Older nurses were significantly less likely to want further training than younger nurses (83.4% of nurses aged 50 years and over compared with 97.3% of those aged 20–49 years) ($\chi^2 = 57.9$, 4 df, $P < 0.001$) as were those working fewer hours (78.5% of nurses working nine hours or less compared with 99.0% of those working 36–40 hours) ($\chi^2 = 20.3$, 6 df, $P < 0.01$). The independent nurses were less likely than the remaining nurses to express an interest in training in the organization of health promotion clinics (39.3% versus 49.0%; $\chi^2 = 5.1$, 1 df, $P < 0.05$) and the theory and practice of health assessments of elderly patients (29.6% versus 38.3%; $\chi^2 = 4.4$, 1 df, $P < 0.05$). Nurses involved in more health promotion activities were less likely than those involved in fewer activities to want training in the theory and practice of health promotion (48.2% of nurses engaged in 14–20 health promotion activities compared with 58.4% of those engaged in eight or fewer) ($\chi^2 = 9.5$, 3 df, $P < 0.05$) or in the organization of health promotion clinics (36.2% of nurses engaged in 14–20 health promotion activities compared with 51.4% of those engaged in eight or fewer) ($\chi^2 = 12.5$, 3 df, $P < 0.01$).

Preferences for training

The most popular format for training among the 620 nurses was one-off study days (66.5%) followed by a planned series of study

Table 2. Areas of interest for role development and for further training listed on the questionnaire.

Area of interest	% of nurses (n = 620)
<i>Role development</i>	
Counselling skills	60.2
Health promotion	53.7
Clinical nursing care	43.1
Extended role in treatment protocols	38.1
Information technology	31.5
Interviewing skills	29.0
Research ^a	22.9
<i>Further training</i>	
Communication skills ^b	62.3
Theory and practice of health promotion	48.1
Information technology	44.4
Clinical nursing care	41.3
Organization of health promotion clinics	40.8
Management of the practice	38.9
Research methods ^a	32.8
Theory and practice of health assessments of elderly patients	31.5

n = total number of respondents. ^an = 512. ^bFor example, interviewing and counselling.

days (64.2%). Most nurses had access to various sources of educational material: nursing journals (92.6%), medical journals (84.7%), medical books (79.5%) and nursing books (78.9%). Two thirds of the nurses shared learning with other nurses (65.5%), and 41.3% shared learning with general practitioners. Of 613 respondents 79.4% had been to a study day organized by the health authority in the last year. The majority of the 512 respondents outwith Merton, Sutton and Wandsworth indicated that their general practitioners gave them time off (94.3%) and funded courses (92.2%); 18.8% of nurses reported funding courses themselves.

Discussion

This study has shown that the majority of practice nurses employed in the region were over 30 years of age, worked in a nursing team, and had a part-time contract. However, this sample was younger and worked longer hours than samples reported in earlier studies.^{4,10}

The survey highlights the scope and variety of the practice nurse's work, ranging from treatments, investigations and administration to health promotion. They also acted in a supportive role to their general practitioners, for example by acting as a chaperone. At the other end of the spectrum nurses reported spheres of work requiring independent judgement and action. The implications of this variety of work when nurses have a poorly defined role have been pointed out before.^{1,3}

Over the last 10 years there has been a movement towards nurse practitioners in primary care as a result of various pressures including government concerns about cost effectiveness,¹¹ nursing professionalization,⁵ and nurses themselves working in primary care.^{12,13} The findings of this study suggest that while the majority of practice nurses are performing a wide range of delegated tasks, nearly half have extended their role towards independent practice.

This study has shown that independent nurses tended to work longer hours than their colleagues, to carry out more health promotion activities, and were more likely to organize call/recall clinics and to want to develop their role in the areas of treatment protocols and counselling skills. They were less interested than their colleagues in training in the organization of health promotion clinics or health assessments of elderly patients, perhaps because they considered themselves to be already well qualified in these areas. It may be a reflection of the rather limited definition of 'independent' chosen for the purposes of this analysis, that these nurses were more interested in substituting for the doctor than expanding the nursing role in general practice.

The majority of practice nurses wanted to develop their role in counselling skills and health promotion. This is in keeping with previous work which showed that two thirds of nurses rated counselling as important to their work.¹⁰ This may partly reflect the effect of the general practitioner contract on the working culture of general practice, and the recognition that counselling skills are increasingly necessary as health promotion assumes a greater role. However, it is also in accord with other studies which show that patients rate communication skills as the most sought after quality of the primary health care provider,¹⁴ and rate provision of time, listening and explanation skills as important measures of satisfaction with the work of a nurse practitioner.¹³

The findings suggest that there is a mismatch between training and practice. Some nurses were carrying out tasks for which they were overqualified such as cleaning, and others were engaged in patient care activities for which they had no formal training. In terms of preparation in primary care nursing only 6% of respondents held health visiting and 13% district nursing qualifications. Thus, the nurses' knowledge base in terms of epidemiology, pub-

lic health, health promotion and nursing care in non-institutional settings was limited. The results also show the proportion of nurses carrying out health promotion activities who have had relevant formal training varied enormously from 62% for family planning to only 1% for diabetes care. Thus, although family planning was the English National Board course completed by most respondents, 38% of the nurses providing family planning were doing so without a relevant qualification.

In view of the fact that this region has a higher than average proportion of people over retirement age,¹⁵ it is of some concern that training in the theory and practice of health assessments for elderly patients was selected by the lowest percentage of nurses in the region. The results give no indication of how far the low priority given to this assessment is related to the general scepticism in general practice about the value of health checks for patients aged 75 years and over, or is a reflection of ageist views within nursing.

The findings need to be considered within the overall limitations of the study design. The question of whether nurses had the opportunity to review their training needs systematically with doctors, managers or their peers is of importance but was not specifically asked about on the questionnaire. It can only be inferred that there was a lack of systematic review from the finding that a high proportion of nurses reported a need for further training and that many held no formal qualification in their present areas of work. There is a further concern regarding the question of non-response bias. It is possible that nurses with a heavy workload and those uninterested in the subject of investigation were less likely to have responded. Although it is difficult to predict the impact of this on the findings, it seems unlikely that non-respondents were all appropriately trained for their jobs. Even if this were true, the proportions without appropriate training would remain high.

In conclusion, it is clear that although the practice nurses had a variety of qualifications and had taken a wide range of courses, the majority wanted further training and to develop themselves professionally. Further, it is apparent that some nurses are engaged in patient care activities for which they have little or no formal training. If practice nurses are to play a key role in the development of primary care services then it is essential that policies and organization of training are addressed so as to ensure that practice nurses are adequately prepared for their clinical and health promotion role.

References

- Hockey L. Is the practice nurse a good idea? *J R Coll Gen Pract* 1984; **34**: 102-103.
- Royal College of Nursing. *Training needs of practice nurses*. London: RCN, 1984.
- Stilwell B. The rise of the practice nurse. *Nursing Times* 1991; **87**: 26-28.
- Reedy BLEC, Metcalfe AV, de Roumanie M, Newell DJ. A comparison of the activities and opinions of attached and employed nurses in general practice. *J R Coll Gen Pract* 1980; **30**: 483-489.
- Bowling A. Delegation to nurses in general practice. *J R Coll Gen Pract* 1981; **31**: 485-490.
- Jefferys M, Sachs H. *Rethinking general practice — dilemmas in primary care*. London: Tavistock Publications, 1983.
- Fullard E, Fowler G, Gray J. Promoting prevention in primary care: a controlled trial of low cost technology, low cost approach. *BMJ* 1984; **294**: 1080-1082.
- Cater L, Hawthorn P. A survey of practice nurses in the UK — their extended roles. In: Bowling A, Stilwell B (eds). *The nurse in family practice — practice nurses and nurse practitioners in primary health care*. London: Scutari Press, 1988.
- English National Board for Nursing, Midwifery and Health Visiting. *The challenge of primary health care in the 1990s: a review of education and training for practice nursing*. London: ENB, 1990.
- Greenfield S, Stilwell B, Drury M. Practice nurses: social and occupational characteristics. *J R Coll Gen Pract* 1987; **37**: 341-345.
- Department of Health and Social Security. *Neighbourhood nursing — a focus for care. Report of the Community Nursing Review (Cumberlege report)*. London: HMSO, 1986.
- Ross F. Primary health care in Thamesmead. *Nursing Times* 1980; **18**: 81-88.
- Stilwell B. Patient attitudes to the availability of a nurse practitioner in general practice. In: Bowling A, Stilwell B (eds). *The nurse in family practice — practice nurses and nurse practitioners in primary health care*. London: Scutari Press, 1988.
- Drury M, Greenfield S, Stilwell B, Hull FM. A nurse practitioner in general practice: patient perceptions and expectations. *J R Coll Gen Pract* 1988; **38**: 503-505.
- South West Thames Regional Health Authority. *South west Thames review*. London: South West Thames RHA, 1990.

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MRCGP EXAMINATION — 1994

The dates and venues of the next two examinations for Membership are as follows:

May/July 1994

Written papers: Wednesday 4 May 1994 at centres in London, Manchester, Edinburgh, Newcastle, Cardiff, Belfast, Dublin, Liverpool, Ripon, Birmingham, Bristol and Sennelager.

Oral examinations: In Edinburgh from Monday 27 to Wednesday 29 June inclusive and in London from Thursday 30 June to Saturday 9 July inclusive.

The closing date for the receipt of applications is Friday 25 February 1994.

October/December 1994

Written papers: Tuesday 25 October 1994 at those centres listed above.

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