Practice nurses: social and occupational characteristics

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SUMMARY. Three hundred practice nurses in the West Midlands responded to a questionnaire survey about their social and occupational characteristics. The nurses were mainly married women with children and had had considerable hospital experience. They were largely satisfied with their job and felt that their own general practitioner colleagues were supportive, though doctors in general might not be so. Large variations in patterns of work were revealed and in some cases there was a considerable extension of the traditional nursing role. Almost two-thirds of practice nurses were undertaking breast and vaginal examinations, 70% were carrying out cervical smears and a number of nurses were diagnosing, investigating and managing common ailments. Nurses expressed a desire for further extension of their role to allow them to undertake broader aspects of patient care and to be less task-centred, but felt that they would require further training to do so. There was evidence of a need for better definition of the practice nurse's role and for more support from health authorities and the nurses' own professional body.

Introduction

THE title 'practice nurse' has come to be applied to nurses who are directly employed by general practitioners, in contrast to community or district nurses who are employed by health authorities. Practice nurses work mainly within treatment rooms in the practice buildings. Most of the work of community nurses is done in the patient's home though some do part or all of their work in treatment rooms.

The number of practice nurses has increased greatly during the past 12 years, and has doubled during the period from 1981 to 1986 to approximately 4000. Practice nurses have recently come under scrutiny and their education and supervision have been questioned.[1] There has been a suggestion that the employing doctor should no longer receive the 70% reimbursement of salary.

This study set out to discover more about practice nurses. Who are they? What sort of training and experience have they had? What range of tasks do they perform? How do they see their future role? What impediments stand in the way of the development of their role?

Method

In the West Midlands region, which includes the counties of Herefordshire, Worcestershire, Warwickshire and Staffordshire as well as the West Midlands conurbation, there are 2752 general practitioners[2] serving a population of about 5 176 000. Approximately 38% of practices employ at least one nurse. The 514 practice nurses in the West Midlands region were identified either through the appropriate family practitioner committee or, in one case, because of difficulty in obtaining the consent of a local medical committee, by circulating all the general practitioners within the family practitioner committee area. With the consent of the employing doctors (only two refused) a detailed questionnaire was circulated to each of the 381 practices in which there were one or more practice nurses employed. Seventy four per cent of the practices contacted directly through the family practitioner committee returned forms and 300 (58%) of all the 514 practice nurses in the region returned the completed questionnaire.

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Results

Age and experience

Of the 300 practice nurses 291 (97.0%) had worked in hospitals after acquiring their basic qualification and before taking up employment with the practice: 136 had been sisters, 102 staff nurses and 53 state enrolled nurses or other junior grades. Two hundred and sixty two of the nurses (87.3%) were state registered nurses, 21.0% were state certified midwives, 8.0% were state enrolled nurses and 39.3% mentioned 37 other post-basic certificates including, for example, the family planning certificate (7.7%), and the health visitor qualification (3.3%). Their post-basic hospital experience showed a broad spectrum (Table 1) as did their nursing experience outside hospital (Table 2). Two hundred and thirty seven nurses (79.0%) were members of the Royal College of Nursing.

All the nurses were female. The age of nurses employed ranged from 21 to 70 years, 7.0% were aged under 30 years, 72.0% were between 30 and 49 years, 15.0% were between 50 and 59 years and 6.0% were aged over 60 years. Most of the nurses had children (94.0%) and 73.0% had two or more.

The length of time they had worked as practice nurses ranged from one month to 22 years: 56.0% had worked for less than five years, 21.0% for between five and 10 years and the remainder had worked for more than 10.

Place and hours of work

Many types of practices were represented in the study. Of the nurses 56.7% worked in urban areas, 12.3% in the inner city, 24.7% in rural practice and 6.3% in mixed urban and rural practices. Some nurses (13.0%) worked in dispensing practices and nearly three-quarters (72.0%) worked in premises owned by the general practitioner. The nurses tended to work in practices where there were a large number of doctors; only 6.3% worked with single handed doctors (Table 3).

Two nurses worked in practices with only female doctors present, 102 (34.0%) in male only practices and 196 (65.3%) in practices with male and female doctors.

In only one of the practices was the nurse the only employed staff, in 55.0% there were at least nine other staff and in 10.0% there were more than 18 other staff. Most of the nurses (94.0%) had their own treatment room and 35.0% also worked occasionally in the patient's home.

Table 1. Post-basic hospital experience of practice nurses.

	Number (%) of nurses ($n = 300$)
Surgery	189 (*63.0*)
Medicine	159 (*53.0*)
Accident and emergency	96 (*32.0*)
Paediatrics	81 (*27.0*)
Gynaecology	78 (*26.0*)
Obstetrics	60 (*20.0*)
Intensive care	54 (*18.0*)
Psychiatry	15 (*5.0*)

Table 2. Experience acquired by practice nurses in other areas of nursing outside hospital

	Number (%) of nurses ($n = 300$)
Agency (private) nursing	75 (*25.0*)
Community nursing (sister)	60 (*20.0*)
Occupational health nursing	51 (*17.0*)
Other private nursing	51 (*17.0*)
Midwifery	36 (*12.0*)
Nursing abroad	27 (*9.0*)
Health visiting	12 (*4.0*)
Forces and prison service	9 (*3.0*)
Community nursing (SEN)	9 (*3.0*)
Community psychiatric nursing	3 (*1.0*)

Table 3. Distribution of practice nurses according to size of practice compared with the distribution of doctors working in the West Midlands regional health authority area.

Number of GPs in practice	Percentage of practice nurses employed ($n = 300$)	Percentage of doctors in West Midlands region[a] ($n = 2752$)
1	*6.3*	*14*
2	*14.0*	*19*
3	*15.3*	*21*
4	*20.3*	*19*
5–10	*43.0*	*28*
Not known	*0.7*	—

[a]Health and Personal Social Services Statistics for England, 1986.

Only 8.7% of practice nurses worked full-time (37 or more hours per week), and 34.0% worked less than 18.5 hours per week. Fifty per cent of the remainder worked for less than 24.5 hours per week.

Nature of work

In order to measure the development of their role, nurses were asked to list the types of work they carried out. They were also shown a list of tasks and problems carried out by a nurse practitioner working in an inner city general practice[3] and asked to indicate which tasks they presently performed and which problems they were involved in managing and to suggest which of them should be part of the work of a practice nurse.

More than 500 different tasks were described, ranging from three to 52 for any individual. Table 4 shows the tasks presently carried out by practice nurses and those which nurses thought should be part of their work and skills or could be, with appropriate training. Table 5 shows the problems they are involved in managing (defined as investigating, diagnosing and treating) and the problems which they thought could be managed by a practice nurse following agreement about treatment with the general practitioner. When asked to rate the importance which they attached to certain roles (Table 6) the practice nurses felt that practical tasks and preventive and screening procedures were the most important.

Thirty six (12.0%) nurses were involved in research work and this included projects such as hypertension research (14 nurses), general health screening (seven) and drug trials (five).

Of 295 nurses 96.6% said that patients did not always have to see the doctor before consulting the nurse.

The majority of these nurses (277, 93.9%) said that the decision about the work they did was agreed between themselves and the doctor, only 14 nurses had no say in the content of their work, and four said they alone decided on the content.

Twenty nine (9.7%) nurses said that the general practitioner never asked their opinion about the management of a case or the nature of the treatment, but 206 (68.7%) were sometimes asked, 63 (21.0%) frequently asked and one was always asked (one did not give an answer).

Table 4. Tasks which practice nurses currently performed and those which nurses thought they should do or could do with appropriate training.

	Percentage of nurses currently performing[a]	Percentage of nurses who think they should/ could perform[a]
Measurement of blood pressure	*96.3*	*86.7*
Suture removal	*95.3*	*87.9*
Intramuscular injections	*94.9*	*87.6*
Subcutaneous injections	*94.6*	*88.0*
Application of suitable dressings	*93.9*	*88.0*
Ear syringing	*93.3*	*87.1*
Intradermal injections	*81.6*	*86.4*
Venepuncture for blood sampling	*74.5*	*87.2*
Cervical smears	*70.5*	*87.0*
Auroscopic examination of ears, nose and throat	*67.8*	*88.0*
Examination of breasts	*62.0*	*88.0*
Speculum examination of vagina and cervix	*60.0*	*85.7*
ECG recordings	*57.0*	*89.2*
Referral of patients to other members of primary health care team, social services and local voluntary agencies	*55.3*	*81.6*
Assistance at or initiation of resuscitation until medical help is obtained	*55.0*	*91.6*
Observation of skin for signs of disease	*52.5*	*85.4*
Measurement of respiratory function	*50.3*	*85.0*
Examination of bones and joints	*39.9*	*65.8*
Intrauterine device removal	*18.0*	*55.3*
Psychological examination for early signs of anxiety and depression	*13.0*	*49.8*
Bimanual examination of uterus and adnexae	*10.7*	*42.1*
Ophthalmoscopic examination of eyes	*9.0*	*51.4*
Stethoscopic examination of heart and chest	*7.6*	*47.2*
Palpation of abdomen	*4.3*	*26.5*
Palpation of liver, kidneys and spleen	*2.6*	*19.0*
Examination of penis and testicles	*2.3*	*31.7*
Referral of patients to consultants	*2.3*	*12.4*

[a]Total number of responses varied for each item (from 291 to 297).

Table 5. Problems which practice nurses were currently involved in managing and those which nurses thought they could manage with appropriate training.

Problem	Percentage of nurses currently managing[a]	Percentage of nurses who think they could manage[a]
Uncomplicated minor injuries (sprains, simple abrasions and cuts)	69.8	89.4
Hypertension	52.0	80.0
Simple allergies, eg hay fever or insect bites	46.8	80.3
Family planning advice	36.1	80.0
Common infectious diseases	34.7	79.9
Urinary tract infections in women	30.4	68.3
Vaginal discharges	30.4	63.4
Conjunctivitis	29.7	73.0
Diabetes	28.8	70.7
Monilial infections of the mouth	25.7	77.0
Otitis externa	25.0	69.7
Seborrhoeic dermatitis of scalp and mild eczema	22.7	71.0
Upper respiratory tract infection including tonsillitis	20.8	60.9
Acute otitis media	19.3	50.5
Asthma	16.1	52.9
Rheumatic diseases	10.7	43.6
Thyroid disease	9.7	38.9
Mild heart failure	8.0	33.0

[a]Total number of responses varied for each item (from 291 to 297).

The majority of nurses (80.0%) were satisfied with their present role and 69.0% thought their role was already extended beyond what had been taught in basic training. About 15% of the nurses expressed a wish to extend their role. Table 7 lists the factors which each nurse felt prevented further extension of her own role. Lack of training or time were mentioned most frequently but 15.0% felt that the general practitioner's attitude was the most important limiting factor. When asked what was the most important factor which stopped practice nurses in general from extending their role the percentage regarding doctors' attitudes as the biggest barrier rose to 44.6% and was easily the most frequently mentioned reason, though 37.3% felt unsupported by the health service or professional organizations and lacking in confidence especially about the legal implications and 30.0% felt lack of training to be the prime factor.

Relationship with the general practitioner

When asked about the use of first names 255 (85.0%) practice nurses said that the general practitioners usually addressed them by their first name and 78 (26.0%) addressed the doctors by their first name.

Discussion

The social characteristics of our sample of nurses closely match those of Reedy's 1977 study[4] in that the majority were married, had children and were aged between 30 and 44 years. Reedy comments that two factors contribute to this phenomenon: nurses returning to work after a period at home caring for a young family are likely to seek flexible and part-time hours and general practitioners prefer to employ older married women who have children.[4] Since 55.5% of nurses in the study (reported in another paper) said that they had chosen practice nursing because it fitted in with their domestic commitments our figures suggest that little has changed in this respect. The same factors may account in part for the apparent stability in employment

Table 7. Factors which practice nurses felt prevented them extending their own role further.

	Number of times mentioned
Lack of further training	67
Lack of time	66
GP's attitude	45
Lack of confidence	29
No desire or need to extend role	18
Lack of space/practice too small	15
Inability to prescribe	13
Legal implications	12
Family commitments	10
Practice finances	8
Too old	8
Confusion between role of nurse and doctor	3
Lack of manpower in the practice	3
Inability to drive	2
Lack of proper job definition	2
Patients' needs	2
Language barrier	1
Lack of opportunity	1
Lack of equipment	1

Table 6. Degree of importance which practice nurses attached to certain roles.

Task	Percentage of nurses ($n = 300$)			
	Most important	Moderately important	Least important	No answer
Practical tasks (giving injections, doing dressings, syringing ears)	82.0	12.3	1.7	4.0
Preventive or screening procedures (cervical smear, well man/woman clinics, blood pressure checks)	69.7	22.3	3.0	5.0
Teaching about health (the importance of diet, exercise or giving up smoking)	43.0	47.7	4.3	5.0
Advising patients about coping with illness	31.3	62.0	2.0	4.7
Being able to identify common minor illnesses and give appropriate advice	30.7	59.7	4.3	5.3
Being able to identify common rashes and give appropriate advice	14.0	71.7	8.7	5.7
Counselling patients with emotional or social problems	9.3	67.0	18.3	5.3
Writing out repeat prescriptions or dispensing drugs so saving the doctor's time	3.3	17.7	73.3	5.7
Reception work (making appointments, answering telephone)	1.7	8.3	84.7	5.3
Advising patients about their welfare rights	1.3	12.0	81.7	5.0

of these nurses, who tend to stay with one practice, and for the high percentage of nurses who expressed satisfaction with their role. However, a career interruption of between five and 10 years for child-rearing for most of the nurses raises the question of the availability of courses to update the skills of new practice nurses.

Our findings about the types of practice employing practice nurses support those of Bowling's 1977 study[5] which found that they tend to be large groups of doctors. The majority of practices in our study had both male and female doctors, so there was no evidence that practice nurses act as surrogates for female doctors.

Enormous variations in patterns of work were revealed in this study, highlighting the lack of a role definition for practice nurses. The study also showed how the role of the practice nurse is developing; although the majority of nurses performed only the traditional nursing tasks a number of nurses managed (that is diagnosed, investigated and treated) common ailments and almost two thirds of nurses were undertaking breast and vaginal examinations, while 70% were carrying out cervical smears. In Reedy's 1977 study[4] only 39% of employed nurses were undertaking cervical smears, and there was no mention of other physical examinations being carried out by nurses. Our group of practice nurses commonly used an auriscope (68%) for ear, nose and throat examination. Although use of a stethoscope (8%) or ophthalmoscope (9%) for examination is still rare it does now occur.

About 15% of nurses expressed a wish to extend their role further and it is quite clear that the majority of nurses think that they could perform a greater number of tasks and manage a much wider range of problems than they do at present. A surprising finding (illustrated on Table 4) was that some nurses wished to give up some of the traditional nursing tasks such as syringing ears, giving injections and removing sutures. They did not indicate who should do these tasks and the discrepancy was not noted when the questionnaire was submitted to another large group of nurses working outside the region. It may be that this reflects an attitude to a very familiar and perhaps boring aspect of their work.

This shift in the role of nurses towards traditionally medical tasks has led others in the nursing profession to ask whether the extended practice nurse's role is really that of assistant to the physician.[6] In the USA in the 1960s nurses were trained to act as surrogate physicians and therefore acquired skills in diagnosis, investigation and treatment of common ailments. A similar debate took place among American nurses at that time about the desirability of nurses taking over part of the physician's role. As a result nurse practitioners in the USA have researched and developed their role, and identified skills unique to nursing.[7] Such skills centre on the caring and educational functions of the nurse practitioner's work rather than on technical tasks alone.[8-10]

Others who have studied the work of British practice nurses have commented on the role of the nurse as listener and counsellor and on the importance of the informal relationship which can exist between nurse and patient and which facilitates communication.[11-14] Yet it appears from the priority given by our sample of nurses to their work that at present they concentrate on practical tasks and preventive or screening procedures. This is also at odds with the public expectation of nurses which Anderson[15] described as that of providers of emotional support rather than technical expertise. Counselling patients with emotional or social problems was rated of only moderate importance by our group of nurses, but many (46%) said that with training they could become more skilled at psychological examination and the recognition of the early signs of anxiety and depression. This may reflect a desire by the nurses to extend their role in communication and inter-personal relationships as much as in achieving greater clinical expertise, although their present roles seem more centred on taking over medical tasks from the doctor.

Academic research in nursing in Britain is in its infancy and one result is the lack of a research-based definition of nursing. Bowling commented that this lack of definition is one reason why nurses accept delegated medical tasks without considering whether they are a legitimate part of nursing.[5] Practice nurses are in a particularly vulnerable position because they may be unable to refuse to take over tasks from their employer without good reason. Until there is a firmer role definition and training for practice nurses their roles will continue to vary widely. Furthermore, if nurses are to extend their roles in general practice, more research is needed to explore how this would alter the role and workload of the general practitioner.

Teaching about health was rated third by most nurses when giving priority to different aspects of their work. Only 3% had health visitor qualifications, which is the field of nursing predominantly concerned with the skills of health education. Most practice nurses were carrying out preventive procedures such as breast examination and cervical smears, while more than half were involved in the management of hypertension: such situations present ideal opportunities for health education. Enabling practice nurses to gain competency in health education may be a logical step towards improving care in general practice.

Writing out repeat prescriptions and undertaking reception work were the aspects of the nurse's work rated by them as least important. This contrasts sharply with Drury and Kuenssberg's findings of 1970,[16] that 85% of a sample of nurses in 140 practices were used regularly for reception duties. While there is concern today that reception work undertaken by nurses is a misuse of professional skill, Reedy comments in an article of 1972 that 'This [reception work] suggests that their training and abilities were highly valued for this work at the point of first contact — probably the most important single function within any practice'.[17] Perhaps receptionists are now expected to be more highly skilled leaving nurses to further extend their role.

The number of practice nurses who worked in patients' homes was surprising, although one of the earliest experiments to extend the nursing role in general practice involved the nurse visiting all patients making a first request for a home visit.[13] It may be that practice nurses undertake tasks in patients' homes which community nurses will not or cannot do, such as changing ring pessaries, performing electrocardiograms and primary visiting.

There was little reciprocity in the use of first names by doctors and nurses; nurses tended to call the doctors by their surname while doctors called nurses by their first name. Buehler[18] in her study in the USA of relationships between nurse practitioners and physicians in clinic teams and private practice noted that the use of names was related to practice setting, first names being used by both nurse practitioners and physicians in clinic settings, but non-reciprocally in private practice. She speculated that privately employed nurses receive their pay cheque from their physician colleague, and are therefore more likely to be deferential. The employer/employee relationship may contribute to our similar findings.

If the practice nurse's role is to be extended further, the legal and insurance implications will have to be faced by professional

organizations, as will the need for new training courses and qualifications for such a role. Perhaps more importantly the nursing profession needs to identify the value of their role in general practice and develop not only the technical aspects of care but those which lie at the core of nursing and which constitute the caring ethic. There is also a need for more research into the policy implications of nurses undertaking more of the general practitioner's work; for example how this could affect list sizes and how the general practitioner's role will change. Finally, and most important of all, there remains the question of whether practice nurses are being used effectively in the present system and whether improvements in the organization of general practice would lead to better patient care.

References

1. Department of Health and Social Security. *Neighbourhood nursing: a focus for care. Report of the community nursing review.* London: HMSO, 1986.
2. Department of Health and Social Security. *Health and personal social services statistics for England.* London: HMSO, 1986.
3. Stilwell B, Greenfield S, Drury VWM, Hull FM. A nurse practitioner in general practice: working style and pattern of consultations. *J R Coll Gen Pract* 1987; **37**: 154-157.
4. Reedy BL, Metcalfe AV, de Roumaine M, Newell DJ. The social and occupational characteristics of attached and employed nurses in general practice. *J R Coll Gen Pract* 1980; **30**: 477-482.
5. Bowling A. *Delegation in general practice. A study of doctors and nurses.* London: Tavistock Publications, 1981.
6. Skeet M. Health auxiliaries: decision makers and implementers. In: Skeet M, Elliot K (eds). *Health auxiliaries and the health team.* London: Croom Helm, 1978.
7. Molde S, Diers D. Nurse practitioner research: selected literature review and research agenda. *Nurs Res* 1985; **34**: 362-367.
8. Diers D, Molde S. Nurses in primary care: the new gatekeepers? *Am J Nurs* 1983; **83**: 742-745.
9. Allen M. Primary care nursing: research in action. In: Hockey L (ed). *Primary care nursing.* Edinburgh: Churchill Livingstone, 1983.
10. Edmunds MN. Junior doctoring. *Nurse Practitioner* 1979; **38**: 40-41, 46.
11. Cartwright A, Scott R. The work of a nurse employed in a general practice. *Br Med J* 1961; **1**: 807-813.
12. Kuenssberg EV. The nurse — a luxury or a necessity in general practice? *J R Coll Gen Pract* 1970; **19**: suppl no. 3: 34-39.
13. Weston-Smith J, Mottram EM. Extended use of nursing services in general practice. *Br Med J* 1967; **4**: 672-674.
14. Harris M. The work of a nurse practitioner. *Nursing Times* 1970; **66**: 1402-1403.
15. Anderson ER. *The role of the nurse.* London: Royal College of Nursing of the United Kingdom, 1973.
16. Drury VWM, Kuenssberg EV. Inquiry into administrative activities in general practice. *Br Med J* 1970; **4**: 42-44.
17. Reedy BL. The general practice nurse. *Update* 1972; **5**: 75-78.
18. Buehler J. *Nurses and physicians in transition.* Michigan: UMI Research Press, 1982.

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