A nurse practitioner in general practice: working style and pattern of consultations

B. STILWELL
S. GREENFIELD, PhD
M. DRURY, FRCGP
F.M. HULL, FRCGP

SUMMARY. The work of a specially trained nurse practitioner, to whom patients had open access, was studied in an inner city general practice over a period of six months in 1983. A total of 858 patients of all ages and ethnic origins sought consultations for 979 problems. Morbidity from every diagnostic group was presented but the majority of the problems (60.4%) fell into the ‘Supplementary’ group: preventive medicine; health instruction and education; social, marital and family problems; administrative procedures. The consultation room setting and the long appointment times available (20 minutes) may partly account for this. Additional problems, mostly concerning health education, were raised in 46.0% of consultations. Most patients chose a consultation with the nurse practitioner appropriately and in more than one-third of all consultations the nurse managed the presenting problem without further referral for investigation, prescription or other medical advice. It is concluded that nurses have a much larger and more autonomous part to play in the care of patients than hitherto.

Introduction

THE potential of the practice nurse’s role has been the subject of many studies over the 20 years since the introduction of the 70% reimbursement of ancillary staff salaries. Delegation of medical tasks to nurses,1,3 and the suitability of nurses to undertake first home visits to patients have been explored.4 Other branches of the nursing profession have regarded the development of the practice nurse’s role with suspicion, fearing that accepting delegated medical tasks would result in nurses becoming assistants to the physician, losing their professional individuality and deserting the caring ethic of nursing.5

In the USA during the mid-1960s nurses who worked with doctors in primary health care settings also began to extend their role by undertaking clinical assessments of patients, the management of common disorders and in some rural and inner city areas acting as surrogates for the physician.6 These nurses were called nurse practitioners and were differentiated from British practice nurses by their level of autonomy and clinical expertise. The care provided by nurse practitioners has been carefully evaluated by nurses and doctors and found to be as safe and effective as physician care.7,8 Fears in the USA about the development of this autonomous role have largely been allayed.9 Several factors have emerged from studies in the USA about the effect of the nurse practitioner on patient behaviour. It was found, for example, that patients with hypertension achieved better blood pressure control when cared for by nurse practitioners10 and that nurses were more effective at helping patients to lose weight, keep appointments and comply with recommendations.11 It seemed that it was not only the nurse practitioners’ clinical expertise that was important to patients but also their style of care, which had its origins in their nursing background.

In the UK, some practitioners have allowed patients open access to practice nurses.12 McGuire, however, commented in her report to the Royal Commission on the National Health Service that decisions made by nurses may go unrecognized by the doctors and even by the nurses themselves.13 This may be because some doctors and nurses in the UK are still ambivalent about delegation.2 A study was designed to examine the role of the nurse practitioner in a British general practice, based on the American model. This paper reports on the numbers and types of problems which were dealt with by the nurse practitioner during the initial stages of the study.

Method

Structure

In 1982 a nurse to whom patients had open access began work in an inner city general practice in Birmingham. She was employed throughout the project by Birmingham University, and on placement in the practice. The nurse practitioner had 10 years experience of hospital nursing, and four years as a health visitor. In order for her to work as autonomously as possible, further training was undertaken in physical examination techniques, the significance and potential seriousness of detected abnormalities and the management of common acute and chronic conditions in general practice. Throughout the project the nurse practitioner was given clinical support by a tutor in the Department of General Practice and the general practitioners with whom she worked.

In the first three months of the study two single-handed male doctors worked as a group (that is, not partners) but later a woman doctor joined one of these doctors as a partner. Together the practice had 4728 registered patients of whom 49% were female.

At each attendance patients were asked by receptionists whether they wished to consult the doctor or the nurse practitioner. A large notice in the waiting room outlined the nurse practitioner’s work and the nurse explained this further each time she met a new patient.

The nurse practitioner had her own consulting room and did not wear a uniform. She consulted for eight sessions each week, and saw patients from both practices. As there was no appointment system the length of each session varied with the number of patients consulting but patients were offered a 20-minute consultation, if necessary. Eight to 10 patients were seen during each session. Most patients were seen in the surgery, but the nurse practitioner made home visits to elderly and chronically sick housebound patients, to supervise medication and monitor physical and social health. These visits did not substitute for the practical care provided by the attached community nurse or health visitor. The practice did not employ any other nurse nor was there a treatment room which, as Waters and colleagues have pointed out, may have influenced the nature of the nurse’s work.3

Protocols were agreed between the practice doctors, the Department of General Practice and the nurse practitioner for

the management of common ailments, which sometimes involved giving prescribed medication. If the nurse practitioner felt this was necessary, she took the patient's notes and the suggested prescription to the patient's doctor, who discussed her findings before signing the prescription.

There was always a doctor on the premises when the nurse practitioner was seeing patients and if she felt unable to manage a problem, she would refer the patient to the doctor immediately, or later, depending on the urgency. This was in part a response to the Medical Defence Union's request for safeguards, because they provided extended insurance cover through the general practitioner supervisor for the nurse practitioner during this project.

Long-term health measures, such as stopping smoking, losing weight or having a smear test, were particularly encouraged by the nurse practitioner and longer consultations allowed opportunity for such health education and preventive work.

The survey
Details of consultations with 858 patients who consulted the nurse practitioner were recorded during March to August 1983. The data comprised patient’s sex, age, ethnic group, the initiator of the consultation, the newness or chronicity of the problem, and whether it was a surgery consultation or home visit. The problem(s) presented by the patient as the reason for the consultation and any other matters discussed, together with details of any further investigations, referrals or prescriptions resulting from the consultation were also recorded. The RCGP-OPCS classification reference manual was used to classify the patient's problems.

Results
Characteristics of patients
The majority of the nurse practitioner's 858 patients (72.0%) were women. Patients of all ages from new babies to octogenarians saw the nurse and the distribution of ages was similar to the whole practice; in both cases about 60% were under 40 years of age. The nurse's patients were mostly (73.0%) from the United Kingdom, although one-fifth were from Pakistan (5.6%) or the New Commonwealth (14.2%).

Pattern of consultations
The data indicated that in over half (53.8%) of the nurse practitioner's 858 consultations the patient had chosen to consult her. Of the remainder 16.9% were reviews initiated by the nurse practitioner, 12.2% had been initiated by a member of the patient's family, 12.1% by the general practitioner, 2.6% by the receptionist and 2.4% by other members of the primary health care team.

Most of the consultations (89.0%) took place at the surgery. The remainder (11.0%) took place in the patient's home. Just over one-third of the consultations were with patients presenting with new problems (37.8%), 29.4% were follow-up consultations and 32.8% were for the care of chronic ailments, for example diabetes, asthma and hypertension.

A total of 979 problems were presented to the nurse practitioner and 492 additional problems became apparent during interviews with 395 (46.0%) of the patients.

Table 1 shows the distribution within the 18 diagnostic groups in the RCGP-OPCS reference manual of all 1471 problems which were identified. Figures for consultations with doctors from the second national morbidity survey, the general household survey and the Nottingham survey are shown for comparison. The nurse practitioner saw problems from all diagnostic groups, but the majority (60.4%) fell into group 18 'Supplementary classification', compared with between 8.4% and 18.8% for the doctors in the three studies quoted above. Half of the problems in the supplementary classification that the nurse saw fell under the heading 'Preventive medicine'; a quarter concerned 'Advice, health instruction and education', 'Medical or surgical procedure without reported diagnosis', or a patient consulting on behalf of another person; a fifth were for 'Social, marital, family problems and maladjustments' or for 'Administrative procedures' such as letters, forms, certificates and prescriptions; there were also a few cases involving 'Maternal care'.

Activities of the nurse
Table 2 shows the 10 most common activities performed by the nurse practitioner — a quarter of all problems first presented

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**Table 1. Distribution by diagnostic group of patient contacts with the nurse practitioner: comparison with patient contacts with the doctor in the second national morbidity survey (NMS), general household survey (GHS) and Nottingham survey (Notts).**

<table>
<thead>
<tr>
<th>Diagnostic group</th>
<th>No. of problems in each group</th>
<th>% of all problems presented (n = 1471)</th>
<th>NMS 1970/71</th>
<th>GHS 1971</th>
<th>Notts 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Infections (incl. intestinal)</td>
<td>34</td>
<td>2.3</td>
<td>3.7</td>
<td>5.6</td>
<td>5.2</td>
</tr>
<tr>
<td>II Neoplasms</td>
<td>3</td>
<td>0.2</td>
<td>1.5</td>
<td>0.5</td>
<td>1.4</td>
</tr>
<tr>
<td>III Endocrine and metabolic</td>
<td>5</td>
<td>0.3</td>
<td>2.2</td>
<td>1.6</td>
<td>2.5</td>
</tr>
<tr>
<td>IV Blood and blood-forming organs</td>
<td>3</td>
<td>0.2</td>
<td>1.0</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>V Mental disorders</td>
<td>55</td>
<td>3.7</td>
<td>9.9</td>
<td>4.9</td>
<td>6.2</td>
</tr>
<tr>
<td>VI Nervous system and sense organs</td>
<td>40</td>
<td>2.7</td>
<td>6.9</td>
<td>5.2</td>
<td>7.1</td>
</tr>
<tr>
<td>VII Circulatory</td>
<td>7</td>
<td>0.5</td>
<td>8.5</td>
<td>7.5</td>
<td>10.9</td>
</tr>
<tr>
<td>VIII Respiratory</td>
<td>53</td>
<td>3.6</td>
<td>18.9</td>
<td>19.6</td>
<td>18.8</td>
</tr>
<tr>
<td>IX Digestive</td>
<td>21</td>
<td>1.4</td>
<td>5.4</td>
<td>6.1</td>
<td>4.8</td>
</tr>
<tr>
<td>X Genitourinary</td>
<td>53</td>
<td>3.6</td>
<td>5.1</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>XI Pregnancy</td>
<td>4</td>
<td>0.3</td>
<td>1.1</td>
<td>1.3</td>
<td>0.7</td>
</tr>
<tr>
<td>XII Skin and subcutaneous tissue</td>
<td>34</td>
<td>2.3</td>
<td>6.5</td>
<td>4.2</td>
<td>5.6</td>
</tr>
<tr>
<td>XIII Musculoskeletal</td>
<td>84</td>
<td>5.7</td>
<td>6.8</td>
<td>4.9</td>
<td>8.2</td>
</tr>
<tr>
<td>XIV Congenital anomalies</td>
<td>2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>XV Perinatal diseases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XVI Symptoms and ill-defined conditions</td>
<td>154</td>
<td>10.5</td>
<td>6.7</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>XVII Accidents, poisoning and violence</td>
<td>30</td>
<td>2.0</td>
<td>5.3</td>
<td>7.4</td>
<td>6.0</td>
</tr>
<tr>
<td>XVIII Supplementary (incl. prevention and family and social problems)</td>
<td>889</td>
<td>60.4</td>
<td>8.4</td>
<td>18.8</td>
<td>11.4</td>
</tr>
</tbody>
</table>
involved a physical examination or screening for hypertension. The majority of the 492 additional problems and requests discussed during consultations (25.4%) were for health instruction and education.

Other additional requests or problems that the nurse dealt with were occupational (3.7%), housing (3.0%) or marital (2.6%) problems, advice about contraception (2.6%) and cervical smears (2.4%).

**Outcome of the consultation**

Data regarding the outcome of the consultations showed that the 858 patients had a total of 210 investigations — 153 laboratory tests, 42 cervical smears, eight X-rays (mostly miniature mass X-ray) and seven others such as electrocardiogram and peak flow. A total of 167 patients (19.5%) were referred to other workers, of which 103 were to the general practitioner, 25 directly to a consultant and 25 to the social services. In 127 (14.8%) consultations the patient received a prescription (signed by the general practitioner).

In 45.0% of cases the nurse practitioner managed the patient’s problem without referral, prescription or investigation.

**Discussion**

In this paper we describe the quantity and nature of the nurse practitioner’s work within one practice. The study did not attempt to compare patients seen by the nurse practitioner with those seen by the general practitioner and it is not therefore possible to say whether certain groups of patients were over- or under-represented in her clientele. The nurse practitioner, however, saw a wide range of patients from every age and ethnic group.

The nurse practitioner saw patients who presented problems from each of the RCGP-OPCS diagnostic categories. Most patients chose a consultation with the nurse practitioner appropriately and in more than one-third of all consultations the nurse managed the presenting problems without further referral for investigation, prescription or other medical advice. There were no complaints from doctors or patients about standards of examination or treatment, and no reported cases of serious illness going unnoticed. Adequate training for this extended nursing role and effective supervision and communication between doctor and nurse is clearly essential.

The experiment differed from previous studies of nursing in general practice in several important respects. At each visit patients were offered a choice between medical and nursing care, whatever their presenting problem. The nurse practitioner did not wear a uniform and worked in a traditional consulting rather than treatment room setting, so perhaps laying more emphasis on supportive counselling and health teaching. This may account for the high percentage of patients whose presenting or discussed complaint concerned social, marital or family problems, or preventive medicine. Cartwright found in 1977 that patients felt less able to discuss family or relationship problems with their general practitioner than in an earlier survey of 1966, and that general practitioners felt it less appropriate for them to do so than in 1966.

Although the nurse practitioner dealt with the patients’ presenting problems, she was also concerned with long-term preventive strategies, such as measuring blood pressure or carrying out cervical smears, when appropriate. Patients responded readily to prompting about life-style changes and they raised many concerns of their own. Again, this reflected the large proportion of consultations (46%) in which patients introduced additional problems, many of which concerned health advice or instruction.

Undoubtedly, the 20 minutes available at each consultation influenced the behaviours of both the nurse and the patient. Listening to patient’s complaints and providing health education were important components of each consultation. Health education was based on what the patient felt to be relevant and was given in a comprehensive form (for example, hand-drawn diagrams or verbally for patients with poor literacy skills). Morrell and colleagues found that doctors who had 10 minute consultations with patients were more likely to advise on prevention and health education and to spend more time talking and listening to patients than those with five minute consultations. It seems therefore, that these important components of consultations are directly related to the time available, whether it is a doctor or a nurse practitioner who is being consulted. Hull and colleagues in an earlier paper also found that positive patient satisfaction with a consultation was associated with longer consultation times.

The report of the community nursing review has recommended that ‘the principle should be adopted of introducing the nurse practitioner into primary health care’. Having scrutinized the varied work of community nurses here and abroad, the community nursing review concluded that the nurse practitioner’s ‘key tasks would be to interview patients and diagnose and treat specific diseases in accordance with the agreed medical protocols; refer to the general practitioner patients who have medical problems which lie outside the written protocols; be available for all patients who wish to consult the nurse practitioner; give counselling and nursing advice to patients consulting her direct or referred to her by a general practitioner; conduct screening programmes among specific age- or client-groups; maintain patient-care programmes, particularly to the chronic sick; refer patients for further nursing care to the neighbourhood nursing service’. It is noteworthy that this job description exactly matched our experimental structure.

If this role is to be developed there will need to be a revision and examination of the way in which nurses are legally covered to provide care for patients. The Royal College of Nursing have so far supported individual cases of nurses extending their role, but have not declared a policy about this. Just as American nurse practitioners have become accountable for their work and the safety of their patients, nurses here who elect to practise in this way will have to accept the need for professional responsibility for the care which they give. If Project 2000, a projected new pattern of training, is adopted it should facilitate the development of personal accountability for nurses. It will release nurse education from the hierarchical supervisory framework which has for so long stultified initiatives.
Given these conditions, we conclude that nurses have a much larger and more autonomous part to play in the care of patients than hitherto, that patients are capable of selecting complaints appropriate for nursing care and will consult a nurse if given the chance to do so. Further papers will explore the attitudes of patients, doctors and other health professionals to the nurse working in this way and will compare and contrast the work of the nurse and the doctors within the practice in an attempt to study the effect on total practice workload.

References

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Address for correspondence
Professor M. Drury, Department of General Practice, University of Birmingham, Birmingham B15 2TJ.

Risk factors for HIV
To elucidate risk factors for seroconversion to human immunodeficiency virus (HIV) 2507 homosexual men who were seronegative for HIV at enrolment were followed for six months: 95 (3.8%) seroconverted. Of men who did not engage in receptive anal intercourse within six months before baseline and in the six-month follow-up period, only 0.5% (3/646) seroconverted to HIV. By contrast, of men who engaged in receptive anal intercourse with two or more partners during each of these successive six-month intervals, 10.6% (58/548) seroconverted. No HIV seroconversions occurred in 220 homosexual men who did not practise receptive or insertive anal intercourse within 12 months before the follow-up visit. On multivariate analysis receptive anal intercourse was the only significant risk factor for seroconversion to HIV, the risk ratio increasing from 3-fold for one partner to 18-fold for five or more partners. Furthermore, data for the two successive six-month periods show that men who reduced or stopped the practice of receptive anal intercourse significantly lowered their risk of seroconversion to 3.2% and 1.8%, respectively. Receptive anal intercourse accounted for nearly all new HIV infections among the homosexual men enrolled in this study, and the hazards of this practice need to be emphasized in community educational projects.