# GENERAL PRACTICE

# Establishing a minor illness nurse in a busy general practice

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#### **Abstract**

Objective—To study the feasibility of a practice nurse caring for patients with minor illnesses.

Design—Nurse given training in dealing with patients with minor illnesses. Patients requesting a same day appointment were offered a nurse consultation.

Setting—Group practice in Stockton on Tees.

Main outcome measures—Number of consultations which required a doctor contact, treatment, and rate of reconsultation.

Results—Of 696 consultations in six months, 602 (86%) required no doctor contact. 549 (79%) patients did not reconsult about that episode of illness, and 343 (50%) patients were given advice on self care only.

Conclusion—Trained nurses could diagnose and treat a large proportion of patients currently consulting general practitioners about minor illness provided that the nurse has immediate access to a doctor.

## Introduction

The numbers of practice nurses (nurses employed by general practitioners) have increased faster than those of any other members of the primary health care team in the past 10 years. In England and Wales in 1983 there were 1729 whole time equivalent practice nurses (6.6% of total staff), but by 1993 there were 10157 (17.8% of total staff). Over half of practices now employ a nurse.<sup>2</sup> Most of their work is preventive (running well person clinics and doing annual assessments of older people, cervical smear tests, and immunisations), although their role has recently expanded to include the care of chronic continuing illness such as hypertension, asthma, and diabetes.3-9 Despite nurses taking on all this consultative work many practices still find it difficult to meet the demand for consultations with doctors.

Patients with acute ("urgent") minor illness, usually requesting a same day appointment, contribute greatly to workload, and many general practitioners perceive that more minor illness is being brought to them. There are many reasons for this, including heightened anxiety of parents about their children, the remoteness of older experienced family members, greater expectations as a result of the patient's charter, and less tolerance of minor health problems.

Although many practices leave gaps in their appointment systems for patients with minor illness to consult their doctor, many such patients are seen by the duty doctor towards the end of the day. We started using a nurse to see minor illness to relieve the pressure on the doctors in the team. This paper describes how the nurse was trained to see such illnesses and how she dealt with them. We proposed the experiment to the family health services authority, which agreed to reimburse 70% of the nurse's salary.

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## Methods

The practice is a first wave fundholding practice in an urban-suburban area. It has been a training practice since 1965 and takes medical students for clinical attachments. The social class of patients is similar to that in the whole of England and Wales. There are almost 15000 patients served by six whole time equivalent general practitioners, three practice nurses, and managerial, records, and administrative staff. Community, psychiatric, and psychogeriatric nurses, a health, visitor, a midwife, a dietitian, two counsellors, a physiotherapist, and an osteopath are also attached to the practice.

The nurse concerned (MLD) is a registered nurse and state certified midwife. She has worked as a midwife in hospital and in the community for 15 years and is accustomed to working independently. She also has the customary life experience from bringing up two children. She had worked in the practice for two years before being trained in diagnosing and treating minor illness. She was trained by sitting in surgeries with the duty doctor in the practice for three half days a week over about a year. She learnt the techniques that are used in brief consultations about acute minor illness and was given experience in using a tongue depressor, torch, auriscope, and stethoscope. After the training year she began her own consultations, working for two hours each afternoon. Her speed gradually increased up to 10 minute appointments.

The receptionists were taught to offer a consultation with the nurse practitioner to patients requesting an urgent same day appointment. Patients were told that if either they or the nurse was unhappy with the diagnosis or treatment after the consultation, the duty doctor would be consulted. If patients demurred in any way they were given an appointment with a doctor. When prescriptions were required they were signed by doctors without the patient being seen by them. The nurse provided a one line summary of symptoms and signs and a diagnosis on the back of the prescription, which she wrote out. All patients were advised about the development of symptoms that would make further consultation advisable. Those with non-minor illness -for example, family planning or gynaecological problems—had their immediate problem attended to and were advised to attend appropriate clinic sessions. The nurse did not ask patients to come back and see her. When she felt that follow up was necessary she asked patients to see their own doctor. If samples were taken for tests she advised patients to telephone her for the results. These telephone consultations were not included in the total.

### Results

From November 1992 to May 1993 the nurse did 696 face to face consultations. In 602 of them there was no doctor contact, in 53 the doctor saw the patient also, and in 41 there was a telephone discussion (table). Half

	Total consultations (n=696)	Upper respiratory tract infections (n=183)	Chest infection and asthma (n=31)	Tonsillitis, otitis media, otitis externa (n=97)	Conjunctivitis (n=29)	Skin problems (n=125)	Genitourinary, gynaecology, family planning (n=56)	Trauma (n=35)	Other (n=140)
Treatment received:									
Advice or over the counter drugs	343 (50)	159 (87)	1 (3)	7 (7)	2 (7)	56 (45)	16 (29)	15 (43)	87 (62)
Antibiotics	149 (21)	22 (12)	23 (74)	77 (79)	2(7)	6 (4)	4(7)	2 (6)	13 (9)
Creams or applications	119 (17)	0`´	0`´	12 (12)	25 (86)	56 (45)	13 (23)	2(6)	11 (8)
Other	85 (12)	2(1)	7 (23)	1(1)	0	7 (6)	23 (41)	16 (46)	29 (21)
Doctor involvement:	` ,	• • •	. <=-/	- <-/		. (0)	(/	10 (10)	27 (21)
None	602 (86)	173 (95)	18 (58)	82 (85)	25 (86)	108 (86)	45 (80)	31 (88)	120 (86)
Saw patient	53 (8)	4(2)	11 (35)	6 (6)	1 (3)	12(10)	2(4)	3 (9)	13 (9)
Telephone discussion	41 (6)	6 (3)	2 (6)	7 (8)	3 (10)	5 (4)	9 (16)	1 (3)	7 (5)
Seen within 2 weeks for same conditi		ν-7	\- <sub>1</sub>		- (=0)	- (-/	- (10)	- (3)	. (3)
Yes	147 (21)	37 (20)	8 (26)	20 (21)	2 (7)	21 (17)	15 (27)	4(11)	40 (29)
No	549 (79)	146 (80)	23 (74)	77 (79)	27 (93)	104 (83)	41 (73)	31 (89)	100 (71)

of the patients were given advice on self care with or without a recommendation for over the counter drugs, 149 received a prescription for antibiotics, and 119 had creams or applications prescribed. Most patients (549) did not consult again about that episode of illness.

The nurse saw 183 patients with upper respiratory tract infections, and she diagnosed and managed 173 of them without referral to the doctor, although a prescription had to be signed for 24 (table). Apart from those with asthma and chest infections she managed 80% to 90% of patients with other conditions without a doctor. Eleven (36%) patients with asthma or chest infection were seen by the doctor, and eight of them consulted again within two weeks for continuing care. Fifteen (27%) patients with genitourinary, gynaecological, and family planning problems consulted again, but many of these consultations were at the formal clinic sessions.

### Discussion

Diagnosis is not an uncommon part of a nurse's job. Midwives and health visitors work in the community as independent professionals and diagnose and manage illnesses. Health visitors give advice to mothers about how to deal with the minor illnesses of their children and sometimes request prescriptions from general practitioners. Nurse practitioners in some accident and emergency departments and workplace medical centres diagnose, sort, and triage patients. Our study shows that nurses can both diagnose and treat minor illness when working in a team setting.

The nurse conducted most of the consultations unaided and handled 95% of patients with upper respiratory tract infections. Most patients with such infections received only advice and suggestions for over the counter medicines such as paracetamol. Importantly, she identified more serious illnesses such as chest infections and asthma and sought a doctor's opinion. Patients with skin diseases who were referred to the doctor (10%) were usually referred for a more definitive diagnosis, and the number could decrease as the nurse sees more cases. Nevertheless, in 14% of consultations some doctor contact was necessary and in half a signed prescription was required. Immediate availability of doctor was therefore essential, as was good communication between doctor and nurse.

Of patients with acute family planning problems, 43% returned to the appropriate clinic. This indicates that the nurse did not provide full opportunistic care but merely dealt with the urgent problem (such as emergency contraception). The nurse did not do any opportunistic health checks nor deal with hidden agendas that she detected but encouraged patients to make more appropriate and leisurely appointments at the special clinics in the practice or with their doctor.

# TRAINING OF THE NURSE

Nursing and midwifery training and practice, plus

experience as a mother, provided satisfactory basic knowledge for the nurse. Her further training by observation of the duty doctor dealing with the appropriate casework was easy to provide. If this experiment is to be taken up more widely courses for practice nurses will need to include the diagnosis and management of acute minor illness, and experienced general practitioners are the ideal teachers. They are also able to offer supervised practical experience in their surgeries."

From the medicolegal standpoint general practitioners remain legally responsible for acts and omissions of any member of their staff to whom clinical tasks are delegated. Nevertheless, if a legal case arose the doctor's defence would be stronger if there were proof of adequate training, qualifications, and experience, as well as a consultation followed by reasonable diagnosis and management.

#### WORKLOAD

Because we kept no record of doctors' extra hours before and during the study we are unable to say how much the duty doctor's workload fell. We presume, however, that some of the 12 or so patients seen each day by the nurse must have had an effect on the doctor's evening surgery, minimising the extra patients that delay return home in the evening. Presumably if the nurse had been available for more than just two hours per day there would have been a greater effect.

Since the end of the study the nurse has started consulting later in the day (4-6 pm) and sees extra patients when her appointments are fully booked. Thus she now provides even more relief to the duty doctor in a particularly busy part of the day. It is possible that the absence of any waiting time for minor illness might have resulted in more patients consulting with such illness, thus undermining attempts to encourage self care. The nurse is, however, aware of this and her consultations include education on self care, as shown by the large number of patients receiving advice only and no prescription.

### SATISFACTION OF PATIENTS

Whenever tasks previously carried out by doctors are undertaken by other health care workers the question of patient satisfaction is raised, even though patient satisfaction with the original doctor care has often not been evaluated. No evidence exists of satisfaction of patients requesting a same day appointment with a doctor, but we have some anecdotal evidence that patients were satisfied with the nurse's care. Firstly, about 90% of patients accepted an appointment with the nurse, and a few patients who had seen the nurse subsequently requested consultations with her. Secondly, the fact that almost 80% of patients did not return for a further consultation about that episode of illness suggests the treatment was effective, which is presumably linked with satisfaction.

# Key messages

- Patients requesting same day appointments for minor illness increase doctors' workload
- A nurse was trained to deal with such patients by sitting in on the duty doctor's surgery
- The nurse managed 86% of patients without contact with the doctor; half required a prescription signing
- Half of patients required only advice on self care, and 79% did not reconsult
- Practice nurses could successfully manage many patients requesting same day appointments with their general practitioner

Several of the doctors discussed patients they had followed up with the nurse, and there was never any evidence of serious errors in assessment and management. Of the patients who returned, about half had been told to do so to have their progress assessed and most of the others simply had the nurse's diagnosis confirmed and were told to persevere with the treatment. A few had developed complications of the initial illness—for example, a red ear drum after an upper respiratory tract infection—or side effects of treatment -for example, vaginal thrush from ampicillin. Few patients had their diagnosis changed, and this was usually because the passage of time had clarified the exact nature of the illness-for example, a herpetic eruption along an area of previous skin discomfort. The doctors believed that these eventualities would almost certainly have occurred even if the patients had seen them in the first instance. There were no formal complaints from patients in the waiting room "complaints box," to the practice manager, or to the family health services authority.

#### REPLICATION IN OTHER PRACTICES

This method of care of minor illness will be attractive to many overburdened practices. We do not think it would be difficult to replicate it but emphasise that the nurse's training and experience, receptionists' sensitivity and understanding of the system, and highly tuned communication and cooperation between doctor and nurse are all vital ingredients. Her work continues here and the family health services authority continues to support it financially.

We acknowledge the support and cooperation of all members of the primary health care team at Norton Medical Centre in the implementation of this work.

- 1 Statistical bulletin No 4. Leeds: NHS Executive, 1994.
- 2 Atkin K, Lunt N, Parker G, Hirst M. Nurses count—a national census of practice nurses. York: University of York, 1993.
- 3 Marsh GN. Efficient care in general practice. Oxford: Oxford University Press,
- 4 Bowling A, Stilwell B, eds. The nurse in family practice. Practice nurses and nurse practitioners in family health care. London: Scutari Press, 1988.
- 5 Jewell D, Turton P. What's happening to practice nursing? BMJ 1994;308:
- 6 Chan CA, Wilkin D, Glendinning C. Annual assessment of patients aged 75 years and over: general practitioners' and nurses' views and experiences. Br 7 Gen Pract 1994:44:263-7.
- 7 Jewell D, Hope J. Evaluation of a nurse-run hypertension clinic in general
- practice. Practitioner 1988;232:484-7.

  8 Barnes G. Nurse-run asthma clinics in general practice. J. R. Coll. Gen. Pract 1985:35:447
- Waine C. Diabetes in general practice. London: Royal College of General Practitioners, 1992.
- 10 Read SM, Jones NMB, Williams BT. Nurse practitioners in accident and
- emergency departments: what do they do? BMJ 1992;305:1466-9.

  11 Ross FM, Bower PJ, Sibbald BS. Practice nurses: characteristics, workload and training needs. Br J Gen Pract 1994;44:15-8.

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# ANY QUESTIONS

A woman is adopting a baby from birth and would like to breast feed. What advice and practical help can she be given? She has no living children and has not breast fed before.

It is quite possible for a woman who has not been pregnant or not lactated to breast feed, and much experience is available, particularly from the United States. It is easier if the adoptive mother has been pregnant before as may be the case here, but this is by no means essential. To breast feed another mother's baby requires determination, patience, and perseverance, and success is not measured only by milk production.

The breasts should be prepared in advance by the regular use of a breast pump to stimulate the nipples. The baby should be put to the breast as soon as possible after birth, though this may not be until several weeks in a baby coming for adoption. Artificial teats should be avoided as the baby learns a different technique of suckling. The baby should be put to the breast frequently (two hourly initially) to stimulate lactation.

Oxytocin nasal spray may promote the let down reflex, but there is only anecdotal experience of its use. The main artificial aid (not strictly a stimulant) is a supply line or Lact-aid, which supplies formula milk through a feeding tube placed beside the nipple. The baby suckles at the breast and also obtains nutrition through the tube from a pack attached to the chest so does not become accustomed to a bottle. This supplementation is gradually reduced as the mother's own supply builds up.

It is essential that plenty of support is available—both from the partner and relatives and from informal and expert advisers. The La Leche League and National Childbirth Trust can provide advice and documentation

(see below). A local breastfeeding counsellor should also be contacted.

Success is not measured only by the production of an adequate supply of milk. Non-nutritive suckling at night and in the morning can be a pleasurable experience for both mother and baby and is said to increase emotional attachment. In a study of 240 adoptive breastfeeding mothers 35% had never been pregnant and another 23% had never breast fed before.1 Over 80% of the babies were exclusively bottle fed before going to their adoptive home. Three quarters of the babies were willing to nurse by the end of the first week of trying. Most infants were under 2 months. More than three quarters of the mothers felt positive about their experience of induced lactation. The bonding experience of breast feeding was generally felt to be more important than milk production. Measured by requirement for supplementation, 63% needed no more than 480 ml of supplemental fluid a day. Fifty four per cent required supplements as long as the mother nursed. A quarter of mothers who had never been pregnant were able to eliminate supplements before weaning the baby off

Doctors tend to be sceptical about the concept of relactation, but it is perfectly possible given perseverance and support.

Further information is available from the National Childbirth Trust, Alexandra House, Oldham Terrace, London W3 6NH, and La Leche League, Box 3424, London WC1N 3XX.—TONY WATERSTON, consultant community paediatrician, Newcastle upon Tyne

1 Anerbach KG, Avery JL. Nursing the adopted infant-report from a survey. Resources in human nurturing international. London: National Childbirth Trust, 1979.