Nurse practitioners in major accident and emergency departments: a national survey

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SUMMARY
Use of nurse practitioners in major accident and emergency (A&E) departments is rapidly increasing: currently they are used in 30% of such departments and this is expected to rise to 63% by the end of 1995.

Most are trained by a formal programme in the employing hospital but 12% claim to have no formal training. The nurse practitioner could prescribe a limited range of drugs in 82% of major departments with ‘official’ nurse practitioners, but radiograph requesting was permitted in only 57% of such departments: of those not able to request radiographs, 95% blamed radiographers for preventing this.

Keywords: major department, minor department, nurse practitioner.

INTRODUCTION
Traditionally, the A&E department nurse practitioner has been an unofficial role in a small A&E department with general practitioner (GP) back-up.

In the late 1980s, there were several publications proposing nurse practitioners as an effective way of tackling waiting times in major A&E departments, and it appeared to us anecdotally, that the number of departments following this advice was increasing. However, we were aware of considerable variation in the role of the nurse practitioner in different hospitals, and this study was designed to examine the change in prevalence, variation in role, and reasons behind this variation.

METHOD
A questionnaire was sent to the nurse-in-charge at all A&E departments in England and Wales in January 1994 (see Appendix 1) having been tested in a pilot study in South West Region. The source for identifying departments was the BAEM Handbook 1993.

The definition of a nurse practitioner was as follows: a nurse who is authorized to assess and treat patients attending an A&E department, as an alternative to the patient seeing a doctor. Some nurses work unofficially as nurse practitioners without actually holding the title.

On this basis, those departments with nurse practitioners were asked whether they were ‘official’ (officially recognized and so titled) or ‘unofficial’ (working unofficially as nurse practitioners).

RESULTS
Replies were obtained from 357 out of 465 functioning major and minor A&E departments: a response rate of 77%. The data were collated and divided into major or minor departments; specialist departments (ophthalmic, paediatric etc.) were not studied as they have a long tradition of nurse practitioners and a specific caseload. Those having 24-h resident medical cover and receiving ambulance trauma cases were considered major, and all others minor. The response rate was 201/225 (88%) from major departments, and 156/240 (65%) from minor departments, but within these groups failure to respond was not linked to size of department or geographical location.

Prevalence
There were 202 replies from major departments, of which 60 (30%) used nurse practitioners. Forty-nine (82%) were ‘official’ nurse practitioners and 11 were ‘unofficial’ (see definition above). In contrast, 89 of 140 (64%) minor departments responding used nurse practitioners, and only 15/89 (17%) were officially recognized as such. The
mean number of nurse practitioners in ‘official’ major departments was 4.2 per department.

Changing prevalence

Respondents were asked how long their nurse practitioner service had been running, and if those not currently doing so had plans to introduce such a scheme in 1994 or 1995. Using this data it was possible to calculate the number of departments using nurse practitioners in each of the previous 5 years, and to predict future growth (Fig. 1).

Grade

The post of nurse practitioner in major departments tended to receive a higher grade than in minor departments. In major departments the median grade was ‘G’ (mode ‘G’) compared with a median of ‘F’ (mode ‘E’) in minor departments (see Fig. 2).

Dedicated nurse practitioners

Of 49 major departments, nine with official nurse practitioners considered them to be ‘dedicated’, that is they work solely as nurse practitioners, often in a separate room with no other clinical role in the department. A further three departments sometimes worked this way, depending which practitioner was on duty. The others mix nurse practitioner work with involvement in the general nursing work of the department.

Training

In major departments with official nurse practitioners, 31 out of 49 (63%) received formal training internally (in the employing hospital or trust) from a combination of doctors and nurses, and 15 out of 49 (31%) were sent on an external course. Practitioners in six out of 49 departments (12%) claimed to have received no formal training at all.

Radiographs

Of the 49 major departments with official nurse practitioners, 29 (59%) allow them to request
certain radiographs. All were restricted to limbs (usually knee or elbow distally) and all had a minimum age limit, which varied from 1 to 12 years.

Prescribing

Of the 49 major departments with nurse practitioners, 40 (82%) allow limited prescribing (dispensing) by the nurse practitioner. Of the 40, all can prescribe tetanus toxoid, 30 can prescribe ‘over the counter’ (pharmacy only and general sale list) medication such as paracetamol, and nine can prescribe ‘prescription only’ items such as oral antibiotics.

Restrictions

The nurse-in-charge was asked which of the following groups they felt had restricted the activities of the nurse practitioner the most. The number of responses to each option, and the percentage that this represents of major departments with nurse practitioners (60) are set out in Table 1. In major departments, 31 out of 60 (52%) answered ‘radiographers’ and 14 out of 60 (23%) said ‘legal considerations’. However, of the official nurse practitioners who were not authorized to request radiographs 19 out of 20 (95%) said ‘radio-graphers’. This strongly suggests that radiographers had successfully opposed an attempt to introduce such a system in those hospitals.

**DISCUSSION**

The use of nurse practitioners in A&E departments is increasing rapidly, and is predicted to reach 63% of major departments by the end of 1995. It appears that the principal reason for this is to reduce waiting times; however, the published evidence to support this only demonstrates a time saving in those patients sent for radiographs. Of major departments with official nurse practitioners, 41% do not allow them to request radiographs, and it would be interesting to know whether those departments have achieved a reduction in waiting times. The apparent blocking of radiograph requesting by radiographers in 95% of such hospitals is disappointing, as it has been demonstrated that suitably trained nurses can request limb radiographs as effectively as doctors.

The great majority of official nurse practitioners have been formally trained for the role: in the absence of national guidelines most hospitals have arranged training in the light of their requirements and resources. The Royal College of Nursing have been considering national guidelines for some years, and their introduction in a non-compulsory form was recommended by the audit commission. Six major departments appear to operate an official nurse practitioner system without providing any formal training, against the advice of the Department of Health and Social Security and possibly exposing the nurse to legal action. The legal position of ‘unofficial’ nurse practitioners is unclear.

Read et al. found that 3% of attendances at major departments were dealt with entirely by nurse practitioners. This relatively low number is sometimes cited as evidence that they are not a cost-effective way of tackling waiting times. However, with the exception of the four departments identified in our study who operate a ‘dedicated’ nurse practitioner, all have to combine the role with other nursing duties (this also has the advantage that the nurse remains exposed to a wide variety of injury and illness).

Our own audit at Frenchay Hospital (1993) found that 4.5% of new attendances were dealt with entirely by nurse practitioners, but in an additional 4.3% of attendances, the nurse practitioner

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of respondents</th>
<th>Percentage of departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors in A&amp;E</td>
<td>6</td>
<td>10.0%</td>
</tr>
<tr>
<td>Nurses in A&amp;E</td>
<td>1</td>
<td>1.7%</td>
</tr>
<tr>
<td>Radiographers</td>
<td>31</td>
<td>52.0%</td>
</tr>
<tr>
<td>Hospital or trust management</td>
<td>4</td>
<td>6.7%</td>
</tr>
<tr>
<td>Patients</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Legal considerations</td>
<td>14</td>
<td>23.0%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Table 1. Groups felt to have restricted the role of nurse practitioners
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requested radiographs, necessitated the involvement of a doctor afterwards, but saved the patient time.3-5

Over 80% of patients attending with injuries within our protocol for nurse practitioners were happy to be seen by a nurse practitioner only,a and all patients wishing to see a doctor can do so.

REFERENCES

APPENDIX 1

THE EMERGENCY NURSE PRACTITIONER

Dear Nurse in Charge

We are conducting a study into the use of emergency nurse practitioners in accident and emergency (A&E) departments, and would be most grateful if you would spare us a couple of minutes to answer the following questions. All replies will be treated in the strictest confidence.

An emergency nurse practitioner is a nurse who is authorized to assess and treat patients attending an A&E department, either as an alternative to the patient being seen by a doctor, or in the absence of a doctor in a department where a continuous medical presence is not maintained. Some nurses unofficially function as nurse practitioners without actually holding the title.

1. Does your Accident and Emergency department run a nurse practitioner service?
   - Yes – Official
   - Yes – Unofficial
   - No
   If no, please proceed to question 11

2. How many nurse practitioners do you have?

3. Do they work as ‘dedicated’ nurse practitioners (working separately from the rest of the department, no other clinical role), or are they expected to carry out other clinical nursing functions as workload dictates?
   - Dedicated
   - Not dedicated

4. What grades are they?

5. Were your nurse practitioners trained by
   - (a) Other nurses
   - (b) Doctors
   - (c) Both (more than one may apply)
   - (d) No formal training
   - (e) An external course

6. When did you commence your nurse practitioner service?

7. What percentage of new patients are seen by a nurse practitioner?
8. Your nurse practitioners can:

(a) Order radiographs

☐ Yes  ☐ No

(if restricted to certain A&E departments please state which)

(b) Prescribe drugs without recourse to a doctor

☐ Yes  ☐ No

If yes:  ☐ ‘over the counter’ e.g. paracetamol

☐ Prescription only medicines (please state which)

☐ Tetanus toxoid

(c) Other

9. What restrictions have been imposed on your nurse practitioner service?

(a) Minimum age of patient

☐

(b) Hours of day (other than due to nurse practitioner not being on duty)

☐

(c) Others - please state

10. Which one of the following groups have restricted your nurse practitioner service the most?

(a) Doctors in A&E

☐

(b) Other nurses in A&E

☐

(c) Radiographers

☐

(d) Hospital or trust management

☐

(e) Patients

☐

(f) Legal considerations

☐

(g) Other

11. Are you planning to start a nurse practitioner service?

(Answer only if not currently doing so)

(a) Yes  ☐ expected year of commencement

(b) No  ☐ would like to but unable to because

(c) No desire to run such a service  ☐ (please give reasons)

12. Please state number of new patients in total seen in your department in 1993.

Thank you for taking the time to complete this survey.

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