SHORT REPORT

Are today's junior doctors confident in managing patients with minor injury?

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Objectives: To assess the confidence of junior doctors in managing minor injuries, compared with other common acute conditions.

Method: A questionnaire designed to elicit areas of confidence and subjective competence was distributed to junior doctors working in the emergency department in December 2004.

Results: Junior doctors felt most competent and confident working with medical trolley patients and least competent working with patients with minor injury. A lack of teaching and experience in handling minor injuries (which are seen by nurse practitioners in a separate unit during the day) was highlighted.

Conclusions: Nurse-led minor injury units may have an effect on junior doctors' experience and confidence in minor injury care. Further effort needs to be made to increase the training of junior doctors in minor injury care.

Increasing numbers of patients with minor injuries are being assessed and treated by nurse practitioners in separate units. Previous studies have shown that nurse-led minor injury services can provide worthwhile and effective service.^{1,2} However, little attention has been focused on the effect of minor injury units on the training and experience of junior doctors.³

The study was carried out in the emergency department of the Northern General Hospital, Sheffield, an adult-only department, seeing approximately 90 000 patients per year. There is a minor injuries unit within the department, open from 08:00 to 22:00 h, which is staffed exclusively by nurse practitioners.

This study aimed to assess the confidence and subjective competence of current junior doctors in managing minor injuries, compared with other common conditions presenting to the emergency department.

METHOD

A questionnaire was designed with two main questions (for questionnaire, see the appendix at <http://emj.bmjournals.com/supplemental>).

Question 1 asked doctors to rank the type of patients (eg, medical trolley, surgical resuscitation, minor injuries) they felt most to least competent managing. The subjective competence score was then calculated (10-rank score), ranging from 1 to 9—the higher the number, the more competent the doctor feels. Data compared confidence in managing minor injury conditions with all other conditions using a two-way analysis of variance and Dunnett's retrospective adjustment.

Question 2 assessed confidence in managing common presenting complaints. The coding categories of emergency department attendances for 2003 were used to identify 20 of

the most common presenting complaints. These were listed along with five other presenting complaints that were considered important, although not necessarily as common as, for example, cardiac arrest. We ensured that there was at least one complaint from most of the common specialties—for example, medicine, general surgery, orthopaedics, ENT, ophthalmology, plastics, obstetrics and gynaecology, and psychiatry.

A 10-cm visual analogue scale was devised to measure the doctor's confidence in managing the presenting complaints listed. This was chosen as it is easy to complete and allows expression of a subjective attitude that ranges across a continuum.⁴ The confidence scores for each item were analysed individually and grouped into relevant specialties—medical, surgical and minor injuries. The minor injuries group consisted of presenting complaints normally seen in the minor injuries unit by nurse practitioners; the medical group and surgical group consisted of presenting complaints that may be referred to them for further management. Two-way analysis of variance compared mean confidence scores for medical, surgical and minor injury conditions with the Student–Neuman–Keuls adjustment.⁵

The second part of this section was used to collect qualitative data, to elicit opinions on how the management of conditions where confidence is lacking could be improved.

Seventeen junior doctors working in the department in December 2004 were sent questionnaires to be completed anonymously.

RESULTS

The response rate was $n = 14$ (82%). The respondents analysed had been working as senior house officers in the emergency department for 4 months. The mean period since qualification was 2.32 (SD 0.82) years.

The doctors felt most competent working with medical trolley patients and least competent working with minor injuries (mean score of minor injuries 1.2, mean score of other conditions 5.46, $f = 15.46$, $df = 8$, $p < 0.05$).

The “top three conditions” the doctors felt most confident in managing were chest pain, paracetamol overdose, and shortness of breath. The “bottom three conditions” they felt least confident in managing were shoulder injury, burns and vaginal bleeding.

Grouping the presenting complaints into relevant specialties, the doctors were considerably less confident in managing minor injuries than medical and surgical presenting complaints (confidence scores for minor injuries 6.04, medical 7.41 and surgical 6.64, $f = 5.5$, $df = 2.0$, $p < 0.05$).

The doctors criticised the system where minor injuries are seen exclusively by nurse practitioners in the daytime, but entirely by junior doctors at night. They suggested more “on the job” teaching in minor injury conditions and more daytime exposure. As one doctor succinctly wrote, “there is no substitute for hands-on experience”.

Figure 1 Subjective competence in managing patient groups.

LIMITATIONS

This is a small, single-centre study with an established nurse-led minor injury unit. Unfortunately, we could not assess the direct effect of the minor injuries unit on the confidence of junior doctors as we do not have any data from before the opening of the unit in December 2002.

DISCUSSION

We have shown that in our hospital, with a separate minor injuries unit, junior doctors are considerably less confident in managing minor injuries compared with other conditions.

Increasingly, minor injuries and other such conditions are being assessed in isolation by nurse practitioners. If such experience is excluded during training, difficulties may arise when doctors are expected to provide support to their own junior staff and nurse practitioners as they become more senior.

Further study is needed to assess what may be a major problem for the future of our specialty. Our department is currently considering ways to integrate the minor injuries unit into the main department and increase junior doctor training in minor injury care.

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