comfort. All these skills are already available within our existing service.

SYDNEY BRANDON

Postgraduate Dean,
University of Leicester School of Medicine,
Leicester LE2 7LX

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Teaching junior doctors practical procedures

"See one, do one, teach one" will no longer do

Junior doctors are not only overtired from working long hours but are also dissatisfied with the quality of their work.[1] House officers complain that too much time is spent on chasing results and organising beds and too little on training—particularly on being taught practical procedures.

Poor performance at resuscitation illustrates well the inadequacy of practical teaching. The problem was first noticed at least five years ago, and courses were recommended to improve juniors' skills.[2] But despite this, performance remains poor.[1] Furthermore, the experience gained by attending cardiac arrests has not been shown to be a substitute for proper training,[3] scuppering the shibboleth "see one, do one, teach one."

Not only junior doctors are unhappy. Patients now have greater expectations and are increasingly taking their cases to the courts.[4] The threat of negligence claims and the risks of complications might both diminish if junior doctors called for help when in trouble, but many fail to do so—either through overconfidence or through reluctance to disturb their seniors. This problem is compounded if seniors fail to attend when summoned.[5] In a recent survey on urethral catheterisation seven of the 30 house officers questioned had not wanted to seek advice "because of their impression that difficulties with catheterisation were not worthy of disturbing senior staff."[6] Overall, 25 had caused complications during catheterisation. Supervision was poor: four had never been supervised, and 24 had been supervised only once. The General Medical Council recommends that experience in the preregistration year should be acquired under the supervision of consultants and other senior medical staff.[7] A survey in Liverpool, however, showed that 85% of the 115 house officers questioned received most of their teaching from other junior doctors and 62% had learnt "a lot" from the nursing staff.[8]

Sadly, problems may worsen because house officers are likely to gain less and less experience in future on the wards—a phenomenon already recognised in the United States.[9] The emphasis on patient care is shifting from the wards to outpatient departments, and unless house officers spend more time in clinics the opportunity for them to learn on the job will decline.

Exposing house officers to more practical procedures during the undergraduate years would be one way of improving their preparation, especially for facing patients alone and at night. As undergraduates they are free to ask questions without the fear of disturbing the sleep of registrars and may familiarise themselves with equipment. A survey of London graduates confirmed that they would have preferred better practical training at medical school.[10] But however desirable this may be, the difficulty remains of declining numbers of inpatients available for teaching.

The medical school at Maastricht in The Netherlands has found a way round using patients as teaching aids by pioneering a skills laboratory for training undergraduates. Models are used to acquire skills: students may practise inserting cannulas into plastic arms, learn to use an ophthalmoscope on a model eye, perform a vaginal examination on a plastic pelvis, and resuscitate a manikin. Communication skills using role playing and real patients are also taught.[11] Simulated learning is not new to Britain and is already used in surgical training,[12] but up until now it has not been established in the undergraduate curriculum. Plans are, however, already underway for the first skills centre run along the Maastricht lines to open at St Bartholomew's Hospital in London next year.

But changes also bring problems. Juniors must be wary that their hard won agreement over hours could jeopardise their opportunity to gain practical experience. Danish doctors confronted the problem of long hours 10 years ago. Their working week is now reduced to 37 hours, but after six years' training a registrar may have performed only two or three cholecystectomies.[13]

Many changes are taking place in the NHS and it is up to the General Medical Council, the royal colleges, the BMA, and the medical schools to make sure that juniors' training does not suffer along the way.

ALISON WALKER

Medical registrar, *BMJ*

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