Junior doctors often feel ill equipped to undertake prescribing. Enter pharmacists, who can make a valuable contribution to the education of medical students, especially in the area of therapeutics

Why and how pharmacists should get involved in medical education

By Lelia Bissell, DipClinPharm

Starting to prescribe is one of the biggest steps taken by medical students when they become foundation year 1 doctors. Many feel poorly prepared for their prescribing role and, in recent years, a shortfall in prescribing education within medical school curricula has been identified. Following the publication of “Tomorrow’s doctors” by the General Medical Council in 2009, the British Pharmacological Society set out a core curriculum outlining the knowledge medical students should achieve by the time of graduation. This curriculum has recently been updated.

Clinical pharmacists should play an important educational role within medical schools to ensure the BPS’s suggested learning outcomes are achieved. They can also help medical students to understand multidisciplinary working and the breadth of professional skills.

Reasons to get involved

An understanding of clinical pharmacology and therapeutics (CPT; see Box 1) is a solid foundation on which to develop prescribing skills. It has been suggested that individuals with specialist training in CPT should, ideally, lead its education within undergraduate medical programmes. However, in recent years the number of clinical pharmacologists in the UK has fallen — leaving behind a gap that can be filled by pharmacists.

CPT teachers can have either clinical or non-clinical backgrounds and may or may not have specific training in pharmacology or pharmacy. This variation in professional experience is valuable; furthermore, the BPS suggests that enthusiasm and expertise in the rational use of medicines is more important than professional background.

Recent data indicate that pharmacists are involved in CPT education at some 80% of medical schools. There are many reasons why pharmacists should become more involved in medical education (see Box 2, p302). So how can you get involved and how involved could you become? Here I offer some top tips, drawn from my experiences of providing CPT education at Brighton and Sussex Medical School (see Box 3, p302).

How to get involved

If you are an experienced, enthusiastic and innovative pharmacist who is keen to become involved in medical education, do not be shy about coming forward. Medical schools will be interested in the skills you have to offer and a range of opportunities exists.

Although there might be concern about funding for such work, most medical schools are happy to reimburse pharmacists for their time. (This model works well at BSMS, which regularly recruits clinical pharmacist facilitators who typically work for the local acute trust.)

It is worth contacting a local medical school and seeking contact details for the CPT department or curriculum lead. Alternatively, a local school of pharmacy may provide useful advice, since there is often interprofessional learning between medical and pharmacy undergraduates.

Consider ways to boost your CV with relevant experience. The BPS is currently developing a national prescribing skills assessment, due to be launched in 2014, and is actively seeking pharmacists to contribute to question writing (indeed pharmacists already constitute one third of the question writers for the assessment). Various e-learning initiatives, such as Prescribe (www.prescribe.ac.uk) and SCRIPT (www.safeprescriber.org), can provide other such opportunities.

Box 1: What is CPT?

Clinical pharmacology and therapeutics (CPT) is a small academic and medical specialism, and many modern medical schools do not have a dedicated academic department. CPT knowledge is just one of the many important elements of medical practice. CPT tends to exist as a vertical theme within many medical school curricula, meaning that the subject is integrated throughout the undergraduate course. For example, at Brighton and Sussex Medical School, basic pharmacological science and systems-based pharmacology are taught in years 1 and 2 and clinical therapeutics is introduced in year 2 and continued through to year 5. In the latter half of the degree there is a major emphasis on prescribing training to ensure students are prepared to be safe and effective prescribers when they graduate.
Levels of engagement
Currently there are varying levels of clinical pharmacist commitment within medical education. A formal full-time role for pharmacists is unusual in the UK; typically, that level of commitment is not necessary. Pharmacists can be actively involved in teaching sessions within their competence and specialization. BSMS runs a successful pharmacist-led tutorial programme; such programmes have been shown to increase knowledge and understanding of drug use. It is also often possible to become involved in facilitating problem-based teaching within medical schools.

Involvement in medical education may take a more practical approach within the clinical environment. For example, pharmacists can reinforce any learning points and reiterate any prescribing issues that are highlighted to medical students on ward rounds or in tutorials during clinical placements. Learning outcomes should include an explanation of the pharmacist’s role, highlight the importance of patient safety and provide an introduction to prescribing paperwork and documentation.

Graduation is not the end of prescribing training so, equally, pharmacists may wish to get involved in foundation doctor training programmes. At Brighton and Sussex University Hospitals NHS Trust, senior pharmacists and doctors jointly deliver a successful teaching programme to junior doctors.

Potential benefits
Pharmacist involvement in medical education encourages a cultural shift towards a more multiprofessional approach to patient care. Early introduction of interprofessional learning in the medical degree means medical students have an increased understanding of the importance of clinical pharmacists. As a result, future doctors are more likely to engage with pharmacists throughout their careers — thus fostering more harmonious professional relationships. Pharmacists who take on academic positions will be expected to undertake and publish research — this experience would be an asset for any pharmacist aspiring to practise at consultant level. Since there is very little evidence around the involvement of pharmacists in CPT education, there are great opportunities to carry our research in this area.

There are also useful qualifications within medical education that pharmacists would be encouraged to undertake (eg, postgraduate certificates and master’s degrees in medical education).

Just the tonic
In my role at BSMS (Box 3) I have come to realize the valuable contribution that pharmacists can make to medical education and how essential their involvement is for ensuring our future doctors are competent and confident prescribers.

I believe that no other professional group can offer the same degree of expertise and experience in medicines use. Involvement in medical education should be a tonic to be enjoyed by any pharmacist.

Box 2: Pharmacist involvement in medical education
Pharmacists are already established providers of clinical education to medical students and of patient-specific pharmaceutical care alongside doctors. Moreover, the General Medical Council has recommended that medical students spend time with pharmacists during practical placements to gain understanding of the prescribing process. Pharmacists possess many skills and attributes that are important to educate students successfully in clinical pharmacology and therapeutics. These include:

- An expert theoretical and practical drug knowledge
- The ability to provide reliable, unbiased drug information
- The ability to offer advice on rational medicine use and appropriate prescribing
- A strong understanding of literature review, clinical trials, data handling and evidence-based medicine
- A commitment to detail in documentation and a familiarity with the prescribing process — essential for teaching medical students about the practicalities of prescribing
- Being accessible within clinical settings (due to being employed in larger numbers than many other medical specialists)

Although not all pharmacists are trained as prescribers, they review the prescribing process routinely and detect prescribing errors frequently. Additionally, in clinical settings where pharmacist prescribing does take place, it has been shown to be safe and clinically appropriate.

Box 3: My experience

I have now been working for five years as a full-time clinical tutor in therapeutics at Brighton and Sussex Medical School. This lead role involves:

- Close working with senior clinicians, clinical academics and pharmacists
- Development of innovative teaching methods
- Co-ordination and delivery of therapeutics teaching and prescribing training

Students receive education in lectures, seminars, small group work and, more recently, simulation with real patients at the local acute hospitals.

The post is an interesting one, not least because there are many opportunities to undertake research. I also get great job satisfaction, and value the positive feedback I receive from students.

References