Graduating a More Confident Pharmacist: Applying the Medical Model of Training

Bill Bartle

I have a dream — that some day clinical training for pharmacy undergraduate students will parallel that of medical students.

In my own undergraduate years, I never saw a patient — or another health care professional, for that matter. Fortunately, pharmacy undergraduate training has progressed since then, but the process has been long and slow, beginning with visits to clinical sites and observation of pharmacists in their roles, an experience in which no responsibilities were delegated to the student. Now, each student completes clinical clerkships of several weeks to months, during which they are integrated into the management teams caring for patients in hospitals, clinics, and community pharmacies. Unfortunately, however, such opportunities are generally offered at the very end of undergraduate training. As such, the student goes directly from primarily a setting of large classes and few expectations (except for the occasional problem-based learning discussion), to a setting of patient assignments and interactions, as well as small-group discussions within the health care team, with expectations of acquiring and discussing new knowledge, and applying it to assigned patients under close supervision. No wonder these pharmacy students appear to have, and sometimes admit to, an insufficient degree of confidence in providing any level of pharmaceutical care. Yet these students are only weeks to months away from graduating and becoming licensed pharmacists.

My 30 years of participating in clinical education for pharmacy and medical trainees has given me a unique view of how our respective professional faculties teach and, more important, train their prospective graduates. Medical training introduces students to the responsibility of taking care of patients in the first undergraduate year. This experiential approach progresses, such that third- and fourth-year medical students spend all of their time in the clinical setting, primarily in teaching hospitals and academic family practice units, accepting increasing responsibility and acquiring practical clinical knowledge. This undergraduate education culminates in, at a minimum, a 2-year postgraduate residency for family practitioners and several additional years for general internists and specialists. The General Medical Council of Great Britain has recently recommended increased and earlier patient contact for medical students in that country.[1]

As I see it, this style of education and early clinical training produces a confident medical graduate. Although we constantly emphasize how much more didactic pharmacology teaching our pharmacy students receive in the classroom relative to medical students, this type of teaching does not seem to translate into confident application of the knowledge to specific patients with specific diseases. In my experience, the medical student or intern will hear about, discuss with more senior trainees and practitioners, and take care of dozens of patients with, for example, diabetes or congestive heart failure over their 4 to 6 years of clinical electives, whereas a pharmacy student may see, at most, 1 or 2 such patients during a clinical elective after a 1- to 3-h practice-based learning lecture or seminar on both of these diseases. For many less common diseases that require drug therapy, pharmacy students may receive no instruction and observe no patients.

The present style of medical training has evolved over several centuries; in contrast, the current state of clinical training for the pharmacy student has evolved only over the past several decades, so it is not surprising that the medical trainee is exposed to superior clinical training that produces a more confident graduate.

It is possible, however, to move more quickly toward the medical model of education and training; in fact, we have already started the process. However, the next required step is a large one and will require a further committed effort from faculties of pharmacy and from

pharmacy departments in teaching hospitals to provide, respectively, a properly structured curriculum and sufficiently experienced clinical pharmacy practitioners with the ability and desire to act as teachers at the bedside. With time, the more senior pharmacy students and postgraduate trainees will be able to provide some of this clinical teaching, under the guidance and mentorship of experienced pharmacy practitioners, as is the case in the medical system. Selected community-based sites could provide some early clinical experience in the first year of the undergraduate program, priming students for greater clinical training and patient care responsibilities in the ensuing years. Just as medicine relies on medical students and trainees to provide, under supervision, a certain level of primary care to patients, so too can pharmacy guide this new breed of undergraduate to provide the initial aspects of pharmaceutical care at training sites, care that cannot now be provided because of insufficient resources.

As faculties of pharmacy contemplate a move to entry-level Doctor of Pharmacy programs, I think it is important that we strongly consider structuring existing and new undergraduate programs along the lines of the medical profession; otherwise, our graduates will have an increased knowledge base but will lack the confidence to apply this knowledge meaningfully in patient care. This could lead to even greater frustration on the part of practitioners, who will have obtained a clinical doctorate to work in a health care system that does not recognize their new level of training and that does not provide them with a suitable level of responsibility.[2]

Deans of faculties of pharmacy, clinical teachers, future employers, professional societies, and patients — we all will benefit from more confident pharmacy graduates. A single voice will not propel this change; rather, a chorus of agreement and action will be required to bring about this important step in pharmacy undergraduate education. I encourage those with similar impressions to step up and be heard, before it is too late.

References

1. Wass V, Richards T, Cantillon P. Monitoring the medical education revolution [editorial]. *BMJ* 2003;327:1362.
2. Kovacs S. An individual perspective on the pharmacy education scope of practice disconnect. *Pharmacotherapy* 2004;24:677-81.

Bill Bartle, BScPhm, PharmD, FCSHP, is Clinical Coordinator, Sunnybrook and Women's College Health Sciences Centre, University of Toronto, Toronto, Ontario. He is also an Associate Editor for *CJHP*.

Address correspondence to:
Dr Bill Bartle
Pharmacy Department
Sunnybrook and Women's College Health Sciences Centre
2075 Bayview Avenue
Toronto ON
M4N 3M5

e-mail: bill.bartle@sw.on.ca