## **LETTERS**

## A New Paradigm in Clinical Pharmacy Teaching in Pakistan

To the Editor. Clinical pharmacy is defined as a branch of pharmacy that deals with the science and practice of rational medication use. The term "clinical pharmacy" is relatively new in developing countries such as Pakistan. Awareness of this field among pharmacy professionals has followed the transformation from bachelor of pharmacy degree to doctor of pharmacy degree in 2004. This new 5-year program not only includes the word "doctor" in its title but also has shifted the focus of pharmacist from dispensing of drugs to patient-oriented pharmaceutical care.

Clinical pharmacy is an important aspect of this advanced degree, which requires a great deal of attention and clinical skills. Since the implementation of PharmD degree programs, clinical pharmacy has become the core of the profession. It has given new dimensions to the field of pharmacy in the form of pharmaceutical care, evidence-based practice, and quality assurance. Hence, the job of academicians has become more demanding in that they have to prepare pharmacy students so that they can justify their degree by meeting the expanded challenges of the profession.

The traditional method of delivering lectures using bulleted PowerPoint slides used to be considered the best approach to teaching. However, PharmD students cannot learn needed clinical skills by this conventional method alone. Contemporary methods of instruction that are appropriate to the subject should be implemented, as has been emphasized in other studies.<sup>2,3</sup>

In Pakistan, until now, the same old-fashioned style of teaching clinical pharmacy, which does not address the practical skills students will need in practice, has been followed. These traditional methods of teaching are not preparing students to handle real-life situations, and this in turn is raising apprehensions regarding the competence of pharmacists and the credibility of the PharmD degree.

One of the recognized pharmacy teaching institutes of Pakistan, of which I am a part, has taken a step forward to implement unconventional techniques in teaching clinical pharmacy, including case-based learning and analysis of doctors' orders. The main objectives of implementing these techniques were to expand students' minds and to

arouse their desire for learning by cultivating their self-learning capability and enhancing their ability to take initiative and participate in clinical pharmacy practice. These methods are showing positive signs in enhancing students' understanding of clinical pharmacy, engaging more students to participate in class, and considerably increasing their ability to critically analyze topics. These methods also are capable of building students' skills to practically implement what they are being taught at this level and hopefully will prove to be a lifelong learning experience for pharmacy students.

Also, because clinical pharmacy preceptorship is a daunting task, the clinical pharmacy preceptor should be a practicing clinical pharmacist. Unfortunately, none of the clinical pharmacy preceptors in Pakistan are currently practicing, except for those at Ziauddin College of Pharmacy. Unlike other institutes, this college is associated with a tertiary-care hospital, where clinical pharmacy preceptors practice apart from their academic responsibilities. From my perspective, having preceptors who also are practicing clinical pharmacists really has a high impact on enhancing the overall effectiveness of clinical pharmacy teaching, as it provides an opportunity for preceptors to share their day-to-day experience with students and help them develop their problem-solving ability.

Finally, there is a need to encourage these and other innovations at pharmacy institutions to fulfill the demands of clinical pharmacy. The challenge for us is to disseminate these interactive techniques throughout the pharmacy teaching institutes of Pakistan and train teachers in implementing them on a macro level. Universities also should encourage clinical pharmacy preceptors to associate themselves with hospitals where they can improve their preceptor skills by actively practicing clinical pharmacy. Otherwise, the pharmacy profession in Pakistan will lag behind in today's competitive world.

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