STATEMENTS

University-Based Continuing Education for Pharmacists

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University-based continuing education (CE) fulfills an important role to support the professional development of pharmacists, advance the practice of pharmacy, and contribute to societal needs for research and healthcare services. Opportunities for pharmacists to engage in new models of patient care are numerous worldwide, particularly as pharmacists' scope of practice has expanded. Approaches to CE have changed to address the changing needs of pharmacists and now include a variety of approaches to support development of knowledge and skills. There is emphasis on the learning process as well as the knowledge, with the introduction of the concept of continuing professional development (CPD).

As institutions of research and education, universities are uniquely positioned to bridge the gap between academic and practice environments, providing opportunities for translation of knowledge to practice. The Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta is a provider of CE in Alberta, Canada, where an expanded scope of pharmacy practice includes prescribing, administering injections, accessing electronic patient records, and ordering laboratory tests. In this paper, the Faculty offers views about future directions for CE, including the integration of CE with core faculty activities, expanding the audience for CE, areas of focus for learning, and partnerships. Finally, we hope to ignite dialogue with others in the profession about the role and function of university-based CE.

Keywords: continuing education, professional development, continuing professional development, universities

INTRODUCTION

The pharmacy profession and pharmacy education have undergone significant change and renewal in the last 20 years as pharmacists' roles have evolved worldwide.[1] To meet the challenges in the shift from a product focus to a patient focus, pharmacists have expressed a need for additional education and training.[2] To be responsive to pharmacists' new roles in pharmacy practice, continuing education (CE) in pharmacy must also change and be refocused.

CE in health professions in general has changed and taken on new directions over the last several decades. In the late 1960s, there was a call for continuing medical education to evolve from a reliance on delivering content and information, to a process model that promoted self-reliance for learning.[3] Over the same time period in pharmacy, while there was growing interest in CE, the efficacy of CE was questioned.[4] Most traditional CE was largely content-based and delivered to pharmacists through lectures or print-based correspondence courses. While traditional CE alone does not produce changes in practice[5,6] CE supports improvements in knowledge, skills, attitudes, behaviors, and patient outcomes if it is ongoing, interactive, contextually relevant, delivered using multiple techniques, and involves repeated exposures.[7-10] The approaches gaining attention for contributing to successful CE include, interactive, blended or multimedia delivery[5,11,12] work-based or practice-based learning[13-16] simulation,[17,18] peer learning and communities of practice,[19,20] learner assessment,[21] feedback,[15] coaching,[22] and mentorship.[4,13,23] Interprofessional CE[22] and engaging student pharmacists early in the pharmacy professional curriculum[24] are also identified as important strategies to improve outcomes of professional development.

A shift from a focus in CE on content to a process model occurred for pharmacy in the 1990s when the concept of continuing professional development (CPD) was promoted as a model to enhance CE for pharmacists in Canada, the United States, the United Kingdom, and in other countries around the world. As an enhancement to traditional CE, the CPD model emphasizes a process of learning (reflect, plan, act, evaluate, document) that enables pharmacists to identify and meet their individual needs, to support their practice, and ultimately to improve

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patient care.[25] CPD increases knowledge, changes practice, and enhances professional development.[13,26] The CPD model is most successful when pharmacists receive training and support for the development of skills for lifelong learning.[27-29] Experience with the CPD model around the world is growing;[27-35] however, it has not been fully adopted by pharmacists[27,31] and use varies depending on the practice setting.[12,33]

The role of university-based CE has been described as fulfilling "the needs or goals of learners seeking professional development, personal enrichment, or the furthering of knowledge and skills"[36] often in collaboration with other faculties, universities, communities, and external organizations. Some CE providers have characterized their role in the context of knowledge translation; that is, using research to improve clinical practices.[37] University-based CE offers a unique approach to pharmacists that encompasses education, clinical, and pharmaceutical research, and pharmacy practice in health service environments. At the same time, engagement of pharmacists with faculty members enriches the university community by highlighting relevant practice challenges and societal issues in health care delivery that shape and inspire teaching and research.[38,39] Importantly, university-based CE provides opportunities to earn certificates, diplomas, and degrees as formal recognition of the learning that is accomplished.

There is a renewed call for creative approaches to professional development for health professionals.[13] University-based CE has a role and responsibility in addressing this call for action. As a university-based provider of CE for pharmacists, the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta is exploring ways to identify what pharmacists want and need to support their practice, in order to more effectively deliver education and engage with pharmacists in practice. This will position pharmacists to better meet the demands of an evolving health care system and improve the health outcomes of their patients. The purpose of this paper is to offer views and spark a dialogue with other faculty members and CE providers about the role and function of university-based CE. First we describe the faculty's work and experiences in CE. We then explore new approaches to university-based CE beginning with integrating CE with core activities, expanding the audience for CE, imagining new focus areas for learning, and creating new partnerships.

EXPERIENCES WITH CONTINUING EDUCATION

The Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta has delivered professional development courses to pharmacists for almost 40 years. It is the only school of pharmacy in the province of Alberta in Western Canada where there are approximately 4,200 pharmacists. Participation in CE is mandatory and pharmacists are required to report a minimum of 15 CE units (1 hour contact time = 1 CE unit) annually in an electronic learning portfolio.[40] CE may be comprised of any combination of accredited or non-accredited learning activities. All non-accredited learning activities are reported in detail to the Alberta College of Pharmacists (ACP), the provincial regulatory authority, similar to US state boards of pharmacy. In the early 1970s, the faculty organized CE with the assistance of the Divisions of Continuing Medical Education at the University of Alberta and the University of Calgary. By the following year, the dean of the Faculty of Pharmacy and Pharmaceutical Sciences appointed a part-time CE coordinator and a faculty advisor. In 2003, the faculty became an approved provider by the Canadian Council for Continuing Education in Pharmacy and today all CE courses offered by the faculty are accredited by this organization.

Partnerships with other organizations, employers, and funders have played an important role in how the Faculty of Pharmacy and Pharmaceutical Sciences has developed and delivered CE. In particular, the partnership between ACP and the faculty provided financial support for the development of CE for Alberta pharmacists and, over the years, celebrated many achievements. Since 1999, over 25 courses have been developed and 3 received recognition for excellence in education. The formal agreement between the Faculty and ACP defined roles and expectations of each partner, and annual funding supported unique and customized learning opportunities not offered by other CE providers. For example, courses to support ACP's introduction of a learning portfolio and the integration of the CPD model in their continuing competence program were developed. In addition, unrestricted industry and research grant funding were available to support course development, delivery, and evaluation. Informal partnerships and collaborations with other university-based providers of professional development across Canada facilitated sharing of ideas and resources, and created additional course options. Collaborations with providers in the United States facilitated delivery of print courses for pharmacists and supported the development of CPD programs.[28,41]

The types of CE courses and the approaches to course delivery have evolved since establishing the continuing pharmacy education office at the University of Alberta. In the 1970s through the 1980s, traditional CE was offered primarily as mail-order, print-based courses, or industry-sponsored evening lectures at low or no cost to pharmacists. The content of CE courses offered by the University

of Alberta shifted over time in response to changes in the profession and practice environment. For example, in the early 1990s, customized CE courses were developed to address implementation of pharmaceutical care[42] in practice and specialty areas such as geriatrics, while another series of courses focused on the use of the Internet. Course delivery methods spanned many technologies including print, audio, telephone, computer conferencing, and the Internet. The faculty's growing expertise in technology-mediated learning led to the development of an increasing number of distance-delivered CE courses[43] in the early 2000s, with some of the courses recognized for excellence in Web-based instruction.

Following the passage of legislation in Alberta in 2007 for a new practice framework that included pharmacist prescribing, administration of drugs by injection,[44] access to electronic patient records,[45] and ordering laboratory tests,[46] CE courses were developed to focus specifically on knowledge and skill development in patient assessment, communication and documentation,[18,47,48] and interpreting and ordering laboratory tests.[49] Instructional approaches for these courses include a significant proportion of active learning, such as small-group learning, simulation, workplace learning, and learning assessment with feedback. Blended learning, defined as a combination of classroom and online learning,[50] has been used in courses to enhance active-learning strategies, continue learning beyond the classroom experience, and increase social interaction and peer learning. The faculty's anticoagulation course integrated experiential learning with traditional print-based instruction and interactive workshops.[51] Typically, CE courses are taught by a team consisting of faculty members, practicing pharmacists interested in CE or adult education, and other health professionals, including dieticians, physicians, and nurses. CE courses in the areas of pain management and palliative care were among the first interprofessional courses to be developed by the faculty. Clinical practice faculty members became increasingly involved in the development and teaching of CE courses over the last decade.

The courses integrate the CPD process with learning assessment, feedback, and follow-up. Program evaluation showed that using CPD in the courses effectively addressed pharmacists' learning needs, transfer of knowledge to practice, and skills needed to support the new practice framework in Alberta.[49,51,52] For example, in an evaluation of a course on anticoagulation management,[51] approximately 20% of pharmacists who completed the course went on to successfully apply for additional prescribing authorization. This percentage is in contrast to the 3% of pharmacists in the clinical pharmacist registry with additional prescribing authorization (G. Eberhart, personal communication, February 28, 2011).

Over the years, the type and availability of university-based CE courses has changed. In the faculty's early days as a provider when it focused on delivering knowledge-based content, CE courses were mailed to 100% of pharmacists in the province and no associated registration fees were charged. Today, most of the faculty's courses focus on skill development in patient care to support new roles in practice, and have high registration fees (approximately $1000 Cdn). Approximately 5% of registered pharmacists in Alberta participate on an annual basis. [53] Interestingly, the enrollment numbers are consistent with the percentage of pharmacist prescribers in Alberta (3%), although how much overlap exists is not known.

Development and delivery of today's courses using technology, small group facilitation, standardized patients, and learner assessment and feedback are both labor intensive and expensive, often drawing on faculty members' time and expertise, along with other resources outside of the faculty. Learning this material requires time, effort, and often personal financial commitments by the pharmacists to attend the courses and complete related work-based assignments. Overall, many factors must be considered in future plans for university-based CE including the cost associated with developing, offering, and completing these courses, and participation rates, as there is no benefit to creating outstanding courses if pharmacists are not going to participate in them.

THE FUTURE OF CONTINUING PHARMACY EDUCATION

As healthcare environments change, there is a renewed call for change in continuing professional education in healthcare. University-based CE has a role and responsibility in addressing this call for action. Areas to explore include the integration of CE with core activities, expanding the audience for CE, areas of focus for learning, and partnerships.

Integration

Providers of continuing medical education are calling for change in CE to seamless education models from the first professional degree through the entire professional career.[54] In principle, CE for pharmacists can and should be produced and delivered by anyone or any group with the appropriate expertise. In practice, university-based CE has the most effective access to this expertise and has often been a primary provider of CE. However, despite education being the core of what a university does, CE has almost always been an add-on to faculty members' regular responsibilities. At the same time, the university is

well-positioned to offer education that catalyzes practice change through translation of research to practice [37] and to support patient care and changes in health care delivery.[54]

There has been an increasing trend among health care professionals toward pursuing specialization in clinical practice. Universities can help support professionals' pursuit of specialization by providing various types of academic credentials.[55] As academic institutions, universities should offer CE programs that capitalize on their expertise, research, and resources, thus providing unique programs and credentialing that could not be offered by non-academic CE providers.

The continued or increased involvement of colleges and schools of pharmacy in CE courses to promote engagement with practicing pharmacists and the professional community, and to introduce CPD earlier to pharmacy students in the preprofessional curriculum, will foster a culture of life-long learning, professional development, and practice. However, the nature of continuing professional education and adult learning requires faculty members to adopt a different focus and to use different skills.[56,57]

Allocating funds from various sources, including CE courses, to provide dedicated CE faculty positions, protected time for teaching and scholarly contributions to CE, and support for regular faculty members in developing new expertise through faculty development programs in professional and adult learning is warranted.[54,58] Finally, to integrate CE effectively with pharmacy school initiatives, it will be important to include CE in the overall strategic plan of academic health professions' programs, integrate CE with existing courses where possible, provide opportunities for research and scholarly activity in the CE arena, commit financial and personnel resources, and formally recognize faculty members contributions to CE for annual review and promotion consideration.[59,60]

Audience

The target audience for CE courses should include those pharmacists interested in both personal and professional development. Ideally, this audience will expand to include other health care professionals who, along with pharmacists, work together in practice and learn together in professional development programs.[22,61] An independent commission on Education of Health Professionals for the 21st century outlined the need for interprofessional education "to break down professional silos while enhancing collaborative and non-hierarchical relationships in effective teams."[62] Interprofessional competencies are emphasized in the newest accreditation standards for pharmacy programs[63,64] and the need for learning in this area for past graduates is substantial. Thus, interprofessional CE for pharmacists and other health care disciplines such as medicine and nursing must become more prominent.[65,66] We believe that such development and interprofessional interactions will stimulate pharmacists to practice to the full extent of their capabilities as part of an effective health care team

Professionals are represented by diverse demographic groups. Three main demographic groups enroll in CE courses.[67] The unique learning preferences and needs of these groups must be considered as CE courses are planned and created. The main demographic groups to be considered are the baby boomers (1943-1960), Generation X (1961-1981), and the Millennials (1982-2003). In terms of motivation and preferences for CE, these generational groups differ somewhat.[67] Baby boomers are projected to work beyond the usual retirement age, and therefore may be participating in CE courses over the next 2 decades. They value recognition and prefer face-to-face interactions.[67] The Generation X group is motivated by career advancement and career change, while the Millennials, representing those just entering a career, is motivated by career advancement, personal enrichment, and to a lesser extent, graduate degrees.[66] Thus, a range of CE courses, including those that offer university credit, will be of interest to pharmacists. Further, all groups prefer blended delivery of classroom and distance/online instruction over distance learning alone.[66]

Attention on how to reach targeted audiences most effectively must be considered for future development of CE. Considering trends in learning and technology in the millennial group of learners,[67] the delivery of shorter courses in blended formats has the potential to yield better uptake and provide better support for the professional development of these pharmacists. Monitoring trends in CE that appeal to audiences, such as combinations of face-to-face workshops with short blasts of content through social media sites, will be important to ensure that CE remains both relevant and desireable rather than solely a required activity. An example of a popular format is TED (technology entertainment and design) Talks that feature short lectures on "ideas worth spreading" (www.Ted.com/talks).[68]

Areas of Focus

The CE options in the future should continue to include offerings that are pharmacy specific. However, learning areas not yet imagined, not available, and/or that pharmacists did not focus on during their initial academic program may be essential to their ongoing personal and professional growth. Thus, opportunities for learning within pharmacy CE should be expanded to address content and skill areas relevant to many professional competencies.[69] The CE courses will continue to position and

prepare pharmacists for the shift in pharmacy practice, particularly in terms of providing patient care services so that pharmacists can practice to their full potential. However, through CE that addresses development of the whole person (see http://www.promise.ualberta.ca/), there also needs to be personal development. A personal development or "whole person" focus to CE will encourage providers to develop courses that address other competencies such as education/teaching, communication, leadership, and teamwork and collaboration. CPD strategies, such as reflection pieces by individual practitioners on how such learning enhances their ability to practice pharmacy, must be considered worthy of receiving CE credit. Joint CE programs between pharmacy and other disciplines, such as the Faculty of Pharmacy's efforts with the Faculty of Business to create a business certificate program for health professionals, present opportunities for interprofessional learning. Another example would be a course in communications focusing on how various health professionals communicate about patient care in a collaborative practice setting. Finally, courses could be designed to build upon each other so that over time participants could earn academic credit, certificates, and/or degrees, if desired. As schools of pharmacy in Canada implement first-professional degree doctor of pharmacy programs, courses leading to the doctor of pharmacy (PharmD) degree should be considered an essential part of CE programming.

Partnerships

Partnerships are an essential consideration in looking to the future of CE in pharmacy. While vital and symbolic partnerships should be continued, it will be important to consider expanding partnerships to include additional relevant internal and external organizations.[70] For example, most universities have academic units dedicated to adult learners. At the University of Alberta this would fall under the mandate of the Faculty of Extension. Exploring partnerships between colleges or schools of pharmacy and their university-based CE units has the potential to create novel opportunities for pharmacists in terms of their professional development. Partnerships with external organizations and with other CE providers in Canada, the United States, and other countries, particularly with other health professions, should be pursued. Building a partnership is a complex process, as partners often have different missions and goals. Attention to the complexity of partnerships, including differing and often competing needs, must be considered.[70,71] However, when successfully negotiated, partnerships in CE offer the potential to provide a broader spectrum of educational opportunities not just to pharmacists, but also to other health care professionals.

CALL FOR ACTION

As the need to address changes in practice is so prominent in the discourse of where pharmacy as a profession is headed, exploring what universities do best when looking for new sources of CE is a worthy endeavor. Following the efforts to introduce CPD, there is a renewed call for change in the professional development process for healthcare professionals. University-based CE has a role in and responsibility for addressing this call for action. The Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta is exploring its approach to university-based CE beginning with integrating CE with core faculty activities, expanding the perception of who the audience for CE is, imagining new areas of focus for learning, and creating new partnerships. CE must support pharmacists in their professional and personal development over the span of their careers. Universities are academic teaching and research environments and have a role in supporting the translation of knowledge to practice. In addition, CE should support practice models such as interprofessional team care – something everyone agrees is important but which is not optimally implemented in most practice settings.

Some of the questions to consider regarding developing future opportunities in CE include: How can colleges and schools best support pharmacists in practice? How can individual faculty members engage in CE while managing other core academic activities? Who is the audience for CE? What should CE courses provide? How can partnerships add value to the CE project? University-based CE has the potential to contribute uniquely and prominently to the continued development of pharmacists as a key member of the health care team, and the increased engagement with practitioners will, in turn, benefit universities. Dialoguing with other colleges and schools of pharmacy and providers of CE concerning the role and function of university-based CE will help foster additional ideas for accomplishing the changes needed to support pharmacists' contributions to healthcare delivery.

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