EDITORIAL

"I Hear and I Forget, I See and I Remember, I Do and I Understand"

Régis Vaillancourt

In this issue of the *CJHP*, Ackman and Mysak[1] describe the integration of second-year pharmacy students into the hospital setting. This mini–clinical rotation was successful in giving the students an early understanding of the role of hospital pharmacists. The experience was deemed to be positive and valuable for both the students and their preceptors. These findings are not surprising and can be explained by tracing our history back to the birth of professional apprenticeship education in pharmacy in Canada.

Pharmacy education began in Ontario in 1868, with an emphasis on a long traditional apprenticeship.[2] Conceptually, the learning modules were based on principles that were enunciated by Chinese philosopher and reformer Confucius (551 BC to 479 BC), who stated "I hear and I forget. I see and I remember. I do and I understand." Since then, pharmacy education has become more academic, with the complexity of the therapeutic knowledge that must be acquired justifying the need for several years of formal education. However, the question now arises as to whether we are forgetting, at least in part, the experiential learning component of our profession. Being a professional does not only imply that the practitioner must be knowledgeable about certain specialized information; the ability to apply this information in practical settings is also important. Some would say that the structured experiential learning built into the curriculum and the internship now required by the pharmacy regulatory authorities after graduation constitute our new forms of apprenticeship.

An innovative way to train pharmacists, one in which I strongly believe, is the co-op approach, an example of which is the program offered at the University of Waterloo's School of Pharmacy. This program has been defined as "an educational model promoting continuous learning through the integration of classroom and applied work-based experience. It is a learner-centered model where the onus is on the student to direct their own learning and to make a valuable contribution."[3] This method stays true to the old model of pharmacy education, in which an apprentice would fully dedicate his or her time to learning the trade, and it is a method that I think we should promote and support. In discussions with the experiential co-ordinator/instructor at the University of Waterloo School of Pharmacy, I learned that not much is yet known about the impact of the pharmacy co-op program (Heather Chase, personal communication by e-mail, April 23, 2009). However, a variety of elements support this approach, including the principles of adult learning and data from a survey of co-op students in another field. At least 3 of the 7 principles of adult learning[4] are met through the placement part of a clinical rotation or co-op program: that adults learn by doing, that adults' learning focuses on problems (problems that must be realistic), and that adults learn best in an informal situation. Nasr and others,[5] who surveyed engineering co-op students, found that the students' co-op work experience had enhanced their ability to function on multidisciplinary teams and to communicate effectively, had provided an understanding of professional and ethical responsibilities, and had enhanced students' recognition of the need and ability to engage in life-long learning activities. These are all positive attributes that should be cultivated among our pharmacy students.

Waterloo is not the only university promoting experiential learning opportunities for pharmacists. Entry-level Doctor of Pharmacy programs at several institutions are promoting increased numbers of clinical rotations. The University of Toronto is initiating a program to integrate students into practice settings through a "community-of-practice framework". The profession has been and still is on the right track in promoting more experiential learning, such as the project described by Ackman and Mysak in this issue of the *CJHP*.[1]

From my perspective, pharmacy students' learning experience does not end once they have completed their formal pharmacy training. In fact, it will never end at all.

References

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ON THE FRONT COVER

Holy Family Hospital
Vancouver, British Columbia

Founded in 1947 by the Sisters of Providence of St Vincent de Paul, Holy Family Hospital started out as an old converted farmhouse in southeast Vancouver. Initially the Sisters grew their own food, bartered, and depended upon the kindness and support of their neighbours to feed their inpatients. They also grew lilies to sell, as one of many means of raising funds for the hospital's operation.

In 1953, a new 52-bed facility was built to meet the requirements of the hospital's focus on rehabilitation for patients with arthritis and stroke. By 1955, the rehab program of Holy Family Hospital was fully functional. The last addition was built in 1976, and the hospital now has a 74-bed rehabilitation unit and a 142-bed extended care unit with an active outpatient program for rehabilitation.

In 1997, Holy Family Hospital, now recognized as a provincial leader in the multidisciplinary care of older adults, joined 6 other Catholic hospitals in the region to form Providence Health Care. The Pharmacy Department of Providence Health Care, which services a total of 774 residential and rehabilitation beds in 5 facilities, is located within Holy Family Hospital. First and interim doses are supplied from this location, and ongoing medication supplies are provided in multidose automated unit-dose packaging, prepared daily by the Regional Packaging Centre (located at St Paul's Hospital). In 2007, the Pharmacy Department (staffed by 5.5 full-time equivalent [FTE] pharmacists and 3 FTE technicians) was honoured to be part of the team that received a 3M Health Care Quality Team Award from the Canadian College of Health Service Executives for their project, "Medication Reconciliation: Reducing the Risk of Medication Errors for Residents Moving into Residential Care".

The *CJHP* would be pleased to consider photographs featuring rural hospitals and their pharmacy departments or residential care facilities taken by CSHP members for use on the front cover of the journal. If you would like to submit a photograph, please send an electronic copy (minimum resolution 300 dpi) to Sonya Heggart at sheggart@cshp.ca.