

# A Pilot Study of Hospital Pharmacists' Preferences for Practice Support

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## INTRODUCTION

Of the approximately 9000 pharmacists registered with the Ontario College of Pharmacists, almost 1300 (about 14%) practise in the hospital setting (Connie Campbell, Ontario College of Pharmacists, personal communication, June 4, 2001). In many hospitals, the role of the pharmacist has evolved from a purely distributive one to that of being an active member of the health care team. The 1997/98 annual report of hospital pharmacy in Canada, produced by the CSHP,<sup>1</sup> noted that the involvement of pharmacists in clinical services had been increasing steadily since at least 1991/92. In fact, the number of pharmacists participating in clinical activities increased by amounts ranging from 29% to 90% over the period from 1991/92 to 1997/98. As well, the number of therapeutic interventions by hospital pharmacists increased by 92% from 1992/93.<sup>1</sup>

The CSHP guidelines with regard to pharmacist education and staff development<sup>2</sup> are general in scope. They state that "All staff involved in pharmacy services shall be provided with educational and staff development programs including orientation, inservice education, and continuing education programs, based on a needs assessment." As well, "Pharmacy staff shall be encouraged to attend meetings or seminars relevant to the function of the department or their particular service. Financial support and/or time in lieu should be provided by the institution where possible."<sup>2</sup> The annual report of the CSHP for 1997/98 listed as one of its "vision objectives" to "Provide support to members in their Direct Patient Care role through education, skills development and practice tools".<sup>3</sup> Clearly, continuing education and practice support and tools are viewed as important by CSHP. Indeed, given the constantly evolving role of hospital pharmacists, it is no surprise that education and tools would be in demand.

For a literature search conducted on PUBMED in June 1999 and updated in December 2000, *Canada*, *hospital*, and *pharmacy* were used as the first 3 search terms, and several hundred records were found. However, when the terms *continuing education*, *needs assessment*, *professional programming*, and *professional tools* were added, only 5 records were retrieved.<sup>4,8</sup> Only one of the papers reported a needs assessment, and it focussed specifically on drug information services.<sup>7</sup> Thus, it seems that little recent research has been published on the needs and wants of Canadian hospital pharmacists with regard to continuing education, professional programming, or professional tools. Some work has been done to describe the preferences and use of continuing education programs by Atlantic pharmacy practitioners, based on the Atlantic Continuing Pharmacy Education Survey (unpublished work, D.K. Yung, College of Pharmacy, Dalhousie University, Halifax, Nova Scotia, November 1995). The Ontario College of Pharmacists has also conducted a survey of the self-perceived continuing education needs and learning experiences of pharmacists in that province.<sup>9</sup>

## DESCRIPTION OF THE PROJECT

This pilot study provided insight into the preferences of 33 Toronto-area hospital pharmacists for practice support, through both continuing education and professional tools.

The research was conducted in 2 stages. The first stage involved generating opinions and ideas from a single videotaped (with consent) focus group consisting of 12 hospital pharmacists. Pharmacist participation was solicited by contacting (by phone and fax) nonteaching hospital inpatient pharmacies in and around Toronto, Ontario. The focus group met on July 24, 1999, in Toronto. The purpose of the session was twofold: to determine current opinions and perceptions of



continuing education, professional tools, and professional support for hospital pharmacists; and to brainstorm ideas for continuing education programs, professional tools, and other types of professional support, on the basis of the participants' perceived needs.

Only pharmacists from nonteaching centres were included in the focus group because those working at conventional nonteaching hospitals may lack educational and professional resources and hence might be expected to generate more plentiful or novel ideas.

The second stage involved meeting with individual pharmacists for audiotaped (with consent) one-on-one interviews, which occurred over a 3-week period during August 1999. Pharmacist participation was solicited by phoning hospital inpatient pharmacies in the Toronto area. The number of interviews was restricted by the limited time available; in addition, many hospital pharmacies were short-staffed during the summer months because of vacations. Multiple interviewees were permitted to participate from individual hospitals, and both teaching and nonteaching hospitals were represented. Pharmacists who had participated in the focus group were excluded from the interviews. Each interview lasted between 20 and 45 minutes. To ensure that the questions were asked consistently, the author was the sole interviewer. The characteristics of the 33 interviewees are presented in Table 1. The purpose of the interviews was to further investigate the information generated by the focus group. The questionnaire used for the interviews (available by request to the author) consisted of 23 questions developed by qualitatively analyzing the videotape and the notes from the initial focus group. The questions were pretested on 2 practising pharmacists.

This pilot study was limited by the size and selection of samples for the focus group and personal interviews and by time and resource constraints. In addition, the participating hospital pharmacists were all from locations near Toronto, so there was not adequate rural representation.

## FINDINGS OF THE PILOT STUDY

Formal learning environments (e.g., workshops, conferences) were preferred by almost two-thirds (21 [64%]) of interviewees. This result was consistent with the overall top choices of preferred educational formats: workshops or seminars (31 [94%]), conferences (22 [67%]), and didactic presentations (15 [45%]). Perhaps pharmacists feel that they learn the most from these types of structured events, or they find these events the easiest in which to participate. However, interviewees

**Table 1. Characteristics of Sample Population (n = 33)**

Characteristic	No.	(and %)
<b>Affiliation type</b>		
Teaching centre	18	(54)
Nonteaching centre	15	(45)
<b>Practice experience</b>		
≥10 years	15	(45)
<10 years	18	(54)
<b>Type of practice</b>		
Staff pharmacist	32	(97)
Managerial role	1	(3)
<b>Sex</b>		
Women	29	(88)
Men	4	(12)

also displayed interest in more intimate, specialized learning formats, with specialty group meetings (16 [48%]) and journal clubs (13 [39%]) also appearing in the top 5 choices. Interestingly, there seemed to be no preference between interactive and didactic events (11 [33%] and 13 [39%]). Yet more than half of the interviewees (18 [54%]) believed that multidisciplinary events were more educational than pharmacist-only events, and learning in a case-based format was either very or somewhat important to a large proportion of interviewees (28 [85%]).

Technology seemed important to many of the interviewees. More than three-quarters (26 [79%]) of them were using the Internet for work-related purposes. Interestingly, but perhaps not surprisingly, pharmacists with less than 10 years of practice experience were using the Internet more than their more experienced colleagues. This finding probably relates to the fact that 10 years ago, the Internet was virtually unknown among the general public, but recently it has become accessible and available to nearly everybody. Younger pharmacists probably used the Internet in university, whereas older pharmacists have had less exposure or training in school and may have had limited opportunity since then to use this tool. Obtaining drug information was the top reason for using the Internet, which agrees with a recent survey of community pharmacists' use of the Internet.<sup>10</sup> Other preferred technologies included computer programs (25 [76%]), Powerpoint presentations (20 [61%]), CD-ROMS (15 [45%]), and videos (15 [45%]).

More than two-thirds of interviewees (23 [70%]) believed that they were not networking enough with colleagues, and an even greater proportion (29 [88%]) felt that barriers to networking existed. Most interviewees (29 [88%]) supported the concept of funding pharmacists from rural areas to attend conferences (rating it as very

or somewhat important). Work site exchanges were valued by a larger proportion of interviewees (27 [82%]) than published lists of hospital pharmacists (22 [67%]) or awards and recognition for innovation (18 [54%]).

The overall top choice of professional tool was the pocket guide (27 [82%]). Other choices, in order of preference, were patient education leaflets and drug information telephone lines (19 [58%] for both), disease management programs (17 [52%]), newsletters (15 [45%]), and dosing cards and financial support (12 [36%] for both). Popular topics for pocket guides included IV/total parenteral nutrition administration/compatibility and monitoring, comparisons of drugs within a particular class, dosing guidelines for various states (e.g., geriatric, renal impairment), drug interactions, and interpretation of laboratory values. A large proportion of interviewees (27 [82%]) believed that their technicians were adequately trained, although some pharmacists commented that, despite the presence of technicians, they (the pharmacists) were performing too many technical duties and were not spending enough time on patient care.

For both continuing education and professional tools, a substantial proportion of interviewees (27 [82%]) preferred a clinical or medical focus over a purely pharmacological focus. The 5 most highly rated topics (identified as very relevant by at least half of the interviewees) were new treatments for existing diseases (31 [94%]), infectious disease (30 [91%]), new drugs (28 [85%]), how new drugs fit into the "bigger picture" (25 [76%]), and consensus guidelines (24 [73%]). The top 3 barriers to participating in continuing education or using professional tools were time, location, and topic. Other barriers included cost, selective invitations, length of programs, shift coverage, staff shortages, and inadequate notification of events.

## CONCLUSIONS

Because this study was limited to Toronto and the surrounding areas, it is difficult to determine how the results might be extrapolated to the rest of Canada. It may be worthwhile to carry out a similar study on a nationwide basis, perhaps with the questionnaire used in this study. It would also be interesting to study the effectiveness of the different learning methods, programs, and tools outlined in this pilot study.

Nonetheless, the results presented here may provide insight and suggestions to those involved in planning continuing education activities or developing professional support tools and programs.

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