

Pharmacy services in family medicine residencies

Survey of clinics associated with Canadian residency programs

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SUMMARY

Surveys were mailed to 82 family medicine clinics associated with residency programs in Canada to ascertain the extent, if any, of pharmacy involvement in the programs. Eight of the 58 (13.8%) usable returns had pharmacists directly involved. They provided pharmacy-based services, offered clinical services, and participated in research.

RÉSUMÉ

On a procédé à un sondage postal auprès de 82 cliniques de médecine familiale affiliées aux programmes de résidence pour déterminer le degré d'implication de la pharmacie dans les programmes. Huit des 58 réponses utilisables (13,8%) ont mentionné une implication directe des pharmaciens. Ceux-ci dispensaient des services pharmaceutiques, des services cliniques et participaient à la recherche.

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PHARMACY IS ONE OF THE health professions often involved in a multidisciplinary approach to training family medicine residents.

Although pharmacists have been working in family medicine clinics for many years, it was not until 1979 that Brown and colleagues¹ first demonstrated that their work was useful to physicians and appropriate to patient care. Several studies have since concluded that the presence of a clinical pharmacist leads to better prescribing, improvements in patients' conditions, and cost reductions.²⁻⁶

In 1981 Johnston and Heffron examined the number and duties of clinical pharmacists in the 359 family medicine residency programs in the United States.² Of the 323 that responded to the survey, 29% (94 of 323) had direct pharmacy input. The duties of the clinical pharmacists were broad and included teaching;

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supervising pharmacy, medical, and nursing students; providing drug consultations; and maintaining formal drug profiles on clinic patients. A second study in 1983 reported that 18% (68 of 386) of the responding American family medicine residency programs had at least one pharmacist involved in clinical services.⁷ The large difference in these percentages could have resulted from different interpretations of "pharmacist involvement" in the two studies.⁷

The most recent study, performed by Shaughnessy and Hume³ in 1990, revealed that there were 381 residency programs in the United States; 24% (79 of 325) of those that responded to the survey had a clinical pharmacist directly involved in the program. The duties of the clinical pharmacist had changed little since the first survey in 1981; the only notable change was an increase in direct patient care (patient education, drug or disease monitoring). Funding sources for pharmacists had also changed to include substantial funding from medical schools, which was not reported at all in the earlier study.

As there are no data on pharmacist involvement in Canada, this study was conducted to determine 1) the number of

Canadian family medicine clinics associated with residency programs that have a pharmacist directly involved; 2) the role of these pharmacists in teaching, research, and clinical services; 3) the source of funding for the pharmacists; and 4) the demographics of the clinics.

METHODS

A 31-item questionnaire was developed to collect information on pharmacy input at family medicine clinics associated with residency training programs in Canada. The questionnaire, with a covering letter explaining the survey, was mailed to the directors of 82 family medicine clinics. The clinic director was asked to complete the first section of the questionnaire, which dealt with the characteristics of the clinics. If a clinical pharmacist was directly involved in the program, the director was then asked to forward the survey to that person for completion.

If the survey had not been returned within 4 weeks, a reminder letter was sent. If it was not returned after an additional 4 weeks, a follow-up phone call was made. All answers to the questionnaires were confidential. The descriptive results of the survey were tabulated using the program Epi Info, version 5.0.⁸

RESULTS

A total of 67 questionnaires was returned (82%). However, only 58 of these contained usable data. Three of the returned questionnaires were not used in the final analysis because of incomplete answers, and six were not used because of duplication (two people affiliated with the same clinic inadvertently received questionnaires). Of the 58 clinics represented, 22 were community-based, 32 were hospital-based, and four did not specify any affiliation.

Number

Only eight (13.8%) of the 58 responding clinics had pharmacists directly involved. Another 10 (17.2%) of the respondents reported they often used pharmacists through affiliated hospitals or drug information centres. One of the eight

clinics with direct pharmacy services did not complete the questionnaire.

Of the seven clinics for which there were data, two of the pharmacy positions were full-time positions, two were 3/4-time positions, and three positions were half-time or less. One pharmacist had been working in the clinic for 15 years while one

Table 1. Funding sources

FUNDING SOURCE	NO. OF POSITIONS FUNDED
College of Pharmacy	1
Hospital pharmacy	1
College of Pharmacy and Department of Family Medicine	1
College of Pharmacy and hospital pharmacy	1
Ministry	1
Independent pharmacy	2

pharmacist had been in the clinic for less than 1 year. Another pharmacist was in a clinic in which pharmacy services were being expanded.

Characteristics of pharmacists

Two of the clinics with pharmacy involvement had two pharmacists job-sharing one position, so background and professional data were obtained for nine pharmacists. All had a Bachelor of Science in pharmacy. Five had completed a residency in pharmacy, and one had a Doctor of Pharmacy degree. Eight of the pharmacists were female. Most of the pharmacists were between 30 and 40 years of age.

Funding

Funding sources for the seven pharmacy positions varied (Table 1). Four of the pharmacists had an annual salary in the range of \$35 000 to \$44 999; three in the range of \$45 000 to \$54 999; and two in the range of \$55 000 to \$64 999. Salaries for the part-time pharmacists might have included salaries from other part-time positions.

Services

For the purposes of the survey, pharmacy services were divided into three categories: pharmacy-based, clinic-based, and

research. Pharmacy-based services included patient counseling, maintaining patient profiles, and providing a formulary. Five of the clinics had a dispensing pharmacy on site.

Clinic-based services involved primarily education and provision of drug information. Pharmacists at all seven clinics provided education to the residents. Pharmacists at six clinics routinely answered questions about drugs and pricing. Most drug information requests came from physicians and family medicine residents. Pharmacists reported limited involvement in research in the following areas: patient compliance, resident education, drug use evaluation, drug efficacy, and adverse drug reactions.

Pharmacists in five of the clinics were involved in precepting students (in pharmacy, medicine, and nursing) and residents (in pharmacy and family medicine). In clinics that precepted pharmacy students, the students participated in taking medication histories, answering questions about drugs, educating patients about medications, teaching about warfarin and diabetes, attending inpatient hospital rounds, and dispensing. Pharmacists in three clinics also routinely taught pharmacy, medical, and nursing students, as well as pharmacy and family medicine residents. The amount of time spent teaching varied from half an hour to 40 hours weekly and varied weekly depending on students' and residents' schedules and rotations.

Job satisfaction

Seven of the nine pharmacists completed the section on job satisfaction. Overall, pharmacists were satisfied (57.1%) or very satisfied (42.9%) with their jobs in the family medicine clinics. Six of seven respondents said that they would like to see their role at the clinic expanded. However, expanded roles were prevented by time constraints, dispensing duties, lack of resources, and lack of funds. Pharmacists said they would like to spend more time on research, teaching, providing clinical services, precepting pharmacy students, participating in case discussions, and providing pharmacotherapy education for family medicine residents.

DISCUSSION

Clinical pharmacists have been involved in family medicine residency programs for many years in the United States. Results of this survey indicate that direct pharmacy involvement in the family medicine residency programs in Canada is limited. However, it is encouraging to note that during the last year one pharmacy position was started and another expanded.

Overall, the pharmacists are satisfied with their jobs in the family medicine clinics and would like to expand their clinical, research, and teaching services. The main obstacles are time – because the position is not full-time or because most of the pharmacist's time is spent dispensing – and money.

In 1981 Johnston and Heffron² suggested funding an on-site clinical pharmacist through a dispensing pharmacy at the family medicine centre. Not only would the pharmacy revenue pay the pharmacist's salary but the pharmacy would be an excellent training site for pharmacy students. However, this solution might not be ideal; pharmacists are often so busy in the pharmacy that they have little time for clinical work, research, and teaching.

The most recent survey in the United States indicated that most clinical pharmacy positions were funded by more than one source, with colleges of pharmacy and hospital pharmacies being the major sources.³ In contrast, while funding sources in Canada varied greatly, only two positions were cofunded. Perhaps cofunding should be examined further. As difficult economic times continue to strain budgets, new, innovative ways to fund clinical pharmacy positions must be explored.

Although only limited data are available because so few Canadian family medicine residency programs have pharmacy involvement, it is encouraging to observe the diversity of services offered by the pharmacists. Despite limitations, pharmacists have managed to initiate various services. Unfortunately only general information about these services was obtained in this study. A detailed examination of clinical pharmacy services offered in one American program

provides much insight into how extensively a pharmacist can become involved in a family medicine residency program.⁹ Various American studies also show that a pharmacist is a valuable addition to family medicine residents' training experience.^{4,6,10,11}

Conclusion

Pharmacy involvement in Canadian family medicine residency programs, although limited (eight of 58 respondents), could be increasing. As the trend continues toward outpatient health care and preventive medicine, cooperation between physicians, pharmacists, and other health care professionals is becoming increasingly important to give patients optimal health care. Family medicine clinics are ideal locations for all these professionals to join forces and share their expertise. ■

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A Comforting Moment

