PHARMACY PRACTICE

Pharmaceutical Care: A Survey of Canadian Hospitals

Pharmaceutical Care Advisory Committee, Canadian Society of Hospital Pharmacists

BACKGROUND

The philosophy of pharmaceutical care (PC) has been evolving into contemporary practice since first proposed by Hepler and Strand.[1] Pharmacy professional bodies have recognized the strengths of the philosophy in meeting the needs of the patients and the profession. The Canadian Society of Hospital Pharmacists (CSHP) has adopted the philosophy of PC and has recommended CSHP members incorporate the philosophy into their daily practice.[2] To assist CSHP members in developing the skills and practices consistent with the PC philosophy, CSHP has incorporated this philosophy into educational sessions for members. This has included published reports in the Journal[3] and educational seminars across the country, such as those organized by the Pharmaceutical Care Advisory Committee (PCAC) of CSHP. It is unknown whether these initiatives have been successful in helping pharmacists and pharmacy departments incorporate the PC philosophy into their daily practice of caring for Canadians. As well, it is, at present, unknown if any techniques such as internal training programs have been employed to advance the practice of PC. And finally, if the PC philosophy has not been incorporated into practice it would be useful to identify what perceived barriers are prohibiting this. To address these issues a survey was developed and completed in early 1995 in Canadian hospitals regarding PC.

METHODS

Hospital pharmacy directors in the major geographical areas of the country were surveyed by members of PCAC. Surveys were sent to ten hospitals in each geographical area (British Columbia, Prairie Provinces, Ontario, Québec, and Maritime Provinces). The centres were not randomly selected but rather chosen so as to have representation based on location (urban and rural), size (large and small), and type (teaching and non-teaching). Briefly, the survey evaluated the size of the hospital and the pharmacy department; the breadth of the provision of PC services; the mechanism for development of services; and existing barriers to further development. To insure a consistent understanding of the philosophy of PC, the following definition was provided: "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life. It requires the patient's (or delegate's) participation, in cooperation with the pharmacist, in establishing agreed upon goals and outcomes for drug therapy."

RESULTS

The hospital and pharmacy department characteristics are illustrated in Table I. A review of this information reveals the varying sizes of hospital pharmacy departments surveyed. As well, these findings demonstrate that the philosophy of PC has been adopted into the mission statement of the majority of the surveyed pharmacy departments.

Information regarding PC training programs and the provision of PC is summarized in Table II. These data suggest that despite an apparent agreement with the philosophy of PC that less than 50% of surveyed departments had an internal training program, and only a very small portion of Canadian hospital patients were actually receiving PC. The number of patients to whom each pharmacist could provide PC was also small. Some of the responses to the question of "what is needed to expand PC to more patients?" included: the need to transfer distribution related activities to technical staff and the increased requirement for staffing and technology to facilitate this transfer; the

Pharmaceutical Care Advisory Committee Members:
G. Brown, (Chairperson), Vancouver, B.C.; **L. Blain**, Toronto, Ontario; **A.M. Bombassaro**, London, Ontario; **A. Gagnon**, Sudbury, Ontario; **W. McLean**, Ottawa, Ontario; **M. Parent**, Québec, Québec; **W. Semchuk**, Regina, Saskatchewan; **K. Slayter**, Halifax, Nova Scotia.

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Address Correspondence to: Glen Brown, Pharm.D., Satellite Manager, Department of Pharmacy, St. Paul's Hospital, 1081 Burrard Street, Vancouver, B.C.V6Z 1Y6

Table I. Hospital and Pharmacy Characteristics

		British Columbia	Prairie Provinces	Ontario	Québec	Maritime Provinces
Hospitals (n)		10	10	10	10	10
Beds (n)	(Mean)	445	456	341	562	398
	(Range)	(133-1500)	(51-895)	(147-650)	(152-926)	(100-700)
% Occupancy in 1994	(Mean)	87%	82%	88%	88%	80%
	(Range)	(66-96)	(73-90)	(71-95)	(78-95)	(70-100)
Hours of Pharmacy Operation/Week	(Mean)	104	92	80	81	73
	(Range)	(50-168)	(38-168)	(56-98)	(40-112)	(35-104)
F.T.E. Pharmacists	(Mean)	19	19	15	12	14
	(Range)	(2-66)	(2-66)	(4-32)	(2-23)	(3-33)
F.T.E. Technicians	(Mean)	16	12	15	11	9
	(Range)	(1-64)	(0.9-31)	(4-33)	(1.5-17)	(2-20)
PC Incorporated in Mission Statement		7	5	9	4	6

Table II. Pharmaceutical Care Training and Provision

		British Columbia	Prairie Provinces	Ontario	Québec	Maritime Provinces
Internal PC Training Program		4	4	4	0	1
Hours of PC Training Program		20-113	10-ongoing	8-32	0	146
% of Inpatients receiving PC	(Mean)	10%	13%	7%	13%	6%
	(Range)	(0-55)	(0-70)	(0-20)	(0-50)	(0-15)
Written Criteria for PC		1	0	2	0	4
# Patients Receiving PC/Pharmacist	(Mean)	13	4	6	16	5
	(Range)	(0-60)	(3-30)	(0-20)	(0-40)	(0-10)

increased need for training and knowledge for pharmacists providing PC; and, clearer definition of the practice including the development of policies and procedures and selection criteria for PC. As well, the need for improved documentation and increased acceptance of the role of the pharmacist by other health care professionals and some reluctance to make the necessary changes required for PC was cited.

DISCUSSION

The findings of the survey are both encouraging and discouraging. On the positive side, the majority of Canadian hospital pharmacy departments appear to have adopted the philosophy of PC as evidenced by the incorporation of PC into the pharmacy's mission statement. These findings are even more encouraging than the 1993-94 Lilly survey that found PC philosophy adopted by 30% of 172 surveyed hospitals.[4] Similarly, encouraging signs of program development were evident by the number of hospitals which have established training programs for PC. No doubt, progress has been made in the scope of PC in the surveyed hospitals since the time of the survey and the presentation/publication of these findings. The requirements of the Canadian Council on Health Services Accreditation (CCHSA) to demonstrate incorporation of PC into patient care for successful accreditation should encourage hospitals to further develop PC services.[5]

Unfortunately, while the philosophy has been adopted, this has not resulted in a substantial change in practice and only a small percentage of Canadian hospital patients are currently receiving PC. Furthermore, these figures may actually overestimate the provision of PC since we were unable to validate that all components of PC were indeed being provided. Although our survey was not randomized, and hence, may not be truly representative of practice, it appears that the vast majority of Canadian hospitalized patients are receiving less than optimal PC. This suggests a significant deficiency in the overall care of patients in hospitalized patients, with the potentially detrimental therapeutic and economic effects for patients and the health care system.

The cited barriers to expanding the breadth of PC are likely not surprising to any pharmacist or pharmacy administrator. Efforts to overcome the barriers are underway in many institutions. Many hospitals are evaluating the administrative and organizational structure of pharmacy departments with opportunities for more direct patient-care responsibilities for pharmacists being realized. Although few departments are currently able to increase staff, enhancement of technician responsibilities, use of technology, elimination of non-essential duties, and the reorganization of hours of operation can be used to increase the time available to spend with patients. Other departments have initiated methods for pharmacists to use time efficiently, improve multidisciplinary data collection and documentation, and to increase

therapeutic knowledge. Many institutions are recognizing and addressing the need for additional training for pharmacists on the skills necessary for providing all components of PC. Several institutions, such as St. Michael's Hospital in Toronto and St. Paul's Hospital in Vancouver, have established training programs which are open to hospital pharmacists from other institutions. The Canadian Society of Hospital Pharmacists has recognized the need for additional training of pharmacists on PC and has incorporated this theme into professional educational programs at national and local meetings, as well as through seminars coordinated by the PCAC. Publications by CSHP and its committees, such as "Patient Pharmacotherapy Monitoring to Pharmaceutical Care"[6] and "Guidelines for Documenting in the Patients' Health Care Record",[7] are available for individual pharmacists or departments to utilize. In addition, CSHP has initiated programs to enhance pharmacists' participation in patient care by the program of Vision '97 Objectives.[8] Briefly, these objectives are: to promote the direct patient care role of pharmacist to others; to encourage members to develop and share innovative direct patient care practice models and experience; and, to provide accessible education to assist members in achieving a direct patient care role. The Society has established committees to address each of these objectives, and individual members are encouraged to contact the committees for input. Hopefully, fulfillment of these objectives will assist all Canadian hospital pharmacists to increase and improve their direct patient care activities.

Pharmacists can not wait until CSHP has accomplished the above objectives. Each individual must evaluate the time and effort spent on activities which are not improving PC within each practice environment. Efforts to delegate technical and nonprofessional functions to others or to technology, such as computers or mechanized drug distribution systems are necessary. Efforts to improve the therapeutic knowledge and communication skills of the practicing pharmacist are encouraged, and can be facilitated by the self-instruction modules developed by various education programs, such as that of the American Society of Health-System Pharmacists.

The survey findings suggest that the PC philosophy is being incorporated into the approach to patient care by Canadian hospital pharmacists. However, significant barriers to practice continue to exist for many pharmacists which must be addressed. Continued efforts at an individual, local, provincial, and national level are necessary to facilitate the rapid change required for the care of the majority of Canadian hospital patients. Pharmacists are encouraged to direct their efforts to those functions which will be successful in improving direct patient care.

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