Expanded Roles for the Community Pharmacist—Which Direction?

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As INCREASING DEMANDS are placed on our medical care system, more effective use of existing health manpower is required. For pharmacists who are already providing services to the community, expanded roles—including increased responsibility in client counseling, health education for patients and community groups, monitoring of drug interactions, and pharmacological consultation to physicians—have been suggested (*1,2*). Cain and Kahn (*3*) and Fifer (*4*) foresee the pharmacist as a health triage officer serving as the point of entry into the community's health care system and providing health screening and primary medical care.

Yet, few investigators have attempted to determine the current activities of the pharmacist and the relative time allocated to each. In a survey of pharmaceutical services to the community, Wilson found that a high percentage of pharmacists only occasionally provided professional services to their patrons (*5*). Community pharmacists participating in a study by Belasco indicated that more of their time should be spent in continuing education and professional activities and less in nonprofessional-related tasks (*6*). No investigations, however, have been directed toward exploring the willingness of pharmacists to accept expanded activities.

During 1973 and 1974 the Department of Pediatrics and the Center for Community Health Systems of the Faculty of Medicine, Columbia University, were engaged in a continuing education program for community pharmacists. The etiology, prevention, therapy, and management of health conditions commonly encountered by the community pharmacist were presented in a bimonthly evening seminar series. Although originally geared toward topics of relevance to community pharmacists in particular, the sessions were increasingly attended

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by hospital-based pharmacists as well as retired pharmacists and drug sales representatives. A total of 129 pharmacists attended one or more sessions. Because of an interest in focusing the educational program to future expanded activities of the participants as members of the health care team, a survey was undertaken to determine the current activities of community and hospital-based pharmacists and their willingness to accept expanded roles.

Methodology

Two mailings, consisting of a cover letter and questionnaire, were used to survey the 129 program participants. The questionnaire was designed to ascertain characteristics of pharmacists and their pharmacies, relative allocations of time to activities in their practices, and their previous continuing education experience. In addition, a list of pharmaceutical activities compiled from a survey of the literature was included. Pharmacists were requested to indicate on a qualitative scale the extent to which they presently performed the activities and to what extent they would be willing to assume the specified expanded roles. A final effort to encourage completion and return of the questionnaire was made by successful contact with 38 percent of the nonrespondents. Of the pharmacists who attended one or more sessions, 80 responded to the questionnaire, a return rate of 62 percent.

Results

More than 50 percent (42) of the responding pharmacists practiced in storefront community pharmacies; 34 percent (27) were hospital based. The remainder were drug sales representatives, retired pharmacists, and faculty and students from schools of pharmacy in the area. The median age of all respondents was 44; the range was 24 to 74 years. The following data pertain only to the 69 community and hospital pharmacists.

The median age of the hospital pharmacists was 7 years younger than that of the community pharmacists, and the number of years in active practice correlated with the age distribution for each group. More than 80 percent of the community pharmacists worked full time in one store, and almost two-thirds owned their stores.

In response to questions aimed at ascertaining participation in informal continuing education, the community pharmacists reported that the mean number of pharmaceutical journals to which they subscribed was 3.2; for the hospital pharmacists, it was 1.6. Furthermore, approximately 60 percent of both types of pharmacist reported that the seminar series was the first pharmaceutical postgraduate course they had attended in 5 years.

Data collected also indicated the pharmacists' perceived time allocations to the following activities: pharmaceutical services (compounding and dispensing prescribed and nonprescribed drugs), pharmaceutical consultation and health education, and nonprofessional activities (selling of nondrug items, ordering supplies, and business administration). Almost three-fourths indicated that at least 60 percent of their time was devoted to pharmaceutical services such as compounding and dispensing (table 1). Two-thirds of the respondents reported spending less than 20 percent of their time in activities identified as pharmaceutical consultation to consumers and physicians; another fifth reported spending 20 to 39 percent of their time in consultation. Forty-five percent of the respondents indicated that up to 20 percent of their time was used in nonprofessional activities; an additional 25 percent reported that nonprofessional activities occupied 20 to 39 percent of their time. Half of the community pharmacists spent 20 percent or more of their time in nonprofessional activities, while only 20 percent of the hospital-based pharmacists reported a similar allocation of time to this activity.

As reported by 58 respondents (3 community and 8 hospital pharmacists responded "unknown" to this ques-

Table 1. Percentage of time devoted to specific services by 39 community pharmacists and 19 hospital-based pharmacists [1]

Percentage of time	Pharmaceutical services [2]			Pharmaceutical consultation [3]			Nonprofessional activities [4]		
	Community	Hospital	Total	Community	Hospital	Total	Community	Hospital	Total
0	0.0	0.0	0.0	0.0	5.3	1.7	2.6	36.8	13.8
1–19	0.0	10.5	3.4	66.6	63.1	65.5	46.2	42.1	44.8
20–39	5.1	5.3	5.2	28.2	21.1	25.9	33.3	5.3	24.1
40–59	23.1	15.8	20.7	2.6	10.5	5.2	17.9	0.0	12.1
60–79	53.9	15.8	41.4	2.6	0.0	1.7	0.0	10.5	3.4
80–100	17.9	52.6	29.3	0.0	0.0	0.0	0.0	5.3	1.8

[1] 3 community and 8 hospital-based pharmacists responded "unknown."
[2] Compounding and dispensing of prescription and nonprescription drugs.
[3] Providing consultative services to consumers and physicians.
[4] Selling of nondrug items, ordering of merchandise, and business management.

tion), the mean percentages of time spent were as follows:

Activity	*Community pharmacists (N=39)*	*Hospital pharmacists (N=19)*	*Total*
Pharmaceutical services	62.4	67.9	64.4
Pharmaceutical consultation ..	16.2	15.7	16.0
Nonprofessional activities	21.4	16.4	19.6

Although the differences in responses were not statistically significant, the community pharmacists reported greater proportions of time spent in nonprofessional activities and less time in pharmaceutical services than the hospital pharmacists reported. (All tests of significance in this study were based on the 5 percent level and the Student's t test was used; the Fisher's exact test was used when necessary.)

Responses to the list of pharmaceutical activities varied by activity and occasionally by type of pharmacist. "Dispensing of prescription drugs" was selected by 88 percent of all the respondents as an activity frequently performed in their present practices (table 2). Other frequent activities included "monitoring of drugs," 51 percent; "consulting to consumers," 47 percent; "dispensing nonprescription drugs," 42 percent; "compounding," 39 percent; and "consulting to physicians," 22 percent. Except for dispensing of nonprescription drugs and compounding, which were performed more often by the community pharmacists than the hospital pharmacists, the differences in responses were not statistically significant (table 3).

Also of interest are the activities that the pharmacists reported performing sometimes or never (table 2). Activities never performed were "health education to community," 73 percent of all respondents; "educating hospital staff," 59 percent; "followup," 43 percent; and "monitoring health status," 42 percent. Only in the followup of patients was there any statistical difference in responses between community and hospital pharmacists —the hospital pharmacists performed this activity less frequently (table 3).

The pharmacists were also queried about their willingness to assume expanded or new roles. With regard to activities they would like to perform more frequently, "consulting to consumers" was cited by 77 percent of all respondents followed by "monitoring drugs," 70 percent, "dispensing prescription drugs," 58 percent, and "health education to community," 51 percent (table 4). For only two activities, "dispensing prescription drugs" and "consulting to consumers" were the differences in responses between the two types of pharmacist statistically significant—both activities were selected more often by the community pharmacists (table 5).

Although "health education to community," "followup," and "educating hospital staff" were indicated as activities infrequently performed, the respondents preferred to perform these activities even less frequently. Only in regard to providing pharmaceutical education to hospital staff was the difference in responses between the two groups statistically significant—the community pharmacists expressed significantly less interest in this activity.

Discussion

The current activities of practicing pharmacists as well as those that they identify as desirable future increments in function must be considered in the planning of expanded roles. As for the results of this survey of community and hospital-based pharmacists, we must emphasize that the sample was comprised of participants in a continuing education program aimed at increasing pharmacists' knowledge and integrating them into the "health care team." The findings clearly demonstrate that the major portion of these pharmacists' current activities were occupied with traditional roles—dispensing, compounding, and monitoring of drugs and providing consultation to consumers and physicians. The pharmacists were not currently engaged in certain activities—such

Table 2. Frequency of present performance of specific activities by all 69 pharmacists,[1] in percentages

Activity	*Frequently*	*Sometimes*	*Never*	*Unknown*
Dispensing prescription drugs	88	7	0	5
Dispensing nonprescription drugs	42	41	7	10
Consulting to consumers	47	43	4	6
Referring	20	54	14	12
Monitoring drugs	51	35	4	10
Consulting to physicians	22	46	22	10
Health education to consumers	16	48	22	14
Health education to community	4	9	73	14
Compounding	39	48	4	9
Followup	12	29	43	16
Monitoring health status	12	30	42	16
Educating hospital staff	3	3	59	19

[1] 42 community pharmacists and 27 hospital-based pharmacists.

as followup of patients and monitoring of consumers' health status—that are frequently advocated by proponents of role expansion.

The pharmacists expressed interest in undertaking a broader range of activities in the future. However, their desired role expansion consisted of an extension of their present activities rather than an assumption of new functions. Their desired role changes were (*a*) greater interaction with consumers, including consultation and health education and (*b*) increased emphasis on pharmaceutical services that require professional training, including monitoring drugs, dispensing prescription drugs, and providing consultation to physicians—in contrast to tasks such as dispensing nonprescription drugs.

It is significant that the respondents were disinterested or gave an equivocal response concerning many of the activities recommended for inclusion in the future role of the pharmacist. These activities included referrals of consumers to sources of health care (triage agent), patient followup activities, monitoring of health status (health maintenance), and health education on the community level.

Table 3. Frequency of present performance of specific activities, according to type of pharmacists,[1] in percentages

Activity	Frequently		Sometimes		Never		Unknown	
	Community	Hospital	Community	Hospital	Community	Hospital	Community	Hospital
Dispensing prescription drugs	91	81	2	15	0	0	7	4
Dispensing nonprescription drugs	55	22	36	48	2	15	7	15
Consulting to consumers	50	41	43	44	0	11	7	4
Referring	10	19	62	41	5	30	12	11
Monitoring drugs	57	41	29	43	2	7	12	7
Consulting to physicians	19	26	52	37	17	30	12	7
Health education to consumers	24	4	60	30	0	55	17	11
Health education to community	2	7	12	4	64	85	21	4
Compounding	52	19	36	67	2	7	10	7
Followup	17	4	36	19	29	66	19	11
Monitoring health status	17	4	31	30	31	59	21	7
Educating hospital staff	2	4	10	33	64	52	24	11

[1] 42 community pharmacists and 27 hospital-based pharmacists.

Table 4. Desired changes in frequency of performance of specific activities by all 69 pharmacists,[1] in percentages

Activity	More	Same	Less	Unknown
Dispensing prescription drugs	58	20	9	13
Dispensing nonprescription drugs	19	37	28	16
Consulting to consumers	77	13	0	10
Referring	30	40	14	16
Monitoring drugs	70	17	0	13
Consulting to physicians	48	34	6	12
Health education to consumers	51	29	3	17
Health education to community	12	38	28	22
Compounding	38	32	13	17
Followup	22	38	17	23
Monitoring health status	42	25	12	21
Educating hospital staff	29	20	25	26

[1] 42 community pharmacists and 27 hospital-based pharmacists.

Table 5. Desired changes in frequency of performance of specific activities, according to type of pharmacist,[1] in percentages

Activity	More		Same		Less		Unknown	
	Community	Hospital	Community	Hospital	Community	Hospital	Community	Hospital
Dispensing prescription drugs	71	37	12	33	5	15	12	15
Dispensing nonprescription drugs	26	7	45	26	17	44	12	22
Consulting to consumers	86	63	7	22	0	0	7	15
Referring	33	26	43	33	10	22	14	19
Monitoring drugs	71	66	19	15	0	0	10	19
Consulting to physicians	45	52	33	37	10	0	12	11
Health education to consumers	60	37	21	41	2	4	16	19
Health education to community	10	15	33	48	36	15	21	22
Compounding	31	31	33	30	14	11	21	11
Followup	29	7	31	48	17	19	24	22
Monitoring health status	45	37	17	37	17	4	21	22
Educating hospital staff	17	31	14	30	38	4	31	19

[1] 42 community pharmacists and 27 hospital-based pharmacists.

In discussions of these findings with the pharmacists who attended the continuing education program, the general interest of these professionals in assuming broader responsibilities was reemphasized. The pharmacists repeatedly expressed three major constraints to projected expanded roles—legal, financial, and potential deleterious impact on the pharmacist-physician relationship. Involvement in health maintenance activities, such as performing screening procedures, is not legally permissible for pharmacists in New York State. It is not possible for the community pharmacist to assume extensive health education and other activities without reimbursement. The pharmacists were concerned that expanding their activities in certain areas, notably patient followup, health status monitoring, and drug monitoring would incur the displeasure of neighborhood physicians.

Nonetheless, an expanded role for pharmacists can have a significant impact on the delivery of health care. In many instances, pharmacists are "the health professionals in closest contact with people," and in urban areas of high crime they often are the only health professionals remaining to serve the people (*5,7*). Pharmacists are available without appointment, they are well distributed, and they already provide limited health services to consumers. When the direction of a role expansion is planned, the community pharmacists must be consulted in order to determine what future increments in function are acceptable to them. In addition, the constraints on role change that are acutely perceived by the practicing pharmacists must be dealt with either by modifying them (legislation, alternate reimbursement methods) or by broadening professional activities in areas not affected by these barriers. Initially, expanding the traditional activities—especially increased interaction with the consumer—has the greatest potential for success because of the expressed desire of pharmacists for such change. Extension of present activities and eventual inclusion of new functions must be accompanied by appropriate continuing education programs to prepare pharmacists for more challenging roles.

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