
Hospital-Based Education Programs for Patients: Views of Health Care Professionals in Maine

ROSEMARY S. CAFFARELLA, PhD

IN A STUDY of how health care professionals—collectively and by professional specialty groups—in community hospitals view education for inpatients, the following issues were explored: (a) the importance of patient education and selected content areas, (b) appropriate roles for health care professionals and patients and their families in the planning and conducting of patient education activities, and (c) judgments about the organization of these activities. The professional groups included in the study were physicians, nurses, allied health professionals, patient education staff, and hospital administrators.

For this study, patient education was defined as a process whereby patients and in some instances their families receive information about specific health problems, learn the necessary competencies to deal with the health problems, and develop accepting attitudes toward the problems and the resulting changes in lifestyle.

Review of the Literature

Education for hospital patients is recognized as an important component of adequate patient care not only by health care providers (1–5) but also by the patients (6–8). Patient education is defined generally as a formal or specifically planned and organized educational program (9–12).

Hospital-based patient education programs serve inpatients, outpatients, and the general community. Several comprehensive overviews of such programs have been published (10,13,14). These programs include a wide variety of educational activities, including individ-

ual instruction, formal classroom teaching, taped telephone messages, video-taped instructions, and physical and occupational therapy sessions (14,15–19). Most of the activities have been focused primarily on patients with chronic illnesses (15,17,19).

Physicians, nurses, allied health professionals, and patient educators have engaged in patient education activities (3,10,15,18,20,21). Members of each professional group have played a variety of roles in education programs—as directors or members of interdisciplinary teams, or both (20,22), as prescribers of the programs (19,23), as teachers of patients (18,21,24), and as program coordinators and administrators (9,13). There is little agreement among the professional groups as to which one should have primary responsibility for education activities in hospitals (24).

The patient's role in education activities also is viewed in a number of ways. Patients are seen primarily as active participants in the total education process (20,25,26) or as recipients of preplanned educational activities (19,27). The role of family members has not been well defined.

Study Methods

The primary data for the study were generated from a questionnaire that was mailed to 1,308 hospital professionals in 22 community hospitals in Maine—about half of that State's community hospitals. The hospitals were stratified into four size categories, according to number of beds. Also, the hospitals were clustered within those strata by whether or not they had patient education programs to ensure that both types were selected for the study. The hospitals to be included in the study were chosen through a random number table. All of the size categories except that of more than 200 beds were represented proportionately in the sample.

Teaser requests to Dr. Rosemary S. Caffarella, Assistant Professor, College of Education, and Assistant Dean, Graduate School, University of Maine, Orono, Maine 04469.

Table 1. Percentage of respondents by professional subgroups and total respondents who accorded selected levels of importance to patient education for hospital inpatients

<i>Level of Importance</i>	<i>Physicians (N = 287)</i>	<i>Nurses (N = 276)</i>	<i>Allied health professionals (N = 100)</i>	<i>Patient education staff (N = 26)</i>	<i>Hospital administrators (N = 18)</i>	<i>Total respondents (N = 707)</i>
Extremely important for all	30.3	55.1	44.0	76.9	44.4	43.9
Extremely important for some	36.9	30.4	43.0	19.2	38.9	34.7
Moderately important for all	12.9	8.7	11.0	3.8	16.7	10.8
Moderately important for some	12.2	3.6	1.0	0.0	0.0	6.5
Of little importance	3.5	0.7	0.0	0.0	0.0	1.7
Undesirable	1.0	0.0	0.0	0.0	0.0	0.4
Don't know	3.1	1.4	1.0	0.0	0.0	2.0

All physicians, allied health professionals, hospital administrators, and one-third of the nurses in the study hospitals were sent a questionnaire. All patient education staff in all of the community hospitals in Maine were also sent a questionnaire.

The survey instrument consisted of closed-ended, multiple-choice questions. The instrument was pre-tested before it was mailed to the professional groups. Of the 1,308 questionnaires sent in the first mailing, 762 were returned—a return rate of 59 percent. Of the returns, 720 were usable—a usable return rate of 56 percent. The number of usable responses provided a reasonable proportional representation of all five professional groups. The rates of representation were patient education staff 87 percent, hospital administrators 82 percent, allied health professionals 69 percent, nurses 58 percent, and physicians 49 percent.

In the hospitals with formal patient education programs as well as those without such programs, the numbers of respondents were closely proportionate to the numbers practicing in each of the several bed-size hospitals. The 50–99 bed hospitals were slightly over-represented, and the hospitals with 100–199 beds were slightly underrepresented.

The data generated from the survey were presented in several ways. First, a display of the data showed how all professionals, collectively and by subgroups, responded to each question area. Then the data were analyzed by chi-square tests of independence to ascertain the significances of differences in judgments among the professional subgroups on each issue. Finally, the data were analyzed again by chi-square tests of independence to ascertain how responses varied in relation to four additional factors—size of hospital, whether the hospital had a formal patient education program, whether respondents had experience with formal patient education programs, and respondents' training in patient education. A significance level of 0.05 was used in the chi-square analysis.

Since the data were generated only from community hospitals in Maine, the following findings and conclusions of this study are generalizable only to those hospitals. However, similar findings might be expected in other locations.

Findings

Health care professionals agree that patient education is an important component of patient care, but not for

Table 2. Percentage of 707 respondents who indicated that specific content areas are important for inclusion in hospital patient education programs for inpatients

<i>Content areas</i>	<i>Of no Importance</i>	<i>Of little Importance</i>	<i>Moderately Important</i>	<i>Extremely Important</i>
Teaching patient to administer own treatment	0.6	0.9	11.8	86.1
Teaching patient self-care independent living skills	0.4	1.0	12.7	85.3
Explanation of diagnosis and treatment of health problem	2.4	2.5	15.0	79.4
Teaching short- and long-term lifestyle adjustments	0.4	2.6	24.0	72.1
Teaching of general preventive medicine	1.3	6.0	27.8	68.8
Teaching about appropriate community resources	0.3	2.2	31.4	65.5
Teaching about financial management of health problem .	0.7	4.8	35.5	55.9
Orientation to hospital facilities and services	2.6	13.7	54.0	28.2

Table 3. Percentage of 663 respondents who judged that physicians, nurses, allied health professionals, patient education staff, and hospital administrators should have primary responsibility for planning and conducting patient education in 9 selected content areas

<i>Content area and function</i>	<i>Physicians</i>	<i>Nurses</i>	<i>Allied health professionals</i>	<i>Patient education staff</i>	<i>Hospital administrators</i>
Orientation to hospital facilities and services:					
Planning	10.1	18.0	10.1	60.6	24.1
Conducting	5.1	33.6	15.4	56.2	8.0
Explanation of diagnosis:					
Planning	80.8	14.1	6.9	20.3	1.6
Conducting	79.1	15.8	6.2	12.3	0.6
Explanation of treatment:					
Planning	77.1	19.9	8.5	21.9	1.0
Conducting	71.3	24.6	8.5	14.8	0.5
Teaching patients to administer their treatment:					
Planning	40.1	47.2	14.2	29.0	0.7
Conducting	14.3	69.0	18.6	16.6	0.4
Teaching self-care independent living skills:					
Planning	20.7	37.6	36.0	38.5	0.6
Conducting	6.1	45.5	42.7	30.9	0.6
Teaching long- and short-term lifestyle adjustment:					
Planning	26.2	20.1	46.2	38.5	1.0
Conducting	9.6	28.1	57.7	31.6	0.6
Teaching about community resources:					
Planning	14.5	14.8	54.2	42.9	3.6
Conducting	4.7	17.2	58.4	37.4	2.0
Teaching about financial management of health problems:					
Planning	6.9	5.7	51.1	38.6	19.2
Conducting	3.9	4.9	54.5	36.4	14.4
Teaching general preventive medicine:					
Planning	57.2	30.7	17.5	37.2	2.6
Conducting	34.6	43.8	22.9	33.9	1.4
Mean over 9 areas:					
Planning	37.3	23.1	27.2	36.4	6.0
Conducting	25.4	31.4	31.7	30.0	3.1

all patients. Of the 707 respondents who answered this question, 43.9 percent believed that patient education is extremely important for all patients, and 34.7 percent thought it is extremely important only for some patients (table 1).

A variety of content areas were judged by the professionals to be appropriate for inclusion in hospital patient education programs (table 2). All the professionals rated the following areas as the most important: teaching patients to administer their own treatment (86.1 percent extremely important and 11.8 percent moderately important), teaching patients self-care independent living skills (85.3 percent extremely important and 12.7 percent moderately important), and explanation of diagnosis and treatment of the health problems (79.4 percent extremely important and 15 percent moderately important).

A majority of the respondents indicated that no one professional group should be given overall responsibility for planning and conducting patient education

activities. As shown in table 3, only one-fourth to one-third of the respondents judged that four groups (patient education staff, physicians, nurses, and allied health professionals) should have this overall primary role. However, each group—except the hospital administrators—was indicated by the total respondent group as having primary responsibility for planning and conducting one or more selected content areas.

Some professional groups described both their own primary roles as well as those of other professional groups in the planning and conducting of patient education activities somewhat differently than did the other groups. Patient education staff (table 4) and physicians (table 5), more frequently than all the other groups, indicated that their professional roles should include primary responsibility for planning patient education activities. Nurses and allied health professionals also indicated more frequently than all but the patient education staff that their roles should include primary responsibility for both planning and conducting patient education activities.

Table 4. Percentage of patient education staff who judged that they should have primary responsibility for planning and conducting patient education in 9 selected areas and percentages of other professional groups and of total respondents who judged that patient education staff should have this responsibility

Content area and function	Patient education staff (N = 26)	Other professional groups					Total respondents (N = 663)
		Physicians (N = 259)	Nurses (N = 263)	Allied health professionals (N = 97)	Hospital administrators (N = 18)	4 groups collectively (N = 637)	
Orientation to hospital facilities and services:							
Planning	69.3	44.3	69.3	74.5	55.6	59.5	60.6
Conducting	54.3	55.0	54.3	65.6	44.4	56.0	56.2
Explanation of diagnosis:							
Planning	46.2	14.7	22.9	23.7	11.1	19.3	20.3
Conducting	20.0	12.5	12.2	9.4	11.1	11.9	12.3
Explanation of treatment:							
Planning	53.8	15.6	23.2	26.8	22.2	20.7	21.9
Conducting	20.1	13.1	16.6	12.2	11.1	14.6	14.8
Teaching patients to administer their treatment:							
Planning	68.0	16.1	34.3	36.7	33.3	27.5	29.0
Conducting	32.0	17.8	25.4	20.6	27.8	20.7	16.6
Teaching self-care independent living skills:							
Planning	61.5	29.2	45.5	37.1	55.6	37.8	38.5
Conducting	38.0	32.3	33.3	21.1	41.2	31.1	30.9
Teaching long- and short-term lifestyle adjustment:							
Planning	60.0	28.9	45.7	36.7	55.6	37.6	38.5
Conducting	24.0	30.6	36.0	24.7	33.3	31.9	31.6
Teaching about community resources:							
Planning	60.0	37.4	46.1	42.3	61.1	42.3	42.9
Conducting	24.0	39.8	37.3	35.4	44.4	38.0	37.4
Teaching about financial management of health problems:							
Planning	44.0	37.2	38.8	42.6	41.2	38.6	38.6
Conducting	16.0	40.2	34.4	35.5	47.1	37.2	36.4
Teaching general preventive medicine:							
Planning	68.0	31.0	38.9	38.1	50.0	35.9	37.2
Conducting	40.0	33.1	33.3	34.0	44.4	33.6	33.9
Mean over 9 areas:							
Planning	59.0	28.3	40.5	39.8	42.9	35.5	36.4
Conducting	28.6	30.5	31.4	28.7	33.9	30.6	30.0

The patient education staff most frequently accorded to nurses a primary role in conducting patient education activities. The physicians (table 6) less frequently than all the other professional groups accorded to other groups the overall primary responsibility for planning patient education activities. The nurses (table 5) less frequently than other groups indicated that physicians should have the primary responsibility for both planning and conducting patient education.

A majority of the professionals believed that former patients (84 percent) and families of present and former patients (75 percent) should be involved in both planning and conducting patient education activities. There was agreement that the involvement of both

groups should depend primarily on the health program of the patient.

As shown in table 7, a large number of the professionals (approximately 80 percent of the total respondent group) believed that patient education programs should consist of an intentional combination of formal and informal activities. Only 12 percent believed that the activities should be principally formal, and only 8 percent indicated that they should be principally informal. Among the physicians, a minority (20 percent) believed that the activities should be principally informal.

About half of the professionals believed that a separate education department would be the best way to

Table 5. Percentage of physicians who judged that they should have primary responsibility for planning and conducting patient education in 9 selected content areas and percentages of 4 other professional groups and total respondents who judged that physicians should have this responsibility

Content area and function	Other professional groups						Total respondents (N = 663)
	Physicians (N = 259)	Nurses (N = 263)	Allied health professionals (N = 97)	Patient education staff (N = 26)	Hospital administrators (N = 18)	4 groups collectively (N = 404)	
Orientation to hospital facilities and services:							
Planning	15.4	5.6	7.2	15.4	11.1	6.8	10.1
Conducting	5.8	4.9	5.1	0.0	5.6	4.6	5.1
Explanation of diagnosis:							
Planning	82.9	76.2	81.4	92.3	100.0	79.5	80.8
Conducting	78.6	75.6	83.7	92.3	94.4	79.4	79.1
Explanation of treatment:							
Planning	81.1	75.3	69.4	80.8	77.8	74.5	77.1
Conducting	75.0	67.8	64.9	76.9	94.4	68.9	71.3
Teaching patients to administer their treatment:							
Planning	54.4	27.4	38.8	32.0	44.4	30.9	40.1
Conducting	22.6	7.1	11.3	11.5	22.2	9.0	14.3
Teaching self-care independent living skills:							
Planning	31.4	9.7	17.7	30.8	27.8	13.9	20.7
Conducting	8.9	3.4	5.2	12.0	5.6	4.4	6.1
Teaching long- and short-term lifestyle adjustment:							
Planning	37.7	16.5	20.6	32.0	27.8	19.1	26.2
Conducting	14.8	4.9	6.1	16.0	11.1	6.4	9.6
Teaching about community resources:							
Planning	17.9	9.9	18.6	8.0	16.7	12.3	14.5
Conducting	5.4	3.4	4.1	4.0	11.1	4.2	4.7
Teaching about financial management of health problem:							
Planning	9.0	3.1	10.8	8.0	5.9	5.6	6.9
Conducting	4.4	2.0	7.4	4.0	0.0	3.5	3.9
Teaching general preventive medicine:							
Planning	64.3	47.9	63.3	56.0	66.7	53.1	57.2
Conducting	39.1	27.0	35.1	52.0	55.6	31.9	34.6
Mean over 9 areas:							
Planning	43.8	30.2	36.4	39.5	38.9	32.8	37.3
Conducting	28.3	21.8	24.8	29.9	33.3	23.6	25.4

coordinate an organized patient education program. A minority, however, of all the groups except the allied health professionals indicated that the nursing department would be better able to do this.

Approximately three-fourths of all respondents judged that it was feasible to establish or expand organized patient education programs in their hospitals. Lack of staff time and a person to coordinate patient education activities were cited by the professionals as the two major factors that impede or prevent the development of such programs. Other factors also agreed upon by a large number of professionals included cost of patient education, lack of third-party payments, and a lack of acceptance by physicians.

The professionals' experience with formal patient education programs had the greatest effect on the way they answered three questions (content, roles of professionals, and feasibility of creating organized patient education programs). A higher proportion of professionals with experience than those without experience endorsed (a) including specified content areas in patient education programs, (b) involving health care professionals in both planning and conducting patient education activities, and (c) establishing or expanding organized patient education programs in their hospitals. Three additional variables (size of the hospital, whether the hospital had a formal patient education program, and the respondent's training in patient education) had

Table 6. Percentage of 259 physicians who judged that they should have primary responsibility for planning and conducting patient education in 9 selected content areas and that 4 other professional groups should also have such responsibility

<i>Content area and function</i>	<i>Physicians</i>	<i>Nurses</i>	<i>Allied health professionals</i>	<i>Patient education staff</i>	<i>Hospital administrators</i>
Orientation to hospital facilities and services:					
Planning	15.4	14.2	12.7	44.3	30.9
Conducting	5.8	23.6	19.2	55.0	10.9
Explanation of diagnosis:					
Planning	82.9	10.9	5.2	14.7	1.9
Conducting	78.6	13.3	6.6	12.5	0.8
Explanation of treatment:					
Planning	81.1	12.3	6.6	15.6	1.2
Conducting	75.0	17.4	8.3	13.1	0.8
Teaching patients to administer their treatment:					
Planning	54.4	25.8	12.1	16.1	0.8
Conducting	22.6	32.8	16.9	17.8	0.4
Teaching self-care independent living skills:					
Planning	31.4	25.8	40.0	29.2	1.2
Conducting	8.9	32.8	32.8	32.3	1.6
Teaching long- and short-term lifestyle adjustment:					
Planning	34.7	12.5	45.1	28.9	2.0
Conducting	14.8	18.4	59.5	30.6	1.6
Teaching about community resources:					
Planning	17.9	8.6	52.8	37.4	5.1
Conducting	5.4	13.0	56.3	39.8	3.6
Teaching about financial management of health problems:					
Planning	9.0	2.0	45.2	37.2	23.6
Conducting	4.4	2.0	48.8	40.2	18.8
Teaching of general preventive medicine:					
Planning	64.3	19.9	15.6	31.0	2.1
Conducting	39.1	30.2	23.1	33.1	1.6
Mean over 9 areas:					
Planning	43.8	14.7	26.1	28.3	7.6
Conducting	28.3	20.4	30.2	30.5	4.5

Table 7. Percentage of respondents who judged that patient education activities should be principally formal, principally informal, or an intentional combination of formal and informal activities, by professional groups

<i>Types of activities</i>	<i>Physicians (N = 273)</i>	<i>Nurses (N = 268)</i>	<i>Allied health professionals (N = 97)</i>	<i>Patient education staff (N = 26)</i>	<i>Hospital administrators (N = 18)</i>	<i>Total respondents (N = 682)</i>
Principally informal	20.1	7.5	8.2	3.8	0.0	12.4
Principally formal	10.3	6.0	8.2	3.8	5.6	8.0
Intentional combination of formal and informal	69.6	86.6	83.5	92.3	94.4	79.6

only a minimal effect on the way respondents answered the questions.

Conclusions

The following major conclusions drawn from this study refer only to health care professionals who work in Maine hospitals.

- Almost all the professionals surveyed believe that patient education is an important component of patient

care. Patient educators and nurses generally believe that it is important for all patients. However, among physicians, hospital administrators, and allied health professionals, opinion differs—some see it as important for all patients, and others see it as important only for some patients. A small percentage of physicians doubt that patient education is an important component of hospital care.

- The professionals generally agree that adequate patient education requires a comprehensive program that

includes both formal and informal elements which are intentionally developed and integrated. The program should incorporate significant contributions from every type of professional hospital worker, but the greatest contribution—especially in the operation of the program—should be made by physicians, nurses, and allied health professionals. Also, the program should provide basic educational services generally to all patients as well as additional services appropriate to the health and health-related problems of individual patients or categories of patients.

- The principal health care professionals agree that the following general areas should be included in a hospital's education program for patients: explanation of diagnosis and treatment; teaching patients to administer their own treatment, about self-care living skills, about short- and long-term lifestyle adjustments, about appropriate community resources, about general preventive medicine, and about financial management of the health program; and orientation of patients to the hospital facilities and services.
- In general, each group of professionals ascribes a greater role to itself in planning and execution of patient education than to other professional groups. Although these disagreements are minor, they should be considered in the planning of patient education programs. Disagreement will probably occur most often between the patient educators and the other professionals, especially physicians, since the patient educators see themselves as having a stronger role than that identified for them by the other professional groups, and between the physicians and other staff—especially patient educators and nurses—because physicians believe their role is greater than that of other staff members.
- Health care professionals in community hospitals agree that the patient education staff should facilitate and coordinate the planning and execution of patient education activities.
- In general, the professionals believe that the involvement of former patients and the families of present and former patients in planning and conducting patient education activities should depend on the health problem of the patient.
- The professionals generally agree that no insurmountable problems exist to prevent the development or expansion of organized patient education programs. However, several factors are slowing the establishment of these programs—principally, lack of staff time to plan and conduct activities and of personnel to coordinate activities. Other inhibiting factors include the cost of patient education, lack of third-party payment, and lack of acceptance of patient education by physicians.
- In general, the professionals who have had experience with formal patient education programs have more

positive reactions to patient education than those who have not had this experience.

The most challenging conclusions of the study center on three areas. First, patient education is recognized by professionals as an important component of care for inpatients; it should include both the medical aspects of an illness and its management, as well as the personal, social, and vocational concerns of the patient in relation to his or her illness. Second, the concept and the day-to-day operation of patient education for inpatients needs to be broadened to include both formal and informal or incidental activities to allow a more complete and comprehensive program. Third, there is a need for a reexamination by the professional community of how patient education activities for inpatients should be conducted and managed. In the model presented here, the existing professional staff's responsibilities would include a role in planning or conducting, or both, of selected phases of the patient education program.

Implications for Practice and Research

Patient education should be a total hospital community effort, rather than delegated to a separate education staff; thus, it will have to be part of each health care professional's job. Hospitals will need to offer continuing professional programs on patient education in order to train existing staff. Also, changes in curriculum to include patient education will be required in most schools that provide preprofessional training for health care professionals. These trainees will have to acquire a basic knowledge and skill base in adult psychology and learning, the teaching-learning process, methods of teaching, and evaluation procedures. Also, they will require materials on patient education in general.

If patient education is to become a total community effort, health care professionals in hospitals, in many instances, will have to change their role perceptions and the perceptions they have of other professional groups. For example, physicians, nurses, and allied health professionals must see themselves and other staff members as teachers of patients. These needed changes in role perceptions are likely to incur a period of role conflict within and among professional groups.

Appointment of a patient education coordinator is necessary if this community effort of professionals is to be integrated and to function effectively. The patient education coordinator (or in large hospitals, the patient education staff) does not necessarily need a traditional health field background, but should have knowledge and skills in the fields of education, community organization, and management. Within this framework, the patient education coordinator or staff will then manage

rather than primarily conduct patient education activities.

The roles of hospital health care professionals in the implementation and coordination of patient education activities need further investigation for both theoretical and practical applications. Examples of questions to be answered are: Is it feasible in terms of present resources to include patient education in the roles of existing hospital staff? Are hospital professional staff members willing to plan and conduct patient education as part of their job responsibilities? Which hospital staff units or combinations of units are most appropriate for planning and conducting general and specific program areas?

Similar studies also are needed to ascertain the opinions of health care professionals toward patient education for other than inpatients, for example, outpatients, emergency room patients, and the community at large. Professional opinions about patient education for other institutions and patient populations—for example, general office practice, community health agencies, mental health institutions—should be investigated.

Since the study reported here was basically exploratory and descriptive, it did not provide an in-depth view of the various areas in question, for example, the roles of patients and their families in patient education; thus, more research is needed in those areas. Apparent additional research questions, although not directly a result of this study, are:

Do patients have the same perceptions as health care professionals regarding the content areas to be included in hospital patient education programs?

What would be the specific roles of patients and their families in planning and conducting education activities? Which health problem areas are appropriate for them?

What kinds of informal education activities are being conducted at present for inpatients? Who in the hospital (professional, nonprofessional, or volunteer) is doing what kind of patient education?

Which patient education activities can be performed most effectively, informally as well as formally?

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