

The Physicians' Recognition and Attitude about Patient Education in Practice

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The purpose of this study was to investigate the current status of physicians' recognition and their attitude towards patient education in actual clinical practice. We sent surveys containing self-questionnaires to one-hundred and fifty physicians in five university hospitals and one general hospital from the period of April to July 1995. The self-questionnaire was designed to evaluate the physicians' recognition and attitude towards patient education at his or her clinical practice. A total of 137 answered-sheets were returned and they were subsequently analyzed. 1) The frequency of physicians' recognition of patient education as an essential component in practice was 76.6%. There was a significant difference between family physicians and other physicians, 97.1%, 69.6%, respectively($p=0.03$). 2) The frequency of physicians' accomplishment of a satisfactory doctor-patient relationship was 51.1%; board certified physicians and residents, 79.4%, 43.3%, respectively($p=0.001$). 3) The percentage of physicians who explained details about examinations and procedures was 73.0%, who interpreted the findings of exams, tests and x-rays 72.3%, but who assessed patient readiness to modify behavior was only 29.9%. The frequency of physicians' education to patient about the biomedical diagnosis and treatment was high, but that of physicians' approach towards patient as a biopsychosocial model was relatively low. Therefore, it is concluded that much more time and emphasis should be placed on patient education in the undergraduate and postgraduate medical education curricula.

Key Words : Patient education, Physicians' recognition, Attitude

INTRODUCTION

The importance of patient education, as medical practice changes in complexity and sophistication, is

being increasingly recognized as an essential component of high quality medical care. With the leading causes of death in the world all closely linked to unhealthy lifestyles, patient education has assumed critical importance(U.S. Dept. of Health & Human Services, 1990). It will become even more important as demands for improved outcomes in chronic disease and preventive health programs increase in both areas, successful health care will necessarily include effective

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educational interventions (McClellan, 1986).

From the ideal patient education, physicians may gain satisfaction in having an impact on the health of their patients, and they benefit from an enhanced relationship with their educated patients. At the same time, it may offer the opportunity to create an environment of trust, to enhance the doctor-patient relationship, and to increase the patients' role in health care, all of which increase patient satisfaction.

Although this conception of patient education has been increasingly appreciated and recognized in recent years, only a few studies have attempted to analyze the current status of actual physicians' recognition and attitudes on such topic. The purpose of this study was to conduct a multicenter investigations as to whether physicians actually recognize the importance of the patient education and if so, their attitudes toward it in current clinical practice.

MATERIALS AND METHODS

A collaborative study group distributed the self-questionnaires to 150 physicians working at different hospitals (five university hospitals and one general hospital) in the urban area, Seoul, Korea. Responsibility for data collection at each site was assumed by a study collaborator who either supervised collection or collected the data directly.

Participants

Background information from completed questionnaires was available for 137 out of 150 physicians who volunteered to participate in the study. Among the study group, 95 (69.3%) were males and 42 (30.7%) were females. The number of physicians under 30 years were 57 (41.6%), between 30 and 40 years 69 (50.4%) and over 40 years 11 (8.0%). The number of family physicians was 35 (25.5%), internists 24 (17.5%), pediatricians 10 (7.3%), surgeon 24 (17.5%), and others 44 (32.1%). The number of board certified physicians was 34 (24.8%), residents 97 (70.8%) and unknown 6 (4.4%). Among the residents, the number of first, second, third, fourth year residents and unknown were 25 (25.8%), 23 (23.7%), 34 (24.8%), 13 (9.5%) and 2 (2.1%), respectively (Table 1).

Self-Questionnaire

The self-questionnaire was designed for the evaluation of the physicians' recognition and of attitudes to patient education in his or her practice. The items of the

Table 1. Demographic features of physicians by sex, age, department and grade

	Items	Number (%)
Sex	Male	95(69.3)
	Female	42(30.7)
Age	< 30	57(41.6)
	30 - 40	69(50.4)
	> 40	11(8.0)
Department	Family Medicine	35(25.5)
	Internal Medicine	24(17.5)
	Pediatrics	10(7.3)
	Surgery	24(17.5)
	Others	44(32.1)
Grade	Staff	34(24.8)
	Resident	97(70.8)
	1st	25(25.8)
	2nd	23(23.7)
	3rd	34(24.8)
	4th	13(9.5)
	unknown	2(2.1)
Unknown	6(4.4)	

questionnaire were structured as done by Plorde et al (Plorde et al., 1984); recognition of the importance of patient education, establishing a medical interview, assessing needs, developing a plan of action, implementing interventions and evaluating interventions. Each item consisted of several specific questions. The guide for answering was followed by three scales; usually practiced, sometimes practiced and rarely practiced.

Statistical analysis

We analysed the data using SAS[®] (v.6.04) statistical software. We observed the frequencies of the subjects who answered for 'usually practiced'. The Mantel-Haenszel chi-square test was performed to compare the recognition and attitudes between family physicians and other physicians, or between board certified physicians and residents. Two sided p values less than 0.05 were regarded as significant.

RESULTS

Recognition of the importance of patient education :

The percentage of physicians who recognized patient education to be essential in practice was 76.6%, practical 73.0%, effective 75.2%, and a necessary part of the care program 82.5%. But the frequency of physicians who thought patient education to be pro-

Table 2. Thought and behavior about patient education in practice

Items	Frequency (%)		
	A	B	C
Recognition about patient education			
Essential	76.6	21.9	1.5
Practical	73.0	25.5	1.5
Effective	75.2	24.1	0.7
Part of the care program	82.5	16.1	1.5
Professionally satisfying	57.7	35.0	7.3
Establishing medical interview			
Developing a satisfying doctor-patient relationship	51.1	46.7	2.2
Asking open-ended questions	40.1	44.5	15.3
Using words the patient can understand	56.9	37.2	5.8
Listening attentively to the patient	64.0	32.8	13.1
Sensitive to verbal communication	50.4	42.3	7.3
Sensitive to nonverbal communication	54.7	35.0	10.2
Concern for the patients' comfort and privacy	58.4	38.7	2.9
Assessing needs			
Identifying patient concerns/ issues	49.6	46.0	4.4
Identifying physician concerns/issues	51.1	43.1	5.8
Inquiring about patients' knowledge of issues	48.9	45.3	5.8
Inquiring about patients' beliefs/attitudes	39.4	41.6	19.0
Exploring patients' prior attempts/skills related to issues	45.3	40.9	13.9
Identifying environmental/ social factors affecting behavior	33.6	40.1	26.3
Assessing patients' readiness/social factors affecting behavior	29.9	40.9	29.2
Inquiring about the family's knowledge, attitudes and behavior	37.2	45.3	19.5
Explaining exams and procedures	73.0	24.8	2.2
Reviewing and interpreting findings of exams, test, and X-rays	72.3	25.5	2.2
Developing a plan of action			
Incorporating patient and physician concerns in developing a plan	35.8	54.0	10.2
Informing patient of conclusions/diagnosis	60.6	35.8	3.6
Informing patient of the cause of the problem	53.3	40.1	6.6
Identifying patient behaviors affecting health	38.0	37.2	24.8
Reinforcing healthy behaviors	36.5	40.1	23.4
Identifying strategies for modifying unhealthy behaviors	41.6	43.8	14.6
Suggesting a plan of action/recommendations	38.6	28.5	2.9
Exploring patients' reactions to plans/recommendations	49.6	41.6	8.8
Acknowledging and negotiating patient difficulties	29.2	51.1	19.7
Implementing interventions			
Presenting ideas in a clear manner	48.9	44.5	6.6
Presenting an appropriate amount of information	50.4	43.8	5.8
Observing patient reactions to intervention	51.8	43.1	5.1
Supplementing verbal discussion with written instructions	24.8	38.0	37.2
Encouraging/responding to questions	32.8	40.1	27.0
Anticipating future events and giving guidance in management	62.8	32.1	5.1
Exploring potential obstacles/offering guidance	40.9	40.9	18.2
Summarizing conclusions near the end of the visit	56.9	31.4	11.7
Recording interventions in medical records	43.8	39.4	16.8
Evaluating interventions			
Confirming from the patient about knowledge	29.9	52.6	17.5
Confirming from the patient about attitude	37.2	50.4	12.4
Confirming from the patient about skill	40.9	43.1	16.1
Observing changes in health status	54.0	39.4	6.6

* A : usually practiced B : sometimes practiced C : rarely practiced

professionally gratifying was only 57.7%(Table 2).

Establishment of the medical interview :

The percentage of physicians who believed that they established a satisfying doctor-patient relationship was 51.1%, asked patients open-ended questions 40.1%, used understandable to the patients 56.9%, and listened attentively to the patients 64.0%. About fifty percent of physicians were sensitive to verbal communication and those who were sensitive to nonverbal communication was 54.7%. The percentage of physicians who concerned about a patients' comfort and privacy was 58.4%(Table 2).

Assessment of the needs :

The percentage of physicians who identified patients' concerns and issues was 49.6%, and those who identified their own concerns and issues 51.1%. Physicians who inquired about patients' knowledge of the issue accounted for 48.9% of the total number, those who inquired about patients' beliefs and attitudes related to the issues 39.4%, those who explored patients' prior attempts and skills in dealing with the issues 45.3%, those who identified environmental and social factors affecting behavior 33.6%, those who assessed patients' readiness and social factors affecting behavior 29.9%, and those who inquired about the family's knowledge, attitudes and behavior 37.2%. Finally those who explained about the exams and procedures accounted for 73.0%, and those who reviewed and interpreted findings of exams, tests and x-rays 72.3%(Table 2).

Development of a plan of action :

The percentage of physicians who incorporated the concerns of the patient in developing a plan was 35.8%, that who informed patients of their final remarks and diagnosis 60.6%, that who informed the patient of the cause of the problem 53.3%. Physicians who identified patient behavior affecting health accounted for 38.0%, those who reinforced healthy behavior 36.5%, those who identified strategies for modifying unhealthy behavior 41.6%, those who suggested a plan of action and recommendations 38.6%, those who explored the patients' reactions to plans and recommendations 49.6%, and those who acknowledged and negotiated patient difficulties 29.2%(Table 2).

Implementation of intervention :

Physicians who believed that they presented their ideas in a clear manner accounted for 48.9% of the

total and those who believed that they presented with an appropriate volume of information 50.4%. The percentage of physicians who closely observed patients' reactions to intervention was 51.8%, that who supplemented the verbal discussion with written instructions 24.8%, that who encouraged and responded to questions 32.8%, and that who anticipated the future events and gave guidances in management was 62.8%. Those physicians who explored the potential obstacles and offer guidances accounted for 40.9% of the total number, those who summarized the conclusions near the end of the visit 56.9%, and those who recorded interventions in medical records 43.8%(Table 2).

Evaluation of interventions :

The percentage of physicians who confirmed the patients' knowledge of disease was 29.9%, those who confirmed the patients' attitude to treat their disease 37.2%, those who confirmed the patients' skill to manage their problem 40.9%, and those who observed changes in health status 54.0%(Table 2).

Comparison of family physicians with other physicians

The items which showed significant differences between family physicians and other physicians are as follows ; recognition of the importance of patient education as an essential component of clinical practice (97.1% vs. 69.6%), physicians who thought patient education to be a part of the care program(97.1% vs. 77.5%), and physicians who listened attentively to patients(62.9% vs. 51.0%)(Table 3).

Comparison of specialists with residents

The items which showed significant differences between board certified specialists(staff members) and residents are as follows ; physicians who believed they establish a satisfying doctor-patient relationship(79.4% vs. 43.3%), those who identified patients' concerns and issues(70.6% vs. 42.3%), those who informed the patients of final remarks and diagnosis(79.4% vs. 53.6%), those who suggested a plan of action and recommendations(85.3% vs. 62.9%), those who explored the patients' reactions to plans and recommendations(67.7% vs. 43.3%), those who explored potential obstacles and offer guidance(58.8% vs. 36.1%), those who confirmed knowledge from patients(55.9% vs. 21.7%), and those who confirmed attitude from patients(61.8% vs. 27.8%)(Table 4).

Table 3. Items that show a significant difference between family physicians(F) and other physicians(O)

Items		Frequency (%)			P value
		A	B	C	
Patient education is an essential component	F	97.1	2.8	0.0	0.001**
	O	69.6	28.4	2.0	
Patient education is a part of the care program	F	97.1	2.9	0.0	0.010*
	O	77.5	20.6	2.0	
Listening attentively to patients	F	62.9	31.4	5.7	0.043*
	O	51.0	33.3	15.7	

A: usually practiced B: sometimes practiced C: rarely practiced. * P < 0.05 ** P < 0.005

Table 4. Items that show a significant difference between staff(S) and residents(R)

Items		Frequency (%)			P value
		A	B	C	
Developing a satisfying doctor-patient relationship	S	79.4	17.7	2.9	0.001**
	R	43.3	54.6	2.1	
Identifying patient concerns/issues	S	70.6	26.5	2.9	0.010*
	R	42.3	53.6	4.1	
Informing patient of conclusions/diagnosis	S	79.4	17.6	2.9	0.017*
	R	53.6	42.3	4.1	
Suggesting a plan of action/recommendations	S	85.3	11.8	2.9	0.035*
	R	62.9	34.0	3.1	
Exploring patients' reactions to plans/recommendations	S	67.7	29.4	2.9	0.012*
	R	43.3	45.4	11.3	
Exploring potential obstacles/offering guidance	S	58.8	32.4	8.8	0.018*
	R	36.1	43.3	20.6	
Confirming from the patients about knowledge	S	55.9	32.4	11.8	0.002**
	R	21.7	59.8	18.6	
Confirming from the patients about attitude	S	61.8	26.5	11.8	0.008*
	R	27.8	59.8	12.4	

A: usually practiced B: sometimes practiced C: rarely practiced. * P < 0.05 ** P < 0.005

DISCUSSION

Patient education can be defined as the process influencing patient behavior, producing changes in knowledge, attitudes and skills required to maintain or improve health(Society of Teachers of Family Medicine, 1979). It generally involves the direct one-to-one relationship in the clinic setting and includes the teaching and counseling to help enable patients to stay healthy and to manage unusual events which may occur. In another words, the patient education does not merely mean giving the medical information, but should also include the conceptual ideas that might affect the patients' satisfaction, compliance and health status

through his or her active participation to management.

The patient rights to be informed constitutes an important rationale for patient education. A Patient's Bill of Rights states that the patient has the right to obtain from the physician complete current information concerning diagnosis, treatment, and prognosis in terms that the patient can reasonably understand(American Hospital Association, 1972). Patient rights have led to expectations that physicians will offer advice on maintaining health(Council on Scientific Affairs, 1990).

The doctrine of informed consent imposes a legal obligation on physicians to assure that patients have sufficient information and understanding to make an informed decision on a proposed course of treatment.

Physicians can be held accountable with regard to educating patients and their families if injury results from an undisclosed risk (Mangels, 1991).

There has been much interest in patient education as a means of reducing costs. In the primary care setting, patient education was shown to reduce laboratory costs (Webber, 1990). Proper patient education has demonstrated substantial benefits for chronically ill patients and for those who need to modify health habits that put them at risk of disease (Mullen et al, 1985). Patient education may also serve as a marketing tool for the practice. One of the factors by which patients perceive quality in a practice is the information provided to them about their health (Abraham et al., 1990).

In the light of above mentioned facts, the patient education can be considered as an active but obligated process which requires a special set of skills and rationale for that it to be strong, encompassing benefits for patients, physicians and society in general. Physicians definitely should believe that it is their responsibility to educate patients and they must spend necessary time doing so. This is reflected on one distinguished survey from Dickey and Robinson (1991) that the patient education, among primary care providers, is reported to include about one-fourth of their health care encounters. Another large survey from AAFP members showed that more than 90 percent of them stated that they counseled adult patients in health risk areas (Mullen and Tabak, 1989). Unfortunately, our study revealed that the rate of physicians' recognition of importance of patient education as an essential part of practice was about high as 70%, but the percentage of their behaviors based on such concept in actual clinical setting was only about 40%. Also, when obtaining the medical history from the patients, the biomedical-oriented items, like observing changes in health status, were more frequently and seriously taken than the psychosocial-oriented items (e.g., feedback knowledge, attitude and skill from patients). As for the contents of patient education, the explanations about biomedical-oriented problems (e.g., finding of exams, tests and x-rays, etc) were given to patients more frequently than the explanations about psychosocial-oriented problems such as patients' readiness, difficulties, social factors and attitudes of their families. These results were, however, similar to the study done by McClellan (1986).

The physicians' educational communication with patients consists primarily of explanations and instructions about disease and treatment. But in actual clinical settings, it is customary that only a few statements are

generally made to encourage desired behavior of patients. And there seemed to be relatively limited efforts to determine whether patients are understood about the informations given by their physicians. This is correlated in our study that less than half of the physicians were accounted for those who usually practiced implementing and evaluating interventions for the their patients.

Patient education has several barriers. There have been reports that showed that physicians typically do not act on the opportunities they have for patient education in daily practice (Council on Scientific Affairs, 1990) and their efforts often are ineffective (Falvo and Bosshart, 1990). Studies about the influence of physician-patient communication on health outcomes generally confirmed that physicians' instructions were frequently misunderstood or not retained for long periods (McClellan, 1986). In a noted study of the health promotion beliefs, attitudes and practices of primary care physicians, fewer than half of the respondents stated that they felt they were much prepared to counsel patients on most types of behavior. Only three to eight percent of them felt very successful in helping patients with any type of behavior change, but about half of the respondents said that their efforts were not effective at all (McCann and Blossom, 1990). Other surveys have reported that physicians generally believe they are ill equipped to offer advice to their patients and that their advice is generally ignored (Council on Scientific Affairs, 1990).

Most physicians consider their limited time as a major barrier to provide the patient education. Supporting this view is a study which found that the amount of information given by physicians is inversely related to the number of patients seen in a day (Dickey and Robinson, 1991). The number of patients seen in a day varies among physicians, or physicians in different departments. Generally, in the case of family physicians in our country, physicians have to examine an average of 30 patients in a half-day (range from 10 to 100 patients). Therefore, time limitation can be an important barrier in accomplishing ideal patient education in our country. In such circumstances, we believe that physicians should learn better and effective way of accomplish counseling in short time and, at same time, learn to utilize other resources, if available, to provide the proper education.

Another barrier, lack of reimbursement, or compensation given to physicians for patient education, is cited as another drawback although this concern ranked lower in provider surveys than other factors. Some hope to improve the situation by putting efforts into to create

new billing codes for counseling and to enhance reimbursement for detailed cognitive services through the new resource-based relative value scale (Dickey and Robinson, 1991). The importance of documenting patient education activities also needs to be reemphasized.

As for the beliefs and attitudes toward the patient education among different physicians, results from our study revealed that there are several significant differences between family physicians and other physicians (also between staff members and residents). Authors believe this may be due to different training styles and personal experiences on patient education. For example, in training program for family physicians, knowledge of behavior science, especially for patient education, is reinforced. Therefore, program for patient education is strengthened throughout the training in residency curricula, as it has been shown to improve significantly the patient education activity of physicians (Residency Review Committee for Family Practice, 1992).

Some physicians doubt the need for patient education with a perception that patients are not interested or motivated to take responsibility for their health. A number of studies have indicated, however, that physicians significantly underestimate patients' desires for information and significantly overestimate the amount of information that they provide (Dickey and Robinson, 1990).

In conclusion, it is revealed that a large proportion of physicians recognized and thought that patient education is an essential component in patient care, but a significant number of doctors do not actually practice or behave with this fact borne in mind in reality. In the future, as chronic diseases may increase all around the world, patient education will take a more and more important role for the control and prevent such diseases. Therefore, physicians should apply more attention and effort to patient education, especially in chronic settings, and at the same time should emphasize and strengthen the training program for patient education in medical school and the residency curricula.

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