The Effect of Video Tape on Presentations Made to Physicians: A Pilot Study in Patient Education

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This paper examines the use of brief patient education in encouraging patients to present stress conditions as problems to physicians.

Participants were patients at the Family Practice Office, University of Arizona Health Sciences Center. All 40 selected patients were visiting the Family Practice Office for the first time. The two groups of 20 patients were similar in age and sex.

An audio recording was made of the patient-physician encounter of all participants. The control group of 20 patients received no education prior to meeting the physician. The 20 patients in the experimental group observed a video tape prior to meeting the physician. The video tape, specially prepared for this project, described the relationship between stress conditions and illness. It further emphasized the physician's need to know about these stress conditions and the patient's responsibility for presenting them to the physician.

The results of the chi-square test of association applied to the number of stress conditions presented demonstrated a highly significant difference between the two groups. The probability level was .01.

This study produced strong evidence to support the hypothesis that brief patient education does affect the presentation of stress conditions to physicians.

This paper examines the use of patient education in encouraging patients to present stress conditions to their physicians. It developed from the recognition of a need to legitimize stress conditions as appropriate problems for patients to present to physicians.

The study was conducted at the Family Practice Office of the Department of Family and Community Medicine, University of Arizona Health Sciences Center. A philosophy of encouraging patients to assume increasing responsibility in the care of their health, and an interest in the social and emotional aspects as well as in the medical aspects of health, made the Family Practice Office an ideal setting for this study.

Patients come to the Family Practice Office with a variety of problems. Those problems most frequently presented are not necessarily the primary problem the patient carries to the physician.[1]

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Table 1. Results of Chi-square Test of Association Applied to Three Categories of Patient's Statements

Statements Made by Patients	Chi-Square Value	Probability Level
Stress conditions	6.53	.01
Volunteered life changes	0.40	.52
Life change responses	0.10	.74

Often the presenting problem serves as a patient's ticket of admission to the physician's office. Zborowski describes social training that does not necessarily discourage use of the physician, but does imply that such use will be based on physical needs rather than on emotional concerns.[2]

Today, patients, as consumers of services, are seeking more from physicians than the treatment of diseases. Cobb suggested that patients seek not only adequate medical care, but also sympathetic emotional support from the physician.[3] Mechanic found that persons who change physicians because of dissatisfaction appear to complain more about the physician's lack of interest, caring, and motivation than about his/her medical qualifications.[4]

Because the physician's role involves communication, interaction, and nurturance, Mechanic suggests that it also meets the interpersonal needs of patients. This is not to say that physicians are in universal agreement over this holistic approach. Black argues that "the doctor's focus should be on the disease and not on the whole life of his patient or on some general ideal of humanness."[5]

Increasingly, however, physicians are accepting stress as significant in the etiology of disease. Selye's physiologic concept of stress has been expanded to include environmental and social stresses, thus legitimizing the presentation of emotional needs and changes in life situations to the physician.[6]

While the relationship between stress and illness is gaining wider acceptance among physicians, patient education is necessary to help patients identify and accept emotional needs as legitimate and appropriate for presentation to physicians. This study examines the effect that brief patient education has on the presentation of stress conditions to physicians.

Methods

The study employed a selected sample of patients who were to see a physician at the Family Practice Office for the first time. To be selected, the patient needed to meet certain criteria. He/she (1) had to be new to the Family Practice Office, (2) had to be regarded as adult, which was designated by the Family Practice Office as 17 years or older, (3) could not be accompanied by another person during the time spent with the physician, and (4) had to indicate consent to participate in the study.

A total of 20 patients was selected for the control group, and 20 patients for the experimental group. The ages of the control group ranged from 19 to 80 years with a mean age of 39 years. The ages of the experimental group ranged from 17 to 76 years with the mean age of 44.05 years.

There were 6 males and 14 females in the control group. Likewise, there were 6 males and 14 females in the experimental group.

The video tape, which was produced as the tool of brief patient education for the purpose of this study, was 6 minutes and 12 seconds long and had three thrusts to its content. The brief introduction emphasized that changes occurring in the life experience require the body to make some adaptation or adjustment. This need for adjustment was identified as stress, and stress was recognized as a significant factor in the etiology of disease.

The body of the script referred to several possible changes or life events which the patient might have experienced. Finally, the message was directed toward placing responsibility on the patient for bringing these events to the attention of the physician.

In order to measure the effectiveness of the selected tool of patient education it was necessary to confine the patients in the control group to the regular office procedure. Only those patients in

Table 2. Frequency and Percent Scores of Both Groups for Presentation of Stress Conditions

Group	One or More Mention of Stress Conditions Frequency	%
Control	1	5
Experimental	9	45
Combined	10	25

the experimental group were shown the video tape before meeting the physician.

The study depended heavily on the cooperation of residents in their second and third year of graduate training, who would be seeing patients in the Family Practice Office. Before recording the conversations between physician and patient, verbal requests to individual physicians yielded permission. The physicians had no knowledge concerning the content of the video tape and were not informed which patients viewed the video tape. The only extraordinary procedure the physicians were aware of was the presence of the audio recorder during every patient-physician encounter involved in the study.

Data were collected by means of these audio recordings. The audio tapes varied in length from 12 to 45 minutes. Only data from the first ten minutes were analyzed.

Besides the data gathered from the audio tapes, descriptive information was collected in the form of responses to letters mailed to participants.

The letter mailed to control sample participants asked, "Do you think your first visit with your doctor would have been different without the presence of a tape recorder?"

The one mailed to experimental group members asked, "Do you think the video tape influenced your conversation with your doctor? If yes, in what way?"

Results

The chi-square test of association was applied to three variables:

1. Number of stress conditions presented as problems to the physician. Specific examples of problems recorded as stress conditions are "stress, tension, feeling down, strain, and worry."

2. Number of life changes volunteered by the patient, using Holmes' and Rahe's Social Readjustment Rating Scale.[7] Examples of life changes included in the scale are: marriage, death of spouse, outstanding personal achievement, change in financial status, change in residence, retirement. A patient's statement regarding a life change, not immediately preceded by a physician's question, was recorded as volunteered.

3. Number of life changes presented in response to the physician's question. The patient's statement of a life change immediately preceded by a physician's question was recorded as a response.

No quantitative analysis was applied to the descriptive information from the letters mailed to and returned by the participants.

Table 1 describes the results of the chi-square test of association. No significant difference was found between the two groups based on the number of life events volunteered by the patients and the number of life events presented in response to the physician's questions.

When applied to the number of stress conditions presented as problems to physicians, the chi-square test of association indicated a highly significant difference between the two groups, with a probability level of .0106.

Table 2 describes the frequency and percent scores of both groups for the presentation of stress conditions. Five percent of the control group mentioned one or more stress conditions to the physician. Forty-five percent of the experimental group mentioned one or more stress conditions to the physician. This score of 45 percent is significantly higher than the score of the five percent for the control group and mean score of 25 percent for the combined groups.

The results of the chi-square test of association strongly support the hypothesis that brief patient education does affect the presentation of stress conditions to physicians, and the descriptive information gathered in this study adds credibility to

the interpretation of the findings.

While responses from the control group indicated that the presence of a tape recorder during the patient-physician encounter did not affect the visit either by inhibiting or enhancing communication, six participants in the experimental group indicated that the video tape did influence their conversation with the physician. They made the following statements:

1. "I guess it made me feel more comfortable and relaxed so I could talk to my doctor with ease."
2. "Tell all, no secrets."
3. "I told him something that had been worrying me—my little girl wetting the bed. I would have kept it to myself."
4. "I was relaxed and open to considering emotional aspects of health, but the doctor was clearly not interested and I felt a good deal of resentment at his attitude—courteous but distant and closed."
5. "Better understanding."
6. "It brought home the message that before the doctor could help me, I had to go through the painful memories again. It really triggered a depressed mood."

Discussion

As demonstrated by this study, the effect of the brief patient education was to encourage patients to present stress conditions to the physician. Because of the small size of the sample and the limited background information regarding the sample, this project should be regarded as a pilot study. Caution is urged in the interpretation of the findings.

The mode of patient education selected was the video tape. This was efficient to manage. It also was general enough to be presented to a variety of patients.

The results of this study suggest a potential for directing the presentations made by patients toward the specific interests of the physician. For the hypothetical physician who has no interest in the patient's emotional status, brief education could influence the presentation toward specific medical symptoms. The findings further suggest that uncertainty and anxiety over the first visit with the physician could be reduced by brief patient education.

The success of the use of patient education to encourage patients to present stress conditions to the physician will be determined in large part by the attitude of the physician. Consider the statement made by one participant, "I was relaxed and open to considering emotional aspects of health, but the doctor was clearly not interested..." Patient education can create patient awareness. This awareness requires reinforcement by the physician.

This study does not presume an interest among all physicians in the psychosocial elements of the patient's health. Some physicians argue that the economics of time do not permit a holistic approach to practice. At the very least, however, the physician must be able to recognize the problems of stress. The physician needs a knowledge of resources in order to make appropriate referrals, or special skills if he prefers to deal with these problems himself. As patients come to expect more than technical competence from physicians, the physician needs education in the skills required for providing emotional support.

The medical literature is replete with studies confirming the relationship between stress and illness. This information has not reached the public to the extent that it is generally supposed. Brief patient education in the form of a video tape can bring this information to the patient.

Until now, patient education has focused primarily on specific medical problems. The findings of this study indicate that patient education can be used effectively to prepare patients for their first encounter with the physician. The effects seemed to be (1) relaxing the patient, (2) encouraging the patient to talk about stress conditions as well as medical problems, and (3) imparting a sense of caring to the patients.

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