

Audiotaping the Oncology Consultation: An Intervention to Increase Patient Satisfaction

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The first visit of a cancer patient to an oncologist is often accompanied by anxiety, disbelief, and fear—powerful emotions that can reduce a patient's ability to hear what the physician is saying. If patients misinterpret or forget important information, both their health care and their relationship with their doctor may suffer. Ineffective physician/patient communication has been linked to increases in malpractice suits.¹

Audiotaping the initial consultation allows patients to review the visit in a less stressful situation, possibly with family members or friends who can help them understand what was said. Taping may also create more effective communication between patient and physician.

A review of the research on audiotaping during oncology consultations suggests that patients' reactions to the practice vary.² While audiotapes reduce the anxiety of some patients,³ for others reliving the office visit actually increases their stress.⁴ Nevertheless, most studies show that patients like having a tape of their consultation

and being able to review information at a later time.⁵⁻⁸ Patients with tapes express increased satisfaction with the clinic and retain information better than patients who depend on their memory of the visit,⁹ and patients with audiotapes request less information at subsequent consultations.¹⁰ Audiotapes are especially helpful for recall in older patients.¹¹

Most of the studies on audiotaping have been performed outside the United States (specifically in the Netherlands, Great Britain, and Canada^{10,13-15}), which may limit their applicability to oncology practices in the U.S.

STUDY DESIGN AND MEASURES

Fifty-four subjects completed the entire study: 27 males and 27 females. Twenty-six subjects were in the experimental group and 28 in the control group. The average age was 60.6 years, with an age range from 27 to 88 (SD = 15.0 years). All subjects were cancer patients who had been previously diagnosed at a large cancer clinic and were being seen by an oncologist for the first time. Each was seen by one of two oncologists (Dr. A and Dr. B). Each physician told new patients about the study and obtained informed consent from those who chose to participate.

Patients were assigned to either an experimental group (audiotape recording) or a control group (no taping), and each physician saw members of both groups. One to two weeks after the initial visit, a research assistant phoned each member of both the control group and the experimental group and asked a series of 24 questions from the Medical Interview Satisfaction Scale (MISS),¹⁶ plus an open-ended question to elicit general comments about the oncology consultation.

The two physicians were later interviewed about tape recorder use.

Unlike other instruments that are more general in nature, the MISS accurately assesses patients' feelings about their health care provider,¹⁶ by focusing solely on the encounter between the patient and the physician. It evaluates cognitive, behavioral, and affective factors, and has also undergone extensive reliability and validity testing that has confirmed its basic methodological soundness.

We modified the MISS for this study by changing the five-point Likert-type response to a four-point response: strongly agree, agree, disagree, and strongly disagree. The initial scale had an "undecided" response, which we believed would not be useful in interpreting the data.¹⁷ Two items in the original MISS concerning prescription medications were omitted from the data analysis because numerous patients in the sample were not receiving prescribed medications.

Each item's value was added to obtain a total score. Cronbach's coefficient alpha for the present study's 24-item MISS was 0.92. This reliability coefficient is comparable to the one initially reported by Wolf and colleagues.¹⁶

RESULTS

The differences between the combined experimental (audiotaped) and combined control (non-taped) groups for both physicians were computed using independent sample *t* tests. Mean MISS scores were significantly higher in the experimental group than in the control group (Table 1). The higher the score on the MISS, the greater the patient satisfaction.

When results were analyzed by physician, MISS scores for the

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experimental group were significantly higher than the control group only under Dr. A (Table 2). The MISS in Dr. A's experimental group of patients was 85.60 (SD = 7.41), while the control group's mean was 77.14 (SD = 12.78). This difference is statistically significant ($t = 2.20$, $df = 27$, $p < .05$). Significance fell short of the .05 probability level for Dr. B when compared with the control group. A possible explanation is that three of Dr. B's patients reported that the recording was of poor quality, and one said Dr. B forgot to turn on the recorder until part way through the visit.

An open-ended question ("Is

there anything else you would like to tell me?") was added at the end of the MISS. Thematic analysis of the verbal responses was conducted, and common themes were identified. Fourteen patients said the tape helped their family members understand their illness and relieved them of having to explain things themselves. The spouses of these patients did not call the doctor for more information.

Both physicians said that audio-taping the medical encounter did not add time to the visit, and both said the tape recorder did not inhibit what was said, even when serious discussions concerning treatment

and/or imparting bad news took place. Both physicians wanted to audiotape patient visits in the future.

Dr. A said he actually enjoyed the tape recorder because he believed he paid more attention to what he was saying and deliberately tried to speak more clearly and loudly so the patient would have a good recording. Dr. B said the tape recorder did not change the way he interacted with patients.

Dr. B said one patient brought the tape recorder back on three subsequent visits to tape the interview again. Dr. A said his patients seemed pleased to participate in the study because they thought that, by

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Table 1: Mean MISS scores in the experimental (taped) group and control (non-taped) group

	N	Mean	Standard Deviation
Taped group	26	84.23	8.24
Non-taped group	28	75.61	12.66

$t = 2.99, df = 46.74, p < .01$

Table 2: Mean MISS scores by physician in the experimental (taped) group and control (non-taped) group

	Experimental Group			Control Group		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Dr. A	15	85.60	7.41	14	77.14	12.78
Dr. B	11	82.37	9.28	14	74.07	12.83

asking them to do so, the physician was trying to be responsive to their needs.

CONCLUSIONS

Satisfaction with the physician encounter was increased if patients could replay an audiotape of the initial oncology consultation. Patients said the tape provided accurate information for their significant others and relieved them of the responsibility of explaining things many different times. They also said the tape reduced their fears about their condition and increased the amount of information they were able to absorb because they could listen to the oncologist's comments again and again.

The physicians in the study did not feel that using the tape recorders inconvenienced them or their office staff. These findings did not support the findings of McConnell and colleagues¹⁵ who found that oncologists opposed audiotaping because they thought it was intrusive, inhibited the free flow of information, and caused frequent interruptions.

Audiotaping can be easily adapted to existing examining rooms. A basic recorder can be placed in an acoustically receptive spot, and tapes can be bought in bulk and given to patients as they leave. Consent forms indicating that patients agree to play the tapes "for personal use only" should be signed to avoid lia-

bility and confidentiality problems.

Recommendations for further study include conducting a larger trial with the same guidelines and assessing patient retention of the information provided in the interview over a longer period of time. ❖

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