A Program for Enhancing Medical Interviewing Using Video-Tape Feedback in the Family Practice Residency

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In an effort to enhance the medical interviewing skills of family practice residents in the clinical setting, the Minnesota Communication Program was developed. The Program, which uses video-tape feedback as the primary teaching method, stresses the integration of biological and psychosocial data as well as the establishment of a therapeutic relationship. A description of the Program including goals, teaching strategies, and guidelines for implementing video-tape feedback is presented. The Medical Interview Skills Checklist (MISC) and its use as an assessment tool are described. Results of a survey eliciting residents' responses to the Program and the implications of video-tape feedback for medical education are also discussed.

There is solid agreement that good doctor-patient communication is essential to effective health care. Physicians need to develop a broad range of communication skills for dealing with the multitude of problems and the variety of patients seen daily. They must be able to integrate biological and psychosocial data in an efficient manner, while at the same time developing a therapeutic relationship. Medical educators have increasingly recognized the need to offer required courses in the areas of medical interviewing and doctor-patient relationships.

Until recently, instruction in medical interviewing consisted primarily of lectures and of demonstration. With the introduction of video-tape equipment, the potential for providing assessment and feedback to learners has vastly increased. Through video-tape feedback, learners have the opportunity to observe themselves and to understand how others may perceive them. Thus, they are better able to assess personally their knowledge, attitudes, and skills for the purpose of increasing their competencies in data gathering, in clinical judgment, and in the therapeutic use of *self*.

Within the past decade, several educators have demonstrated the importance of video-tape equipment as a teaching tool.[1-5] M. M. Berger comments,

> . . .In view of the inadequacies of teaching methods to date and the necessity for teaching a larger number of professionals more adequately in a shorter time to meet the . . . needs of our society, present teaching methods will have to be radically revised to utilize video closed circuit and video tapes. It is probably more important that the teaching system be revised around this new modality rather than that the new modality be incorporated into the old structure and old ways. . . .[6]

Since 1973 the Minnesota Communications Program has been a part of the Family Practice Residency. This Program uses video-tape feedback to enhance medical interviewing and diagnostic skills of residents as they function in the clinical setting. The approach is *holistic* in that it stresses looking at the patient within an integrated biological-psychosocial framework; is *humanistic* in that it stresses the uniqueness of individuals and their capacity to cope with life problems; and is *naturalistic* in that teaching is done in the physicians' working environment. In the ensuing sections, the goals, teaching strategies, and evaluation of the Minnesota Communications Program will be presented.

Description of Program

The overall purpose of the Minnesota Communications Program is to help residents elicit and integrate biological and psychosocial information as part of the initial data base on patients and their families. Four overlapping areas of assessment aid in accomplishment of this goal.

Interaction Process

Using video tape, reviewers assess residents' skills in various aspects of the doctor-patient relationship. This includes the development of rapport, sensitivity to patients' verbal and nonverbal cues, and the resident's perceptions of his or her own feelings and attitudes during the interview. Means of organizing the interview and

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directing the interview process are identified. Among the specific skills stressed are open-ended questions, facilitation of patient responses, reflection of feelings, and internal summaries.

Patient Assessment

Through the video-tape playback, the reviewers have the opportunity to re-examine the patient. The resident's problem-solving ability and logic are explored. Emphasis is placed upon the chief complaint, symptom pursuit, and formulation of a differential diagnosis, the patient profile, a problem list, and an appropriate plan of treatment.

Practice Management

The major issue discussed is how the physician can best utilize time seeing patients. Among the specific areas covered are use of the health-care team, patient scheduling, and the economics of clinical practice and health-care delivery. The video-tape playback presents a case example of how a resident manages a patient and stimulates discussion of guidelines for future patient management.

Personal Assessment

Self-confrontation through video-tape feedback provides a vehicle to examine personal strengths and weaknesses, to explore the resident's effect on others, to increase his or her self-perception, and to assess the resident's capacity to utilize existing support systems. The resident also has the opportunity to develop a greater congruity between sense of self as a person and as a family physician. In that regard, particular emphasis is placed on the need to maintain a balance between personal/family and professional commitments.

A supportive climate for optimal learning is essential during the individual taping and review. This supportive climate is developed by emphasizing what the resident did well and also what could have been done better. The stigma of being examined and judged is replaced by a spirit of shared problem solving between the reviewer(s) and resident. Immediate feedback of performance creates high resident involvement. Further motivation occurs when observing oneself with a patient. The resident has the opportunity to step outside of his or her subjective world to become an observer of the behaviors illustrated on the video tape. The behaviors which are "mirrored" can be identified as positive or negative. One caution in reviewing the video tape is to take care that the resident not become overly critical of every movement observed on the tape.

Basic Guidelines

The family practice clinics have video-tape cameras which are unattended and stationary in the corner of the examination room. Three examination rooms are each equipped with one video-tape camera and a microphone. Although only one video tape can be made at a time, there is the option of taping in one of three rooms. A three-quarter inch video-tape recorder, a monitor, a switcher, and an audio-mixer are located in a clinic conference room. After a 15-minute training session the faculty member, resident, nurse, or clinical staff member is able to operate the equipment. In the hospital setting, portable equipment is set up at the bedside.

Prior to each of the taping sessions, the patient's oral permission is requested. The patient is told that the video tape is confidential and will only be used for educational purposes. After the session the patient is asked to sign a written release statement for medical/legal purposes, thus protecting the patient, resident, clinic, and/or university. Only rarely will a patient refuse to be video taped.

In the preparation and implementation of the taping sessions, seven guidelines are followed:

1. *The resident is given the Program objectives and is asked to read a set of pertinent articles and papers identifying various kinds of interviews and skills.* This procedure fosters anticipation of the taping sessions and establishes appropriate expectations and understanding of the objectives.
2. *The scheduled taping is done in the resident's own milieu.* The resident is more comfortable within his or her own setting. Video-tape equipment is as unobtrusive as possible.
3. *The resident is taped with a patient for whom he or she has responsibility.* This promotes involvement, commitment, and continuity.
4. *The patient is a "routine" patient, requiring a history and pertinent physical examination.* A zero-history patient is preferred, ie, one about whom the resident has no previous knowledge. It is important that the resident be dealing with a "normal" problem and not an "abnormal" situation.
5. *The preceptor or program director is present during the review sessions.* The preceptor is able to support the resident during and after the session. In this process, both the preceptor and the resident develop a frame of reference from which to discuss each other's communicative behavior and/or clinical skills.
6. *A team-teaching situation is preferred.* With the video-tape playback serving as a catalyst for discussion, a dialogue is generated between the preceptor, communications specialist or other behavioral science person, and the resident. At times it is useful to bring in the patient for further discussion. Initially, reviews are not made within a group context, especially in

front of one's peers, as this is a highly threatening situation. Rather, the playback takes place individually with the communications specialist or MD faculty member present.[7]

7. *The review of the taped interview is immediate and both case oriented and interaction oriented.* This procedure fosters involvement and interest. Through the "instant replay" the resident not only relives the dialogue (content), but also recalls feelings and behaviors (process). Thus, the reliving and recalling are natural processes of the playback.

The taping and review sessions are scheduled for a half-day or three-hour uninterrupted block of time. Generally, one-and-a-half to two hours are required to review a 30-minute interview and physical examination. Thus, it takes approximately three times as long to review as to produce a tape. The interview tape is left with the resident for future review and comparison.

Each resident is scheduled for taping at least two or three times over a six-month period. This allows the resident to practice various skills. During this time, residents may also tape their own sessions and review their performance. The number of sessions for review is limited only by the amount of time and resources available.

Various procedures are used during the review session. When the consultant, preceptor, or resident observes something related to the objectives of the taping sessions, the tape is stopped for discussion. The resident's behaviors demonstrated during the taped interview are discussed as examples of appropriate or inappropriate skills. The resident is questioned about personal feelings, self-image, relation to the patient, and development of differential diagnosis. The communication consultant or faculty member also models appropriate behaviors and skills. For example, if the discussion is on the resident's attending and listening behavior, the consultant models his behavior as part of the interactional process. If some serious deficits are demonstrated, the resident is asked to return to the patient and to focus on the particular skill. In some instances, the resident is monitored during the interview and telephoned immediately by the reviewer who asks him or her to demonstrate or improve a particular skill. In both situations, the resident receives immediate feedback.

After each of the sessions, an extensive summary letter is sent to the resident identifying salient strengths and weaknesses. The Medical Interview Skills Checklist (MISC) to be described below is also attached to the summary letter.

The Medical Interview Skills Checklist

The Medical Interview Skills Checklist (Table 1) is an important adjunct to the Program. The checklist is an outline of Program objectives and a tool for resident evaluation. Content validity of MISC was established through observational analysis of 80 video-taped interviews and use by family physicians and other educators.

The MISC identifies both the content and process of the medical interview. The content or the *what* of the interview represents the data collected. In a holistic approach, both biological and psychosocial data constitute the content of the interview. Interaction process skills are the *how* of the interview: (1) how the resident organizes and structures the medical interview, and (2) how the resident forms therapeutic relationships.

The MISC serves as the foundation for the video-tape review, as it structures examination of the biological and psychosocial data, the organization of the interview, and the depth and breadth of the physician-patient relationship. It is a tool for measuring specific data-gathering and problem-solving skills.

The ratings used for the MISC are Strong (S), Weak (W), or a checkmark (√) indicating that there is not enough data to make a decision. The categories are rated Strong or Weak instead of using a Likert scale, because the primary concern is with identification of resident skills and not with the comparison of performance from one resident to another. The Minnesota Communications Program attempts to reinforce positive behaviors and to identify areas for improvement. Behaviors which are positively reinforced are most likely to be developed and maintained; behaviors suggested to be weak are likely to be changed or improved.[8]

Residents' Response

Initially, close observation through video-tape playback causes the residents to react with feelings of anxiety from a sense of being evaluated. However, with proper orientation and the development of a supportive climate, residents accept the taping sessions as a positive and valuable experience. This is particularly evident after the first taping review.

Seventy percent of the residents (N=48) who had participated in the video-tape feedback sessions completed a self-administered questionnaire. Over one half of the residents stated that the *most* beneficial or valuable aspect of the video-tape feedback sessions was to "see myself and the patient." In terms of the overall value of the Program to the residents, they rated as valuable: (1) the taping sessions, (2) having more than one taping session, (3) having received a summary letter, and (4) having their program director participate in the sessions. The residents felt that having other residents included in the sessions was of little value.

Implications

The use of video-tape equipment in

the clinical setting is still largely an untapped resource. The Minnesota Communications Program and similar approaches have only begun to realize the potential of this teaching tool. Techniques such as role playing and simulated patients are useful primarily in the early stages of resident training where emphasis is placed upon maintaining a high degree of uniformity in educational experiences. As the resident becomes fully immersed in the routine of a family practice clinic, the variety of patients and problems encountered vastly increases. Hence, the training approach employed must be adaptable to the changing nature of the clinic or hospital environment. The format of this Program provides such flexibility.

There are several specific advantages of the Minnesota Communications Program. First, the bridge between training and actual practice is minimized. Residents are able to view how they relate to patients in a setting closely akin to that of their own eventual practice. Second, the use of video-tape equipment allows for better supervision and review of resident performance both by clinic preceptor and by the resident. Residents' self-perception is heightened and the amount of feedback they receive about their rapport with patients is likely to increase. As a result, residents are able to collect data more effectively within the therapeutic framework of the doctor-patient relationship. Third, having a systematic and ongoing program of video taping allows the resident to focus on specific problem areas (such as dealing with the pediatric patient, with the geriatric patient, with the patient who is reticent, or with families) with the opportunity to engage in self-observation afterwards. Fourth, having video-tape equipment available in the clinic further allows for additional activities. For instance, the physician/preceptor may wish to be taped and to have a review session as a means for self-education. Also, tapes made of interviews with patients showing different types of problems or diseases can be utilized at clinical teaching conferences. Finally, video-taping capability allows for an ongoing program of self-evaluation. It also provides a tool for establishing a formal evaluation mechanism as part of an annual performance review.

Table 1. Medical Interview Skills Checklist

Biologic Inquiry*

____ Patient Diagnosis
- ____ Identification of patient problem (symptom pursuit and natural history)
- ____ Medical history — past (surgeries, hospitalization, injuries, accidents)
- ____ Medical history — family
- ____ Review of systems
- ____ Physical examination (talks patient through examination)
- ____ Diagnostic decision making process (differential)
- ____ Problem list
- ____ Identifies positive aspects of health and condition
- ____ Tests — x-ray, lab, etc
- ____ Prescription of medications and/or treatment (use and appropriateness of referrals)
- ____ Preventive medicine orientation (patient education)

Psychologic Inquiry

____ Patient Profile
- ____ Demographics (age, family size, religion, education, etc)
- ____ Life situations (identifies stresses, feelings, and functioning)
  - ____ occupational functioning (stress and satisfaction with military service, retirement)
  - ____ family functioning (parents, children relationships, extended family)
  - ____ marital functioning
  - ____ sexual functioning
  - ____ social relationships (significant others)
  - ____ religious and spiritual support
  - ____ alcohol and drug use
  - ____ leisure time activities ("What do you do for fun? Relaxation?")
- ____ Impact of illness on patient/family (feelings, hardships, support)
- ____ Life-style
  - ____ general style of life
  - ____ specific ("What is a typical day, evening and/or weekend like for you?")
- ____ Support systems (identified, and "When in crisis or need, who do you go to for help?")
- ____ Identification of psychosocial problem(s) (emotions, feelings, support systems, etc)
- ____ Identification of psychosocial strengths (coping mechanisms, support systems, etc)
- ____ Development and assessment of patient-family treatment (one-to-one, couple or family counseling, medications, referral sources, etc)
- ____ Preventive medicine orientation

Interview Structure

____ Organization
- ____ Opening
  - ____ identified plan/physician's agenda
  - ____ tell patient what you're looking for/purpose/focus
  - ____ administrative/amount of time, etc
  - ____ sets expectations

*Rate S (Strong), W (Weak), or √ (no opinion or inadequate data)

Table 1. Medical Interview Skills Checklist (continued)

- ____ Structure of Questioning (general to specific)
  - ____ rate/pace
  - ____ flow/exchange
  - ____ un-biased questions
  - ____ clarity, concreteness, terminology
  - ____ absence of verbal idiosyncrasies
- ____ Maintenance of control (telling patient what doctor is looking for, structuring patient responses)
  - ____ use of time
- ____ Integration
  - ____ systematic plan
  - ____ internal summaries
  - ____ transitions
- ____ Closing
  - ____ summary — explanation of findings, observations, recommendations
  - ____ requests last minute disclosures

Process

- ____ Establishment of rapport
- ____ Listening behavior (attending behavior)
  - ____ eye contact (head and face)
  - ____ seating and arrangement of furniture
  - ____ use of chart
  - ____ awareness of verbal/nonverbal cues (congruence, signs of stress, tone of voice)
  - ____ body posture
  - ____ verbal reinforcers (uh-huh)
- ____ Demeanor
  - ____ status-role relationships of doctor and patient (adult-adult, patient as participant, etc)
  - ____ poise and confidence
  - ____ naturalness, congruent role
  - ____ sensitivity
    - ____ positive and nonjudgmental attitude
    - ____ patient agenda awareness — person oriented
    - ____ recognizes patient's feelings
    - ____ recognizes one's own feelings
- ____ Supportive behavior
  - ____ positive tone of voice
  - ____ use of touch
  - ____ use of verbal reinforcers
  - ____ appropriate use of reassurance
  - ____ reflection of patient's feelings when appropriate, paraphrases
  - ____ clarification of feelings when appropriate
  - ____ shares feelings when appropriate
  - ____ uses silence and pauses
  - ____ focuses on the "here and now" — immediacy
  - ____ uses confrontation

The main problem with the Minnesota Communications Program is the time demand involved in doing a video-tape session. In essence, the resident, the preceptor, and the behavioral science consultant have to devote the better part of a morning or afternoon to this endeavor — this is often difficult to schedule. However, the favorable resident response indicates that the time spent is of value.

Hopefully over the course of time, more medical educators functioning in a clinical setting will begin to employ video-tape equipment as the cost is becoming less prohibitive. They will seek to use systematic approaches like the Minnesota Communications Program for training residents to provide more efficient and effective patient care.

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