Use of Video Tape in Teaching Psychological Medicine

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Video tapes have been used extensively in medical education and especially in training for family practice. This article describes the use of video-tape equipment in rural health centers at the Rockford School of Medicine, University of Illinois, College of Medicine. The video camera was incorporated into the clinical transaction by having it operated by a psychiatrist-preceptor in the presence of the patient. This method makes available an intimate glimpse of the clinical situation, less disturbed by intrusive gadgetry than has heretofore been possible. Patients seem mostly unaffected by the taping, so long as clinical personnel sanction it, and the function is firmly placed within the supportive bounds of the doctor-patient relationship.

A scan of the medical literature for the years 1971-1975 reveals that video-tape equipment has been used in ways as diverse as they are imaginative. Tapes have been used as "self-learning material" in the teaching of the pharmacology of the peripheral nervous system,[1] as an adjunct to learning in psychiatry,[2] and as a research recording tool[3] which compares well in reliability and validity to live observations and has the advantage of replay capacity. Video tapes have also been used clinically, to induce hypnosis[4] and to "feedback pertinent information" in family therapy.[5]

The video camera has been used in many ways in educational contexts: to provide immediate feedback, to turn out closely programmed, carefully formatted productions, and to simulate clinical situations. All of these techniques are directed toward the production of structured cognitive learning with a minimum of emphasis on paracognitive aspects. (Zabarenko RN, Zabarenko L: The Doctor Tree. Unpublished manuscript.)

This report deals with an effort to develop more natural and effective techniques for using video-tape equipment. The essence of the method was the incorporation of the video camera into the clinical transaction by having it operated by a psychiatrist-preceptor in the presence of the patient, the medical student, and at times, faculty, and other paramedical professionals.

This method dealt with real patients without pre-arrangement as they came to rural health centers. Both cognitive and paracognitive aspects of learning were stressed, as was the necessity of teaching along both of these lines. Because the material was unrehearsed, the use of highly structured or lockstep teaching methods was impossible. This served an educational purpose, since much in the practice of medicine cannot be arranged in carefully ordered fashion, and the student's capacity to manage and tolerate uncertainty is a vital part of his learning. No similar use of the video camera as an acknowledged part of a spontaneously occurring clinical encounter could be discovered in the literature.

Method

The video cameras in community health centers in rural areas of Northern Illinois associated with the Rockford School of Medicine had fixed focus lenses and had been installed on wall brackets. For this experiment, cameras were moved down to a tripod lower than eye level and were fitted with zoom lenses. A small camera was used, and in situations where the examining room (usually 10 ft by 10 ft) was too dark, a high intensity quartz lamp was used to provide reflected lighting from the ceiling. Thirty-minute video-tape cartridges were used. Although cartridges providing for longer time spans are available, the shorter tapes seemed more appropriate in view of the emphasis on primary care in the clinical program. As is well known, in family medicine most doctor-patient visits are brief, usually about 15 minutes. Students tend to work less rapidly than experienced practitioners.

Moving the camera to a tripod offered greater flexibility, and once the camera was set up, any of the three people could operate it at least well enough for documentation of the transaction. A small amount of practice with the lighting, focusing,

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zooming, and panning were required in order to become comfortable with them. These maneuvers can add variety and richness to the documentation of the transaction.

Usually three persons were involved in the instructional video taping: a patient, a student, and a psychiatrist. No technician was required, and the taping was completely unrehearsed. In accordance with ethical practice and legal regulations, witnessed permission forms were obtained from the patients. There seemed to be no hesitation to sign these forms. The psychiatrist was not introduced as such, but identified as a physician in the community health center. In most cases the student began the interview, and the interaction unfolded from that point.

The only pre-planning involved was that the student and the psychiatrist-teacher agreed that there might be worthwhile psychological aspects to investigate in the interaction. In many of the tapes, the psychiatrist became involved midway through the transaction and his voice was heard from behind the camera. In some instances, on his own initiative or at the student's request, the psychiatrist did most of the interview. There was also one interview in which the patient was asked to handle the camera while a number of aspects of her case were summed up by the student and the physician. It was clearly understood, of course, that she was a party to this summation.

Applications

The method offered a number of educational opportunities. One benefit was immediate "de-briefing." Although some students showed small interest in making the tape, most perceived quickly that, when it was viewed immediately after the transaction while its nuances were fresh, discussion with the instructor was especially valuable. Students not involved in the original transaction often find tapes displaying the work of their peers valuable for postfilm conferences and supervision. Perhaps the most important educational point is that a repeatable, precise documentation of an unrehearsed clinical transaction is obtained, and as far as can be discovered, the transaction is little distorted by the intrusion of the video taping.

This method has now been used with second, third, and fourth-year medical students in community health centers of the Rockford School of Medicine and with family practice residents. The flexibility of the medium suggests potential uses in other medical schools, both for instructional and evaluative purposes, and as an examination procedure. A list of the topics already recorded includes: three sessions of marital counseling, one with wife only and two with a couple, a hysterical young woman, depression in a retardate, mixed depression in a manic depressive, agitated involutional depression in a manic depressive, agitated involutional depressive response, chronic situational depression in a passive dependent character, a young woman with infertility related to parent loss, and histories and physicals in a variety of non-psychiatric conditions showing educational changes in the students.

Some of the advantages of the process come from the informal, yet serious quality of the interactions, and the casual and unconflicted references to the camera by the participants. If the clinical staff treats the video camera as a natural and comfortable part of their work, as has been possible in most instances thus far, patients accept it more rapidly than under other recording conditions, and are less anxious. The largest gain over simulated doctor-patient encounters is the unrehearsed quality of the material. In this method, the camera is not an alien presence and does not generate any dysphoric paranoid-like feelings in students and physicians. It has been noted[6] that physicians may be more troubled than patients when their work is recorded.

Perhaps because the camera is operated by a participant, it is seen as an adjunct or extension of the physician-instructor and is included in the student's and the patient's perception of the transaction as a positive and supportive presence which can become a check and a guide for memory and provide emphasis on the thoroughness of work. The method also captures the clinical exhibitionism of the patient. A sizable part of the clinical transaction is the evocative demonstration of illness to activate the healing urges and activities of the physician. This may help explain why patients accept the camera so readily.

The disadvantages of the method must be listed as well. It is costly in terms of instructor time for filming and reviewing the material. However, it is less costly than the amount of time which might be needed if a technician and programmer were used. The time necessary for editing for more general use is considerable. Inevitably, there were occasions when student-physicians or residents, engaged in an evaluative as well as an instructional relationship with the psychiatrist-teacher, were ill-at-ease with the preceptor looking on. In these cases the camera added yet another observing eye. In some tapes one can see evidences of competitiveness and struggle for the camera and interview time with the instructor.

There are a number of extensions of the method which might be valuable. It has been used at Rockford to record an interaction between student and patient only. One tape exists in which a psychiatrist-patient dyad was recorded. In these tapes, only the patient is seen, and there is no third party present, allowing even freer exercise and recording of clinical skills.

The use of such tapes for patient-management problems on certifying examinations is already commonplace. In the examination situation, although doctor and patient are engaged in a real-life clinical interaction, the presence of the camera can be intrusive, especially if the tape is made (as it frequently is) in a studio. While it is true that under such circumstances doctor and patient can become immersed in urgent clinical problems and disregard the camera, this concentration requires energy, and it seems that the material is unlikely to be as fresh and uncontaminated as in the method we have described.

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