Experiences with Video

A Report on Video as a Teaching Aid

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Teaching by television is a powerful method. Drug companies know this and have always been aware of the effect and importance of slick audio-visual presentation, yet it is still little used in medical education. In any discussion about video it is necessary to recognize this ambivalence and resistance to new technology. For the teacher, I think that this may stem from fear of the unknown, appearing incompetent, or worse, redundant.

There are a number of ways of using video equipment. Closed circuit television with or without replay is already used in psychiatry, as in family therapy clinics, for example. This technique can be extended to provide impartial feedback on performance in other settings such as mock viva sessions.

Another use for video is to make complete educational programmes. Criticism of video in the past has been at the content of such programmes: lectures or contrived panel discussions have little visual impact. Even if the subject is interesting to the audience they will soon become bored. In my view, it is better to exploit the visual possibilities.

I shall discuss the steps involved in making such a video using as an example a programme Dr Andrew Powell and myself made on 'Psychological Defence Mechanisms'. This subject can be difficult to teach. A way of bridging the conceptual problem is by the use of examples. The video should, then, include illustrations of denial, repression, etc, ranging from the every-day to the pathological.

Early discussions led to an outline of possible ideas for a programme. As practical aspects were considered these ideas became refined and then developed into a script. The script does not need to have every word verbatim—a paragraph explaining the purpose of each scene is much better. For example, scene eighteen in the script read: 'It's a kitchen at breakfast time. John Burton is looking for his car keys. He can't find them. His wife makes a joke of this by saying that she thought he didn't like going to the dentist but wasn't this taking it a bit far? He replies to this by asking whether she is suggesting that he lost the keys on purpose.' In the event this scene was filmed in a hallway with the character searching through his coat pocket. The actors made up their own dialogue and we introduced a humorous aspect which provides important contrast of affect and keeps the audience interested.

The next step was to organize the filming. A shooting schedule was produced so that for each scene the location, actors, props and special effects were listed. In general it is best to do all filming at one location at the same time and try and work other considerations around that. Then there is the weather to consider . . . For 'Psychological Defence Mechanisms' the filming lasted a week with twenty-one different scenes and seven different locations. Surprisingly, we kept to schedule and finished on time. At this stage the film was half finished in terms of time and effort required.

I prefer to use a single camera and recorder, filming the scene from one angle, then changing the camera position and filming it again. This enables one aspect of the scene to be focused on and filmed several times until it is technically and artistically right. It also makes editing much easier. Another method is to use a multicamera set-up, cutting between cameras at the time of filming. Although this may appear quicker it is very difficult to cut between shots at exactly the right moment for maximum visual impact. Other major disadvantages are technical: wiring two or more cameras together, getting the colour balance right and communicating with the several cameramen.

Advances in camera design and miniaturization have made this sort of project possible. The camera we used was a high grade industrial model, not of broadcast standard but capable of producing a good quality picture at reasonable cost. In essence the camera converts the picture into a complex electronic signal. This is then recorded magnetically on to video tape. There are a number of different recording systems and formats. Domestic machines use half-inch tape, but for this sort of production a commercial three-quarter-inch system called Umatic is the minimum requirement. The signal can be electronically handled in a number of various ways. We used a recording system called high-band Umatic. It is four or five times more expensive than low-band Umatic, but the difference in picture quality is apparent on final copies.

The next stage is editing. This involves copying required shots from one tape to another using two machines linked together by complex electronics. Show copies are then made from the master edit. The real disadvantage of video is apparent at this stage. With 16 mm film bits can be cut out or added in the middle of the programme, but this is not possible with video tape. The programme is built up from scene one and worked through sequentially to the end titles. In practice it is necessary to produce a trial edit and then write the commentary. The final programme can then be edited, taking into account such considerations as programme length, continuity and pace.

'Psychological Defence Mechanisms' was designed to be a lecture aid, to provide examples and stimulate discussion. It was also made so that it could stand on its own as a complete programme, in the hope that it would find favour outside St George's. The content and purpose of the programme should dictate distribution and financial considerations. As an exercise I estimated the theoretical cost of 'Psychological Defence Mechanisms' including only production expenses and using commercial facility house pricing as a guide. This amounted to £7,500. In fact our actual expenses were only £400 as we did

not have to pay for the camera or editing facilities. We have decided to charge £40 per VHS copy. This amount covers the copying cost and postage, leaving a little spare to fund future productions. The time involved in making the programme has not been taken into account.

I feel that such expenditure is fully justified: in spite of high academic levels of achievement now required for entry to medical school, students still differ in ability to understand new concepts. Videotaped programmes from all sources provide a substantial reservoir of teaching material to complement traditional teaching methods. A natural repository for such material is the library. At St George's we now have two replay monitors and VHS machines. For small screens VHS provides a perfectly satisfactory picture and has the advantage that tapes and machines are one third the cost of the Umatic equivalent. The equipment is discreetly bolted down and the tapes are security tagged. We have not had any problem with misuse or theft. I had originally thought that the students would watch the programmes individually but in the event they often watch in groups of two or three. At the moment headphones are provided but ideally each machine should be in its own room. It has been difficult to find suitable titles for the library. The British Universities Film and Video Council produce a catalogue with over 5,500 titles and I have found them very helpful.

When students join the psychiatric firm they are given a handout with a few lines on each title. Some programmes are regularly used in seminars and this is indicated on the handout. 'Psychological Defence Mechanisms' comes into this category. We hope that students will tailor their learning to meet their own needs and will also use the tapes for revision.

In the future, co-operation between medical schools would be beneficial. The cost of programme production is substantial yet this cannot really be met from sales. The taxpayer, who ultimately foots the bill, will at least expect the programmes to be used widely. In the past inter-school projects have floundered as a result of parochial interests. Even with 'Psychological Defence Mechanisms', I know that not everybody agrees wholeheartedly with the message in every single scene! However, at least in psychiatry there is little resistance to using a programme produced by another medical school.

Video is here to stay and there are exciting developments for the future. Equipment is becoming smaller, cheaper, more robust and technically better. However, emphasis must be on quality 'software'. At the moment, throughout the country there are miles of videotaped patient interviews that are unedited, unwatched and unusable. Little wonder that enthusiasm has waned.

At the bottom line a University is about education and video can often be the best way of getting the message across.

The Use of the Telephone in Continuing Psychiatric Education: Successes and Failures

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To those who have bought shares in British Telecom, and for those who have not, this report may offer evidence to help them rationalize their judgement about the wisdom of their action.

Lester[1] has reviewed the literature on telephone communication for patients in psychotherapy and points out that it can be the communication method of choice for certain patients, although therapists may find it a major disadvantage in so far as it offers ready accessibility at times inconvenient to the therapist. The telephone has also been used as a method of distance learning, particularly by the Open University. It offers the opportunity of communication between a tutor and his students where distance prevents ready access. The Centre for Medical Education, Dundee, has regular telephone topics of interest to general practitioners, but these are not problem-related.

This report deals with three different ways in which telephone communication has been used to promote aspects of Continuing Medical Education in the field of psychiatry. The first of these, Quip (Questions in Psychiatry), offered an opportunity for general practitioners to phone in with questions concerning their psychiatric problems. Parry[2] pointed out that Continuing Medical Education for general practitioners needed to be immediate, appropriate and relevant to the particular problem with which the family doctor was dealing at the time. If the problem was one of paediatrics there was no advantage in attending a lunch-time seminar on management of elderly demented patients.

The Department of Psychiatry at Sheffield University, with the help of Upjohn Limited, organized a telephone answering machine attached to a dedicated telephone line to which general practitioners could ring in and put their questions on the machine and have them answered within 24–48 hours by members of the Department, including honorary lecturers (NHS consultants), who agreed to participate in the service.

General practitioners were circulated with information about the service together with the telephone number on small adhesive labels which could be put in a prominent place on the desk, by the telephone or in the visiting diary.

The service opened with the arrival of the first telephone call, not from a general practitioner but from a patient. This patient was in tears because her general practitioner had prescribed potassium clorazepate (Tranxene) three times daily while she was under the impression that the normal dose was once daily. Her general practitioner evidently insisted that he was giving the right dose and when she continued to