AUDIOVISUAL METHODS IN CONTINUING EDUCATION*

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THIS PAPER is based on my seven years' experience of producing tapes for general practitioners, and slight experience of the use of television, for continuing education. I hope to explain the principles on which we work when choosing material for this purpose. There are three separate aspects which it is helpful to consider, although in practice it is difficult to say where one ends and another begins. These are: What the general practitioner needs; what he likes and dislikes; and the best methods for bringing facts to his notice.

Needs

Every general practitioner realizes his need for constant re-education, but it is difficult to obtain general agreement about what his needs are. But if we cannot agree, other people will quickly step in to decide for us. Nowadays, there is much more willingness on the part of educational organizations to hear from the general practitioner himself what he needs, but still most courses are ultimately run by specialists. This is inevitable, and acceptable so long as specialists realize how biased they are about their own subjects and are prepared to listen to the general practitioner's opinion on the relevance of any particular subject to general practice. The general practitioner must therefore have definite ideas about what he needs and not merely about what he wants, in the way of education.

There is always plenty of new material. It is a frightening but useful exercise to look back to one's student days, to see what great changes have come about since then. For me this was the mid-1940's: antibiotics were still new, penicillin was very unstable and we injected it in hot beeswax, and we sprinkled sulphanilamide powder into wounds. Tuberculosis was still a scourge—four students in my year died of it, one of pericarditis. Pink disease was common, its aetiology unknown, and cardiac surgery was almost never

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attempted. Each year brings dozens of new ideas and the general practitioner must decide which to accept, which to reject. Specialist advice is needed, but it is not easy to discover the true relevance to general practice of a new idea.

Many new advances may be included in the category of ' marvels '. By this I mean subjects interesting in themselves and which general practitioners should know about because their own patients may be involved, but which are never likely to be used by general practitioners. One might include pacemakers, organ transplants, the use of high-pressure oxygen. In fact, general practitioners have little difficulty in learning about ' marvels ' because they are given much publicity in the press, lay as well as medical. It is less easy for a general practitioner to decide how much he needs to know about such things.

A much more important need is for constant re-appraisal of everyday subjects, in which all the time small changes of attitude are occurring, so gradually that there is a danger of the general practitioner failing to notice what is happening. We may consider urinary infection: during my time as a general practitioner opinions about its relative importance, its aetiology (including psychosomatic factors) and its response to antibiotics have undergone sweeping changes. At present it is regarded as a possible important precursor of hypertension. There is no clear-cut point at which one idea is right and all others wrong. It is easy to read an article, skim it, accept those parts that agree with one's own ideas and reject those that do not. For instance, in *The Lancet* there was an article (Mond *et al.* 1965) on urinary infection in general practice, where bacteriological investigation was carried out in every case of apparent cystitis. As a very rough generalization, I may say that more than half the specimens were not infected; nearly half the non-infected specimens nevertheless showed white cells; all but one of the infected cases responded to sulphonamides. This article was clear and well written. But I found that on reading it a second time I obtained a quite different meaning from my first, cursory, reading. I realized that if two or three people who had, say, pro- or anti-psychosomatic ideas, or who did not accept the (necessarily) arbitrary criteria used in the survey, read the articles they would come away with entirely different conclusions. Unless we are on our guard, our prejudices prevent us from being receptive to new ideas and able to change our ways.

General-practice studies of this kind are extremely valuable, but it is not enough merely to read about them. We must also check them against our own work, and try to look critically at everything we do. Reading may merely confirm us in our own particular brand of woolly thinking.

Likes and dislikes

Turning now to general practitioners' likes and dislikes, perhaps

the greatest dislike is of patronage, of being ' talked down to '. Though perhaps sometimes justified, this is a big obstacle to keeping up to date. Perhaps more self-criticism would lead to greater tolerance of criticism from others. Young doctors in hospital have to endure criticism and must be able to justify every action. If more general practitioners subjected themselves to criticism it would strengthen their self-confidence. They tend to be ' insulted ' if offered material that seems lowbrow or humdrum—some might be insulted by the article on cystitis—not realizing that advances in humdrum treatment of everyday illness may result in enormous saving of life. If better treatment of cystitis could prevent hypertension, we ought not to feel insulted if we are asked to change our ideas about cystitis. Unfortunately, especially among junior hospital staff who have no experience of general practice, there is a tendency to accentuate dramatic advances and undervalue new ideas about conditions that are not seen in hospital.

General practitioners do not feel so insulted if they understand the true significance of something that may at first sight seem beneath their notice. When planning tapes, we try to emphasize the personal relevance to general practitioner listeners of what is being said. This may perhaps be done by outlining what the listener probably already believes, before proceeding to demolish this structure in order to build afresh. But it is not easy. A television programme on rehabilitation after strokes, although it contained some new and more positive ideas than are generally in use, failed to stimulate many general practitioners. Much of the material was about physiotherapy and so they felt it was unsuitable, although the speaker emphasized that these were things the general practitioner could teach a patient's relatives to do, with much benefit.

General practitioners tend to have a reputation for asking for practical rather than theoretical information. To some extent this is because they live closer to their patients, but a preoccupation with treatment, especially drug treatment, gives general practitioners a bad image. With our tape library we have found that once the immediate desire for facts about new drugs is met, a listener goes on to want information that is more theoretical. The desire to learn will grow only if it is satisfied. Another dangerous tendency of general practitioners (by no means confined to them) is to seek out that which they already know, and concentrate on their pet subjects rather than on their weaknesses.

Methods

Suitable methods for bringing facts to general practitioners must naturally include reading and attendance at courses and meetings, but it must be recognized that these do not prevent the learner choosing only those subjects or facts that he already believes. Audio-

visual methods have the advantage that the learner cannot leave parts out. If the media are properly used, with an intimate style suited to the listener at his own fireside, they have a tremendous potential for presenting new ideas. But the material *must* be chosen and produced very carefully, with a simple clear message. A well-put message carries conviction, and if some general practitioners are insulted because they already knew it, this is unimportant if those who did not know it are now convinced. Detail can, and should, be left for the listener to read for himself—a good programme will stimulate to do so, as we know from our own listener surveys (Graves and Graves 1961).

The message may be deliberately provocative, to encourage discussion and argument among small groups. We have written elsewhere about such groups (Graves 1964) of which there are now a great many. This is a most effective method of keeping up to date, encouraging self-criticism, the desire for further knowledge and self-confidence among group members.

Television has the great advantage that it can show actual movement. This is not always fully exploited—too often one feels that illustrations have been dragged in to bolster up a subject that is not really suitable for visual teaching. But in demonstrating techniques—such as Ortolani's sign—television is at its best. However, the very simplicity of such demonstrations is only obtained by prolonged and careful attention to detail. Medical speakers are in general not yet aware of the immense amount of preparation needed for a successful audiovisual presentation, and some have not the time or are not prepared to take so much trouble over something that may only last a few minutes.

Television, and to a lesser extent tape, can be used to show the ' marvels ' (which we must know about, although I spoke slightingly of them earlier). But a producer must resist the temptation to show too many of such things instead of the much more important—and much more difficult to produce—advances in everyday medicine. Tape, especially if combined with slides, has a wide scope, but its great value is the transmission of ideas and translation of advances in thought into something personal for the listener.

There are still people who see little point in audiovisual teaching when there are so many books and journals to be read. I can only say that all these things have their place and are complementary to one another. We need to make the best use of all these methods, in the desperate struggle to keep up to date.

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