young doctors are adequately trained for general practice, and established practitioners can obtain all the continuing education they require.

It has not been possible in this article to do more than mention briefly some of the main problems and offer a few suggestions to solve them. The views expressed are my own, but I am grateful for the help and encouragement of many members of the College of General Practitioners throughout the country.

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KEEPING INFORMED BY TAPE AND DISK

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The idea of being kept informed by tape and disk arose when we were engaged in the analysis of some of the replies to the questionnaire sent out to members of the College of General Practitioners by the College's Postgraduate Education Committee. We were struck by the number of general practitioners who found difficulty in attending courses because of lack of time, deputizing difficulties, and so on. Many said that "few meetings are held in this area now, as it is not worth getting a speaker to come for just a few people." Why not, then, take the meeting to the general practitioner? We decided to make a trial of recorded talks, which, we thought, would not only bring good speakers to those who would not otherwise hear them but also provide an incentive to hold small meetings, with discussion, often as valuable as the lecture itself.

Argument

It may be said that as reading is quicker there is little point in going to all the trouble of recording talks, but the following points should be considered.

Advantages of Auditory over Visual Education.—The spoken word has more power to command and hold attention, and no skill in printing can reproduce the expression, timing, and emphasis by which a speaker brings home his points—let the reader contrast the speeches of Sir Winston Churchill with their printed replicas—but the speaker must be good. There is no better soporific than a bad lecturer. That this is not just a biased impression is suggested by the observations of Joyce and Weatherall (1957), who found, in comparing different methods of education, that auditory methods were best—even the old-fashioned formal lecture, which was only just beaten by discussion groups, which, of course, use far more time and staff. Diagrams, formulae, and pictures can be understood more quickly and easily if the eye is free to concentrate on them while the ear listens to the exposition.

Dangers of Unsupervised and Unplanned Reading.—Joyce and Weatherall found this method of teaching "consistently least effective" for undergraduates, and for postgraduates the danger becomes greater as the time since

qualification increases. The newer the method of treatment, the more strange it will appear, and the greater the chance of articles on it being ignored in haphazard reading.

False Confidence in Reading.—Many doctors suffer from two delusions: (1) that they always read the journals that they buy; and (2) that they, having read a journal, have not missed anything in it. It is a salutary experience to test oneself on these two points. Gaps in knowledge are most readily brought to light by free discussion between friends and equals.

Geographical and Academic Isolation of the General Practitioner.—It is easy to understand that the general practitioner can be cut off by lack of time or by distance from courses; but academic isolation, though less tangible, is no less real. It includes lack of practice in studying and in arranging thoughts and decisions in an academic way. Working alone, the general practitioner may lose the ability for mental gymnastics, so that the rapid cut and thrust of argument at ward rounds may leave him feeling discouraged and inadequate. We hope that the issue of recordings will encourage him to seek out his neighbours to discuss what they have heard, to read in a more selective way, and perhaps to go on ward rounds with a firmer tread. The ideal recording would not supplant formal postgraduate teaching, but would point the way to a fuller use of it.

Novelty of Education by this Means.—The reaction of the average doctor to paper by post is now almost nil, as any organizer of activities knows to his cost, but it is still difficult to resist the appeal of a recording, which cannot be glanced through, and which requires the setting aside of a proper period for its hearing. (Listening while shaving or driving cannot be too strongly condemned.) But the value of this novelty will be irretrievably lost if it is spoiled by the anticlimax of poor material.

Tape-Recording Already used in Education.—In other fields much use has already been made of this valuable tool. Schools use it for many subjects, not only languages, and it is of great value for blind, deaf, or other handicapped children: the prospect is enormous and still largely experimental. Many authorities are building up libraries of educational recordings. In medicine, many subjects, such as cardiology and psychiatry, are particularly suitable, and undergraduate teaching makes some use of recordings. In the United States of America many varieties of recorded education are available, of which we will mention only the Audio-Digest Foundation, which distributes weekly abstracts of literature on tape to medical subscribers, and the Seminar Kits made by the University of Utah College of Medicine, which are lectures on gramophone disks, with illustrations. Some medical societies overseas which have widely scattered members already make recordings of their meetings for members unable to attend.

The Experiment

We proposed to send out, not abstracts or recordings of previous occasions, but talks specially made for the microphone and for our particular audience. The response to only the first two recordings is described. After those, although the experiment continued and merged imperceptibly into the present Medical Recording Service of the College, the scheme was much modified and the "audience" became much larger.

The Listeners.—These were selected by picking out from the replies to the questionnaire 50 of those College members who had said, for one reason or another, that they had been unable to get to courses. They were by no means a random sample or representative of the College as a whole, but they all wanted to keep up to date. Twenty-seven agreed to take part in the trial. Many of them were from country areas, including some very isolated places, but some were from towns (25% of College members work in rural or semi-rural areas), covering most parts of Great Britain. Five had tape-recorders, the others had long-play record-players.

Material and Method

The first recording consisted of a 15-minute introductory talk describing the experiment, followed by a 15-minute talk on recent advances in virus disease. This subject was chosen as it has a distinct bearing on general practice and is likely to be thought "too technical" in print. Compared with later ones, it was not acoustically a good recording, was read from a script, and was very concentrated. The second also lasted 30 minutes and was a much better recording: an informal talk by a general practitioner on psychiatry in general practice, a subject for which there had been many requests. The talks were first recorded on tape, and, from this, soft disks were cut. (These are similar to commercial L.P. disks except that, being individually cut from shellac, small numbers can be ordered, whereas the more serviceable hard pressings have to be bought by the dozen at least.)

The listeners were divided into four groups: one group of doctors with tape-recorders, and three groups of those with gramophones. The tape or disk was sent to the first member of each group, who was asked to listen as soon as possible, and then post it to the next man on the list, the last returning it to us. In the package were included two envelopes: one, to be read before listening, gave general instructions and a description of the recording; the other, not to be opened until after listening, contained the following questions: (1) Did you find this more, or less, instructive than reading a similar talk? (2) Did you have difficulty in finding time to listen? (3) Be honest—would you have read this kind of article? (4) What length of recording would you prefer? (5) Suggestions for future recordings. (6) Any other comments.

Listeners were asked to reply to these questions in a letter to us when they posted on the recording, which also gave us a clue to its whereabouts. They were asked, if possible, to collect a group of colleagues to join them in listening and discussion.

With the second recording went a different set of questions: (1) Did you find this recording helpful? (2) We shall be making more detailed talks of psychiatry for loan on application—would you like to hear them? (3) How many doctors listened to this talk with you? This recording was sent out only on disk, and to 14 listeners at that time, although very many others have heard it since then, and it was used for the first tape-discussion.

Results

Of the 27 doctors who received the first recording, 18 found the method more instructive than reading, 4 less, and 3 were not sure. Four thought that it was easier to concentrate when listening than when reading, and two thought that the novelty had a lot to do with it.

Twenty-two said that they had not had much difficulty in finding time to listen, and five said it was not so easy. Some added the proviso that it was all right if they had four or five days. (In fact, few kept the recording for more than a few days. One circuit of eight doctors, including postage time, was completed in just over six weeks. During that time about half of the listeners managed to collect others to listen. This was, however, during January–March. Summer circuits are naturally taking much longer.)

Eleven would have read a similar article, 14 would not. But only one actually saw the article in print and read it—a very similar one was in several journals at this time—an example of false confidence in reading.

Thirty minutes was the most popular length.

A long and carefully thought out list of suggestions for future recordings was received, which was very similar to the requests for subjects for courses from the questionnaire replies, with much emphasis on recent advances, and new drugs.

The 14 replies to the second set of questions were uniformly monotonous. All who heard this (second) recording

found it helpful, all wanted to hear more, and 33 other doctors had listened, so that, on an average, each had gathered two or more friends for discussion.

Other Comments.—We were pleasantly surprised by the interest and enthusiasm aroused by this trial. We had many long letters full of every kind of advice, suggestions, and offers of help, besides comments and criticisms. Allowing for kindness towards a new venture, we had the impression that recorded talks would find a willing audience. We noted very soon a difference between the tape-recorder and gramophone listeners—the former being more trenchant, though more constructive, in their criticism, and wanting less formality and more "audience participation," while the latter were more conservative and perhaps less critical.

Conclusions From the Trial

Technical

From this trial we learned a great deal, which may be summarized thus:

1. Soft disks, although fairly tough, are not equal to ordeal by G.P.O. Many were badly scratched, and after one was returned from the Highlands actually bent we decided to increase the number of our listeners to justify the expense of commercial pressings. Suitable postal containers remain a headache, but we hope to overcome this shortly.

2. Very good quality indeed is required if the recording is to be transferred from tape to disk. Without professional equipment it is impossible to make a good enough recording of a meeting or discussion in a public place, because acoustic conditions are usually bad. We have made many such recordings, but while they are satisfactory enough on tape, they will not do for the disk. We now record entirely, if possible, in ordinary living-rooms, which have the added advantage of putting the speaker more at his ease.

3. We soon found that any formality (such as reading from script) or artificiality of manner was mercilessly exposed by the microphone. To sound right, the talk must be informal, unscripted, almost "armchair." Some speakers can achieve this without effort, some perhaps never, and some rely very much on gesture or expression. One learns to recognize a good microphone speaker, and we are sure that there is a whole new field of talent awaiting discovery.

Non-technical

The response to this short trial encouraged us to believe that there was a demand for recorded talks, and we invited any interested members of the College to join in further experiment. Most of them would be able to listen only to disks, but a surprising number of doctors have tape-recorders, and many of them (like tape-recordists everywhere) have a great deal of energy and enthusiasm, and correspond on tape with others here and overseas. We hope to let them play a really active part in postgraduate education by joining in tape-discussions, recording their own cases for discussion, or by acting as "local correspondents," these being some of the ideas suggested by those taking part in the trial.

The Medical Recording Service at Present

This is now a regular service of the College of General Practitioners to its members, well over 100 of whom are now receiving recordings regularly. They are by no means all "geographically isolated," as many of them come from the great towns. The "circuit" system worked well during the trial and is still used, talks being sent round groups of about 10 members each every other month. Five talks have been completed and many others are in the making. About half are by consultants and half by general practitioners with a special interest or experience, titles and subjects being drawn at first from our original list of requests. Where possible, illustrations accompany the recording, either as duplicated diagrams or transparencies (a small pocket viewer is enclosed) to be studied while listening. For

example, one talk on skin disease is accompanied by a series of 24 transparencies and two diagrams.

Members on our list receive tapes or disks at regular intervals, but they can, on request, have a particular recording again, perhaps for a meeting, as can any other member of the College.

Also available on request to members are a number of recordings which will form the nucleus of our library. These include recordings of notable College occasions such as the James Mackenzie Lecture, and more detailed talks on subjects, such as more advanced psychiatry, which have been asked for by members but may not appeal to all.

The Discussion Tape.—This is a new feature of the service, which is still experimental. Accompanying each recorded talk to listeners with tape-recorders is a blank reel of tape. After hearing the lecture, each listener has five minutes of tape to record his own comments, ask questions, and air his views. This tape will go round a second time so that the earlier speakers can hear the whole discussion—about half an hour if each member of the circuit adds something. In some cases the original lecturer will answer the questions and round off the discussion before the completed tape goes out again. This is a very popular idea, as even the shyest listener can have his say, without fear of interruption, with as much time as he likes for preparation. The following comments, taken from part of the first discussion tape, give some idea of the response.

"Two colleagues came 12 and 6 miles and felt it well worth while, and we had a stimulating discussion . . . the Medical Recording Service is doing a real service to medicine . . . unenlightened G.P.s can be shown the virtue of joining the College through the virtuosity of its members."

"This was a thoughtful and well-delivered address, and held my interest throughout. . . . The contributions of the others before me were of almost as much value as the lecture."

"My partner and I had a very enjoyable evening listening to the talk and discussing it."

"If I'd been the first . . . I think I'd have said I'd rather have read the lecture, but now I see how much better it would have been if I'd invited other doctors to listen with me. I hate psychiatry and fear mentally upset people, so to make up for it I used to read a lot, but it only made me feel more inferior. This talk has shown me that perhaps I've been approaching the subject in too highbrow a fashion. . . . You've done me a lot of good."

They all described their own problems and asked questions, comparing notes with one another. It is impossible to convey in print the excitement of hearing the voices of doctors, separated by hundreds of miles from the lecturer and from one another, discussing their reactions to a talk that they had listened to, as if together. Except for short intervals of time, they were together, and it should be remembered that tape, needing no processing and quickly copied, can be sent directly after a lecture or event to listeners anywhere, probably more quickly than it could be put into print.

Plans for the Future

Talks will continue to be sent out at regular intervals, and we shall hope to cover a large field of subjects. Our aim, however, will always be to direct attention to, and stimulate interest in, other methods of education, particularly discussion groups.

We are experimenting with recordings of heart sounds and other subjects, to see whether we can make use of them, as some subjects are more suitable than others, and an enormous amount of research on technical points needs to be done. We hope eventually to build up a comprehensive library for the College, so that any member will be able to obtain an up-to-date talk or course in any subject. Recordings of historical interest to the College will be collected for its archives.

We hope overseas members will be able not only to listen to our recordings, but to send us some of their own, so that real contact can be made with them.

In these ways we hope to advance a step further the work that the College has already done in bringing together its members and giving them a feeling of brotherhood and unity of purpose.

We thank Smith Kline and French Laboratories Ltd. for paying for the production costs of both the original trial and the present Medical Recording Service; and John Hassell Recordings for technical advice and help. Also the countless members of the College of General Practitioners whose enthusiasm and help made the idea become fact.

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PSYCHOLOGICAL MEDICINE IN GENERAL PRACTICE

A REPORT PREPARED BY A WORKING PARTY* OF THE COUNCIL OF THE COLLEGE OF GENERAL PRACTITIONERS

A working party of the Council of the College of General Practitioners was appointed to study psychological medicine in general practice, after a request had been received from the Ministry of Health for the views of the College on this subject. It accepted as a definition of *psychology* "The science which deals with the mind and mental processes," and of *psychiatry* "The recognition and treatment of diseases of the mind" (*Stedman's Medical Dictionary*).

First, written evidence was obtained from 27 members of the College who had expressed a special interest in psychology and psychological medicine in a general practitioner's work. Next, details of the teaching of these subjects were sought from all medical schools in the British Isles and from some in the Commonwealth. A draft report was then sent to the Association of Teachers of Psychiatry in Undergraduate Medical Schools, to members of the Psychological Medicine Committee of the British Medical Association, the Royal Medico-Psychological Association, and the Society for Psychosomatic Research, to all members of the Council of the College in the United Kingdom and Eire, to many consultant psychiatrists, and to others.

This report, which has now been submitted to the Ministry's Standing Advisory Committee on Mental Health, discusses the importance of this branch of medicine in general practice, and the types of psychological illness seen by family doctors; it examines the leading part that should be played by all family doctors in this work, and the undergraduate and postgraduate instruction they require; it points out the help that may be given by a general practitioner with a special interest in the subject, and his particular needs at present; and it makes six recommendations.

Importance of Psychological Medicine in General Practice

Every good family doctor must be a good psychologist, for psychological medicine is part and parcel of all general practice. To misdiagnose organic disease has long been regarded as a serious error; it is now appreciated that to miss psychological illness is just as bad and may lead to even greater unhappiness. So much

*Members of the Working Party: Dr. C. A. H. Watts (Ibstock) (chairman); Dr. S. I. Abrahams (London) and Dr. J. H. Hunt (London) (joint honorary secretaries); Dr. Annis C. Gillie (London); Dr. J. P. Horder (London); Dr. Richard Scott (Edinburgh).