Medical Education

General Practitioners and Medical Television

J. H. WALKER, LINDA BOWRING, VALERIA MORRIS, JENIE RICE, J. R. THORNHAM
C. S. TOWNSEND, P. S. VEITCH, DENISE WILLIAMS

British Medical Journal, 1971, 1, 392–394

While medical television programmes designed primarily for the continuing education of general practitioners have been transmitted by Independent Television and the B.B.C. for several years, no more than 50% of practitioners may ever see a single programme, and of those who do less than half watch regularly.[1] Though Cameron[2] showed that the programmes did have a demonstrable educational effect an up-to-date assessment appears essential if production is to continue. Previous studies of audience reaction relying on postal questionnaires were suspected of bias, and it was concluded that valid information could be obtained only by personal interview.[1]

Survey

A 10% sample was drawn from the 1,000 practitioners working within the area of Tyne Tees Television reception; of these five were unable to collaborate, and substitutes were selected. Each practitioner was interviewed by one of us, using a standardized questionnaire. Basic data about each doctor, his practice, his postgraduate education habits, and his medical televiewing were collected.

Qualifications.—Altogether 53 doctors were graduates of the Newcastle Medical School, 35 of other provincial universities, and 6 of London teaching hospitals; a further 6 had graduated overseas. Eighty-four had basic medical qualifications only, but seven held the D.Obst.R.C.O.G., three the D.C.H., four the M.D., and six a combination of these.

Experience.—Though 76 of the doctors had less than two years' hospital experience before entering general practice 24 had more than three years and a further 6 had worked in other medical fields. In addition 29 were currently holding clinical assistantships in a variety of specialties, 19 were working part time in industry, 17 were conducting sessions for the local authority, and a further 11 were concerned in insurance or similar work. Forty-six had no medical commitment outside their practice, though 27 worked in the community in a non-clinical capacity—for example, as a local councillor or school governor—which occupied an average of two to three hours a week. An average of four hours a week was spent on a variety of hobbies.

Practices were in a wide range of settings, including conurbations, large towns, country towns, and remote villages. Despite the trend towards grouping most doctors worked single-handed or in partnerships of two or three. Only 25 doctors were in groups of four or more, and no single characteristic, such as age in particular, identified those likely to work in this way. Appointment systems were by no means universal; 36 of the practices continued to consult in the traditional manner. Night and weekend emergencies were covered by 69 of the doctors within a practice or neighbourhood rota, 15 relied entirely on an emergency treatment service, and a further 13 operated a practice rota with occasional recourse to the emergency treatment service. Use of the emergency treatment service was more likely among doctors in one-man or two-man practices—25% of the small practices compared with 8% of the larger ones. Three doctors in rural practices were permanently on call.

Work Load.—Though it is difficult to compare work load between practices the doctors in this series did make an estimate of the number of hours worked and of patients seen during the week preceding the interview (Table I). While 14 practitioners worked less than 40 hours a week and 10 saw fewer than 40 patients a day, the norm appeared to be 55 or more hours a week and 66 patients a day. No significant pattern emerged from our attempts to correlate age, practice size, and work load.

TABLE I—*Distribution of General Practitioners by Age, Number of Hours Worked per Week, and Number of Patients Seen Daily*

Age	No. of Doctors	Hours Worked per Week	No. of Doctors	Patients Seen per Day	No. of Doctors
<30	2	<30	1	<40	10
30–39	18	30–39	13	40–59	45
40–49	33	40–49	16	60–79	29
50–59	32	50–59	32	80–100	12
≥60	15	≥60	38	>100	4

Postgraduate Education

Despite the geographical scatter only 11 practitioners were more than 10 miles (16 km) and only five more than 20 miles (32 km) from a postgraduate centre. Of the total sample 89 had been to the centre—39 for lectures, 2 for seminars, 2 for ward rounds, and 46 for a combination of all three. Within the previous two years 54 had also attended an intensive postgraduate course (for one or two weeks). Only five doctors thought that postgraduate education in general practice was unnecessary.

The Medical School, University of Newcastle upon Tyne NE1 7RU
J. H. WALKER, M.D., D.P.H. Senior Lecturer in Family and Community Medicine
LINDA BOWRING, Final-year Medical Student
VALERIA MORRIS, Final-year Medical Student
JENIE RICE, Final-year Medical Student
J. R. THORNHAM, Final-year Medical Student
C. S. TOWNSEND, Final-year Medical Student
P. S. VEITCH, Final-year Medical Student
DENISE WILLIAMS, Final-year Medical Student

READING

Sixty-nine doctors in the present series read the major journals (*British Medical Journal, Lancet, Practitioner*) as well as the increasing number of free medical newspapers and magazines, 27 read the major journals only, 2 read the "quickies" only, and 2 read none at all (Table II). Without recourse to additional facilities, therefore, most general practitioners seem to be concerned in a reasonably active programme of continuing education.

TABLE II—*Time Spent Weekly on Reading Medical Periodicals*

Time (in hours)	None	½	–1	2	3	4	>4
No. of general practitioners	2	3	22	25	27	8	13

TELEVISION VIEWING

Though most people own televisions two of the doctors did not have a set and a further seven rarely watched. Of the remainder 36 spent up to an hour a day and 38 between two and three hours a day viewing during the week preceding the interview; 89 had at some time watched a postgraduate medical television programme. Apart from the two doctors who did not have televisions nine found transmission times inconvenient or expressed disinterest; 78 had seen at least one programme during the preceding year, 38 more than four, and five more than 10. Most doctors (45) watched the late evening transmission, 17 the Sunday morning, and 14 the Wednesday lunchtime showing. Thirty-three were satisfied with existing transmission times, 36 would have preferred them to be earlier in the evening, 12 Sunday morning or afternoon, six weekday afternoons, and two, rather surprisingly, weekday mornings, while 11 had no preference.

Tyne Tees Television circularize details of each series of programmes in the form of a card timetable and a brochure of more detailed programme notes. Though seven doctors claimed not to have received these only three knew nothing of programmes in advance; 67 were informed about I.T.V. transmissions, 4 about B.B.C., and 26 about both. As the circular often arrived well in advance of the programme 69 would have welcomed a postal reminder. Fifty-two of the doctors had the brochure to hand at the time of the interview; 84 had found the notes valuable, 60 referring to them during or after the broadcast. The notes encouraged 32 to be selective in choosing programmes. Though 21% of the doctors in Cameron's[2] study viewed in company, those in our survey in the north east watched medical television alone. Of these 40 knew of other doctors who watched, and 35 had at times discussed the programme with someone else; only three knew of patients who had seen any of the programmes.

Results

When considering some of the variables and their relationships no significant correlations emerge, though several points are of interest (Table III). The oldest group of doctors and, surprisingly, rural doctors are the least enthusiastic viewers. Only 12% of the more recently qualified never watched compared with 30% of their senior colleagues. Doctors who attend refresher courses or hold hospital posts are more likely to view than those who do not, though they see no more programmes than members of the Royal College of General Practitioners or those who tend to watch more television of a general type in any case. Attendance at refresher courses was highest among doctors in rural practices, members of the Royal College of General Practitioners, and those holding clinical assistantships. Medical televiewing correlates well with reading habits; 60% of the regular viewers spent an average of two hours or more reading journals each week compared with 30% of the remainder.

TABLE III—*Number of Doctors Viewing Television Programmes and Attending Refresher Courses*

	No. of Doctors	Programmes Seen in 12 Months (% of Doctors)			Percentage of Doctors Attending Refresher Courses
		None	1–4	≥5	
Overall	100	22	40	38	54
Partnerships of 1 or 2	41	20	40	40	54
Partnerships of 3 or more	59	23	40	37	54
Attended refresher course	54	20	48	32	100
Members of R.C.G.P.	24	25	33	41	66
Doctors with hospital posts	29	27	45	27	66
Rural doctors	6	50	17	33	66
Regular viewers of general television	55	23	36	41	52
Qualified before 1940	36	30	40	30	52

PROGRAMMES

As the survey covered a period of one year during which several series of programmes were screened no attempt was made to evaluate individual programmes. Even so, 57 doctors clearly remembered the subject of the last programme they had seen and often several of its important features. Ten doctors thought the range of topics very good, 37 good, 28 adequate, and 6 poor. Relevance to general practice was categorized as never by 1, occasionally by 24, usually by 50, and always by 6.

Twenty-six of the doctors felt the programmes to be aimed at specialists, eight at the general public, and only 47 at general practitioners; 84 thought the general practitioner ought to be the appropriate focus. Though practitioners have been deeply involved in programme planning 33 doctors in the present study were not aware of this, and while 63 felt that they should play a greater part 24 were quite definite that they should not.

Suggestions about the content of future programmes, made by 76 doctors included in order of priority: differential diagnosis, management of problems in general practice, management of emergencies, therapy, prevention, diagnostic tests, and prognosis.

Television was not regarded as a very effective form of postgraduate education (Table IV). There is no active involvement of the viewer, and several of the doctors had fallen asleep during the late night programme. In some centres discussions have been held after individual broadcasts to overcome this difficulty, and 38 doctors thought this a good idea. Sixty-six per cent of the doctors would also welcome videotape recordings for viewing at convenient times.

TABLE IV—*Opinion of Doctors Regarding Most Effective Form of Postgraduate Education*

	No. of Doctors
Refresher course	33
Lecture	15
Ward rounds	14
Combination of these	20
Television	2
Other	16

Discussion

During the study year 23 programmes were transmitted by Tyne Tees and B.B.C. television in the Newcastle area. Of these, 5% of the doctors in the present sample saw 10 or more and 38% saw from five to nine. This is certainly a higher proportion of regular viewers than was found by Cameron[2] or Barkla and Smith,[5] but it still represents an average of only four programmes per general practitioner in the region. In a 20-programme year in the north east of England, therefore, an average of 200 practitioners will see each programme. Of these only four will regard it as the most satisfactory form of

postgraduate education, and most of the remainder will be doctors who are well read, have attended refresher courses, are members of medical societies, have hospital posts, live near postgraduate centres, and are engaged in active continuing education.

Open-circuit medical television has probably been overtaken by the rapid expansion of other forms of postgraduate education. In the academic year 1969-70 10,000 hours were spent by 1,021 general practitioners in the Newcastle region in intensive or extended postgraduate courses. The regular lunch-time meetings held in 12 postgraduate centres and a variety of case conferences and clinical attachments probably double this total. The maximum estimate of medical televiewing is 2,000 doctor-hours in the region, and in reality may be much less. Isolated from the main stream of activity in postgraduate centres medical television is handicapped by production delays, which inhibit the presentation of current topics, by frequent failure to exploit the technical possibilities of the medium, and particularly by an inability to involve the viewer.

If medical television is to continue the function of the programmes might be more clearly defined and specifically aimed at doctors in postgraduate centres. A national or regional curriculum of short, provocative presentations could be interspersed with regular current-affairs programmes requiring less elaborate production techniques and transmitted during the lunch-hour periods as "discussion openers."

Perhaps of greater value than the education of doctors is television's potential for informing the public. While our study suggests that lay audiences are small, previous estimates had been higher[3]. If, as Robert MacNeil[4] claims, "Television reaches, persuades and informs more extensively and homogeneously than ever before," programmes dealing with smoking, obesity, exercise, personal relationships, contraception, child development, accidents, the use of medical services, and other topics involving doctors, social workers, psychologists, educationalists, therapists, and patients would be a much more effective use of the facilities available.

Medicine is increasingly dependent on its partnership with the public.

Our survey seems to suggest that enough is being done to educate the doctor; the emphasis should now be on the patient.

References

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Hospital Topics

Early Walking of Geriatric Amputees

M. B. DEVAS

British Medical Journal, 1971, 1, 394–396

Summary

After amputation geriatric patients have been enabled to get up and walk with the help of a prosthesis, an "early walking aid." The physiotherapist measures the patient, fits the early walking aid, and instructs him in walking. The prosthesis is simple to make, easy to apply, and allows early walking with the use of a walking frame or sticks. Thus the geriatric amputee can walk as soon after operation as his general condition allows and the surgeon wishes.

Introduction

Since certain patients for various reasons were unable to attend the nearest limb-fitting centre some 40 miles (64 km) away, they were referred to the geriatric-orthopaedic unit at St. Helen's Hospital, Hastings. The plight of these patients indicated that some simple appliance should be made to allow them at least independence in the ward. The first appliance made was no more than a sawn-off crutch with a polyethylene socket made from a plaster cast of the thigh (Fig. 1). It was less sophisticated than a wooden leg made by a sailor after Trafalgar, but its success exceeded all expectations. Thereafter early walking aids were in great demand for all patients undergoing amputation.

Royal East Sussex Hospital, Hastings
M. B. DEVAS, F.R.C.S., Orthopaedic Surgeon

Patients and Method

Since 1962 123 amputations have been carried out by the general surgical staff. It is not my purpose to describe here in detail the reasons for, or technique of, operation in these geriatric patients. The overall production of the early walking aid was my only concern. This was a deliberate policy to enable the physiotherapist to take her proper place in this programme. All decisions as to when the patient should walk rested with the surgeon and the physiotherapist.

Before operation the necessary measurements were taken, so that, if possible, the patient's new "leg" was at the bedside when he awoke from the anaesthetic. There was no advantage in getting the patients up immediately after operation—one or two weeks later, according to fitness and progress, was soon enough—but during that time exercising the stump with the early walking aid attached produced a better stump than simple exercises or bandaging. Thereafter amputees attended the limb-fitting centre as usual.