

PRACTICE OBSERVED

Practice Research

Reactions of patients to video recording of consultations in general practice

GUY HERZMARK

Abstract

The potential value of video recording for examining medical consultations depends on the extent to which such recordings are representative of unfiled consultations. This paper examines the views of 295 patients in two general practices whose consultations were filmed and compares them with the views of a control group of 185 patients. Most of those who were filmed reported that the consultation was not directly affected, and no overall effect of filming was discovered when patients rated their stress after the consultation, their rapport with the doctor, or other aspects of the consultation. At one practice, however, filming was significantly associated with lower ratings of rapport between doctor and patient among those patients who reported some direct effect of filming. Patient refusal rates from other studies are also examined and shown to vary systematically—the more opportunity patients are given to decline the more likely they are to take it. Consideration of doctors' responses to being filmed would usefully complement the emphasis on the views of patients.

Introduction

Video recording techniques are being used more and more to examine medical consultations and as aids for training, self review, and research. Such methods offer a more permanent, comprehensive, and flexible record of the consultation than verbal descriptions or direct observation alone. As the necessary technology becomes

more generally available and doctors and others seek to understand how consultations work there is probably a long and productive future for the video camera in the consulting room. There are some practical difficulties, such as developing and implementing appropriate methods of analysis, but it is hoped that these will soon be overcome. Questions still remain, however, about the extent to which video recordings are representative of unfiled consultations. If many doctors or patients decline to be filmed those who accept filming may not be typical of doctors or patients as a whole, and the credibility of results based on such recordings may thereby be undermined. Even when both doctor and patient have agreed to be video recorded one or the other may feel constrained or inhibited by the filming. Recordings may thus not represent faithfully the reality of unfiled consultations. If this were the case the findings based on video recording techniques would be less useful. It is therefore necessary to establish the extent to which filming affects the consultation.

This, however, presents methodological difficulties. It is impossible to compare the "seen" and the "unseen" consultation precisely because one is unseen. Some comparison could be made if doctors' ratings of filmed and unfiled consultations in which they had participated were available, but no such study has apparently been reported. Questionnaires, however, have been used to assess the reactions of patients who have been filmed. Two principal approaches have been adopted. The first is to ask patients directly whether filming affected the consultation in various ways. For example, Campbell, reporting on a survey in general practice, concluded that video recording was acceptable to roughly 95% of patients and that no patients reported adverse effects on the consultation. Martin and Martin noted, however, that surveys carried out in the surgery may inhibit the expression of negative comments by patients and suggested that roughly 20% of patients thought that the consultation had been affected—for example, by making them less willing to talk about embarrassing matters. Research using these methods may raise interesting issues, but the weaknesses inherent in such designs make most conclusions speculative.

MRC/ESRC Social and Applied Psychology Unit, University of Sheffield, Sheffield S10 1TN
GUY HERZMARK, B.A., research officer

The patients at the single site practice who were sensitive to filming tended to be younger (average age 34 years) than other patients there. All but one were young. They had consultations, however, for a variety of reasons, only some of which concerned sensitive or embarrassing, or otherwise, and urinary incontinence. The small numbers of patients make further analyses unproductive, but the results suggest that there may be some patients whose reports of the consultation are adversely affected by filming.

Discussion

Overall, the findings of this study do not indicate any major impact of filming on patients' reports of the consultation. Most patients said that they forgot about being filmed and that it did not affect the consultation. Moreover, the views after the consultation of those who had been filmed did not differ appreciably from those of patients whose consultations had not been recorded. There is evidence, however, that at one practice sensitivity to filming may have been linked to adverse reports about rapport between doctors and patients and about information provided by the doctor. Several explanations for this finding (and its absence at the other practice) are possible. It may depend on the sex of the doctor or on the social class of the patient, who were similar at the two practices. Or it may be the result of the fuller explanation about the filming that was given at that practice. Not only was some explanation made before the consultation, but each consultation lasted longer, which may have helped the doctors to explain matters more effectively.

It is perhaps noteworthy that more patients declined to be filmed at the single site practice (10% than at the other practice (2%). There is general agreement that patients should be informed about filming and given an opportunity to decline. The methods by which this might be achieved have, however, varied, as have the reported refusal rates in general practice populations. Campbell used explanatory notices in the waiting area and found that roughly 3% of patients declined to be filmed. Similar refusal rates were reported by Martin and Martin when the agreement of patients was sought by the doctor as they entered the consultation room. Many more patients, however, seem to decline when they are given more explanation before filming and asked to sign a consent form before leaving the doctor. For example, Pringle et al noted that 10 (11%) out of 91 patients refused under these circumstances, and average refusal rates of 20% were reported by Martin and Martin, with even higher rates for patients with particularly sensitive problems. Ethically, patients should clearly be allowed to choose whether or not to be filmed. Methodologically, however, problems arise if large numbers decline, as the resulting sample will be less representative of the patient population. The credibility of results based on such recordings may thus be undermined. The findings from this study

suggest that the ethical and methodological demands are in conflict: the more opportunity the patients are given to refuse the more likely they are to take it. It is therefore important for future research that both procedures for agreement and refusal rates be reported accurately.

The absence of major direct or indirect effects of filming on the reports of patients on the consultation found in this study suggests that video recording need not affect the consultation to any great extent from the patient's point of view. The study also shows that it may cause difficulties for some patients and that some will decline to be filmed. If the representativeness of filmed consultations is to be more fully considered the views of doctors will also need to be taken into account. Davis et al reported that the anxieties of the doctors in their study were largely overcome as they became familiar with the video recording techniques. The acceptability of such methods to doctors generally, however, is still uncertain. The consultation behaviour of doctors who agree to be filmed may be constrained to the need to be seen to be "doing the right thing." Research on these issues seems to be sparse, but it would usefully complement the emphasis so far placed on the views of patients.

I thank the doctors, staff, and patients of the practices concerned for their time and tolerance, and in particular Dr Alan Evans for his help; the IBM (UK) Scientific Centre who funded the study; and my colleagues at the MRC/ESRC Social and Applied Psychology Unit, Garry Brownbridge, Bob Garber, Dr Mike Fitter, and Dr Toby Tully for many useful discussions.

References

- Campbell DJ, Steel J, Smith C, Spence I. Training family doctors to video psychiatric illness with recorded advice. *Lancet* 1980; **315**: 121.
- Pringle M, Blundell S, Jones D, et al. Video recording in general practice. *Br Med J* 1980; **315**: 1314.
- Pringle M, Blundell S, Jones D, et al. Video recording in general practice: a preliminary report. *Br Med J* 1979; **108**: 628.
- Pringle M. Video recording in general practice. *Br Med J* 1980; **315**: 1300.
- Lambert R. Audiovisual recording in the surgery. *Br Med J* 1980; **315**: 1302.
- Martin M, Martin PA. The reactions of patients to video cameras in the consulting room. *Br Med J* 1981; **314**: 407.
- Pringle M, Blundell S, Jones D. Assessing the consultation methods of observing trainees in general practice. *Br Med J* 1982; **108**: 100-04.
- Brownbridge G, Brownbridge G, Jones D, et al. Patient reactions to doctors' competence in general practice consultations. *Br Med J* 1981; **29**: 52.
- Herzmark G. Brownbridge G, Jones D, et al. Consultation time and compliance in general practice. *Br Med J* 1984; **14**: 689-94.
- Robert F, Bradburn N, Lee P. Patients' attitudes towards video-recording of advice in general practice. *Br Med J* 1985; **275**: 559.
- Kaplan S, Linn S. Patient attitudes towards video-recording in general practice. *Br Med J* 1975; **262**: 6.
- Finn F, Asher M. The doctor-patient relationship as seen in general practice. *Lancet* 1976; **10**: 1077-1081.

100 YEARS AGO

A lecture on "Dustbins and Cholera" was delivered recently at the Royal Aquarium, by Mr. William Warner, R.E., of Nottingham, who divided his subject into the four branches—first, the description of house-refuse; secondly, the dustbins into which the refuse was cast; thirdly, the vehicles used for collecting it; and, fourthly, the various methods used to dispose of house-refuse. Under the first head, he said that not only vegetable matter, which could be burned in the kitchen, but all kinds of offal and dead animals, were thrown into the dustbins; but whatever the dustbins contained should be removed by the dustmen. They often refused to do so, as not being compelled by the Public Health Act. By being kept, such refuse became decomposed and injurious to the neighbourhood. He said there was no doubt that cholera and similar diseases had been aggravated, and many lives sacrificed, by the dangerous elements of the dustbin. In 1883, a memorandum was sent to the sanitary authorities from the Local Government Board, in which it was stated that measures of cleanliness before the outbreak of cholera were of far more importance than the removal or disinfection of filth afterwards. Dustbins formed of brick or wood should be entirely abolished, and a round iron or steel receptacle used, with handles on the sides, and about the size used by dustmen; while a water-tight collection

twice a week should be carried out. No one should be allowed to harbour dust; and every time the receptacle was emptied, it should be sprinkled with disinfectant. With regard to the vehicles used, he condemned the system of emptying the refuse into the top of the carts, causing great unpleasantness to passers-by. He suggested low-bodied carts, to be filled without ladders. At a very small cost, he said, such carts could be made with low bodies and wooden doors on the top, thus keeping the dust from flying about. He exhibited a model of such a cart. As to the disposal of the refuse, he advocated burning. Destroyers erected at Leeds, Derby, Bolton, Ealing, and other places, not only consumed such refuse without smell, but at a small cost for labour; and the steam generated might be used. The waste heat was utilised in many towns to drive mortar and manure mills, and for various other purposes. He referred to the measures to which the heat generated by the burning of the refuse could be devoted, and pointed out how the cost of erecting destructor in all large towns might be diminished. A resolution was then carried to the effect that it was desirable that house-refuse from dustbins should be cremated, when it could not be disposed of by ready and more economical processes, as a preventive to disease. (*British Medical Journal* 1885; **1**: 404.)

The second approach is to use indirect measures of patients' responses to the consultation and then to compare the views of filmed patients with those of patients who have not been filmed. Any effect of filming on patients' views, adverse or favourable, has implications for the more general validity of the recordings thus obtained. Although such studies are apparently rare, Pringle et al, using these methods, concluded that video recording showed no appreciable effect on patients' stress and arousal after the consultation, whereas patients were adversely affected on these measures by the presence of a second doctor. This study, however, was confined to a single site and did not specifically control for the possibly confounding effects of background variables such as the age and sex of patients.

It is likely therefore that the reactions of patients to video recording merit further consideration using more complex research designs. An opportunity to do this arose during a recent study of introducing a computer into general practice consultations. This paper examines the views of patients at two practices whose consultations were filmed and compares them systematically with the views of control groups of patients at each practice who were not filmed. These consultations all took place before the computer was introduced. Both direct and indirect assessments of filming are considered by addressing the following two questions: (i) How intrusive and disruptive was the filming perceived to be? (ii) How did it affect patients' perceptions of and reactions to the consultation? Examining the effects at the two practices separately enables the robustness of the findings that emerge from either practice to be considered.

Method

The study was carried out in two urban practices. In one practice four women doctors looked after roughly 8000 patients in a predominantly middle class area. Appointments were usually made at 10 minute intervals. The other practice had two sites in a mainly working class area with six men doctors looking after over 20 000 patients and using a five minute appointment system. Surveys were selected at random for each of the four doctors at the smaller practice and for the five participating doctors at the other practice (one partner having left during the study) and allocated one of two conditions:

Unfilmed. This group comprised 185 patients whose consultations were not filmed. They were however advised by the doctor that their views would be sought after the consultation; they would mail having their consultation filmed. In addition, patients at the smaller practice had received some explanation about the filming from the research worker. Roughly 10% declined at this practice and roughly 2% at the larger practice. These patients were therefore not filmed. The views of the filmed patients were sought after the consultation as described above, but, in addition, they were given the opportunity to ask to have the recording erased by being asked to sign a form giving consent for or requesting erasure before completing the questionnaire. Only one person asked for the recording to be erased.

The distribution of the sample by practice and condition was as follows: smaller practice, 64 patients not filmed and 60 filmed; larger practice (on two sites) 121 not filmed and 235 filmed. The questionnaire that patients were asked to complete included items that had been selected from questionnaires used in previous studies.^{1,2} It was piloted, and a final version is available on request. The background information requested about the patients included: age, sex, how long they had been registered with the practice, frequency of visits to surgery, whether they had seen their "own" doctor, and their attitudes to doctors. Direct responses to the filming were asked by the research worker whether the consultation had been filmed, and, if so, how aware of the filming they had been and whether they thought that it had had any effect on the consultation. Indirect effects were examined through measurements of the patients' post consultation stress (three items, internal reliability $\alpha=0.75$, four point scales: "not at all" to "very...") ("Are you feeling tense?") and their views about the consultation as follows:

- Doctor attentiveness and rapport (eight items, $\alpha=0.83$, five point scales: "strongly agree" to "strongly disagree") "I was able to tell the doctor everything I wanted to?" "The doctor was very interested in me as a person?"
- Perceived provision of information by the doctor (two items, $\alpha=0.78$, four point scales: "nothing" to "enough") "Did the doctor tell you enough about what was wrong with you?"
- Expected ease of compliance with the doctor's instructions (one item, four point scale: "very difficult" to "very easy")
- Reported intention to comply (one item, four point scale: "completely" to "little or none at all")
- Confidence in efficacy of treatment (one item, four point scale: "very likely" to "not likely at all")
- Satisfaction with standard of treatment received (one item, five point scale: "completely satisfied" to "very dissatisfied")

Although these measures may be insufficient as absolute indexes of patients' attitudes, they are adequate for comparisons between groups of patients.

The total of 480 questionnaires was obtained after excluding 27 patients, who, from their answers, appeared to have misunderstood whether or not their consultation had been filmed. This confusion rate of approximately one in 20 is comparable with that reported elsewhere. The average age of those included was 44.7 years, and a third were men. The sample therefore included more women than would be expected from national consultation rates. Sex was controlled for, however, in the comparative analyses reported below.

Results

Direct assessment of the impact of filming.—Of those patients whose consultations were video recorded, most (71%) reported that they forgot about being filmed. Roughly a quarter said that they were aware from time to time and a few that they were aware much of the time. Over three quarters said that they did not think filming had affected the consultation at all. A fifth thought that it had been affected "possibly a little" and a few "a fair bit" or more. There were no significant differences between these figures according to which doctor had been consulted in the practice or depending on which practice (or site for larger practice) it was. This pattern of results is broadly comparable with those reported by Martin and Martin.

Indirect assessment of the impact of filming.—Analyses of variance methods were used to examine differences between the views after consultation of the experimental and control groups. In these analyses differences in patient background variables—for example, age and sex—and the questionnaire methodology—normal, read out, or completed at home—and the possibly confounding effects of which doctor was consulted and which site (in the larger practice) were examined and where necessary controlled for statistically. No significant effect of filming on any of the dependent variables was found at either practice. Thus patients' stress after consultation and their ratings of doctor attentiveness and rapport, provision of information by the doctor, expected ease and likelihood of compliance, confidence in efficacy of treatment, and satisfaction with treatment received were unaffected by being filmed. Although no overall differences were apparent as a result of filming, it was possible that patients' subjective ratings of compliance might be more greatly affected. In particular, although most of those who had been filmed reported that it had not affected the consultation, a fifth thought that it had. The responses of the filmed group were therefore further analysed to see if this factor was related to other differences or views (table). At the practice on two sites no difference was found, but at the other practice significant differences were observed for two measures: reported rapport between doctor and patient and perceived provision of information by the doctor. In both cases those who thought that the filming had had an effect on the consultation were more critical than those who reported no such effect.

Mean scores for perceived rapport between doctor and patient and provision of information by the doctor by reported patients of differences due to filming at the single site practice

	Some difference	No difference	F	P	
	Range	Mean	df		
Perceived rapport	0-2	1.50	9-96	4.11	$p<0.05$
Provision of information	1-4	2.67	2-63	27.31	$p<0.001$

Note: High scores indicate more negative views for each measure. No comparison is possible across measures.

Audit Reports

Vitamin B₁₂ treatment in Coventry and Warwickshire

We were interested in the findings of Middleton and Wells that of 492 patients in Coventry who were receiving vitamin B₁₂ injections, 78% (382) were having them more often than the recommended three monthly dose of hydroxocobalamin. Members of our group collected data on B₁₂ therapy in 12 general practices with a total of 63 082 registered patients. We found a rate of 2.1 patients per 1000 population who were receiving injections of vitamin B₁₂, which is higher than the rate of 1.59/1000 found by Middleton and Wells.

Our analysis was performed according to the method of Fraser et al, but our data were collected over only two months—May and June 1985. One hundred and twenty nine (90.5%) patients were receiving hydroxocobalamin; 39 (28.2%) were having injections three monthly; 64 (46%) had had a blood count performed within the past year. The original diagnostic criteria were sought for 121 patients: 59 (48%) had a record of a macrocytosis combined with

both a high serum B₁₂ concentration and a low serum folate concentration. A reticulocyte response to treatment was rarely noted, although a Schilling test seems to be a more useful and definitive test. The participating doctors liked to conform a dietary B₁₂ deficiency in vegetarians—for example, in Asian patients, who, practically, can no longer obtain oral supplements under the National Health Service.

There is thus considerable scope for rationalising vitamin B₁₂ treatment in Coventry and Warwickshire, and we will be doing this in our practices. — F. WILSON, general practitioner and coventry, Warwick University Medical Audit Group, University of Warwick, Coventry CV4 7AL. (*Accepted 19 July 1985*)

1 Middleton J, Wells W. Vitamin B₁₂ injections: considerable scope for work for the district nurse. *Br Med J* 1982; **284**: 124-5.
2 Fraser M, Goshall M, Stenhouse M. Audit of the use of vitamin B₁₂ in general practice. *Br Med J* 1983; **287**: 779-81.

Walk in surgery for children

We ran a walk in surgery (no appointment necessary) four days a week for five months starting in November 1983 for children aged 0-16 years. It was intended to be used by patients as a service permanently. Four hundred and eighteen children attended 520 consultations: 65 children per surgery; 60% of the children aged 0-1 years in the practice attended, 41% aged 1-5, and 15% aged 5-16. Roughly 37% (112) children required no treatment, but health visitors followed up those who had constipation, warts, poor sleeping patterns, and enuresis. The other 73% (306) of children required treatment for respiratory tract infections, otitis media, and allergic and gastric disorders; 15% were followed up by the health visitors, and 12 were referred for investigations and surgery. General practitioners made 41 home visits in the four months before the trial and 22 visits during the trial, though normally more visits are made during the winter.

From the age-sex register the record of the next child to one who had attended the walk in surgery showed that half of these "controls" had never been to a surgery and half had been to normal surgeries or to the well baby clinic. No child was admitted to hospital during the trial from this practice, though 169 were admitted from other sources. Parents were pleased with the walk in surgery and asked us to extend the surgery to five days a week. Health visitors dealt with 25% of children, found valuable opportunities for health education, and gained confidence in dealing with minor illnesses. The three general practitioners tried to standardise care and changed prescribing patterns. I thank my partners and Professor David Metcalf for his advice. — I. A. SYED, general practitioner, J. Leach, health visitor, Scott Park Surgery, 187 Manchester Road, Burnley BB11 4HP. (*Accepted 10 July*)

Multicultural medicine

Breay.—A farming term for a well defined pathogenic disease of sheep, which was acute and often fatal. It is not commonly seen today because of vaccination but was believed by farmers to be caused by sheep poring themselves on rich lowland pastures affected by frost after the sheep had been brought down from sparse hill grazing. The meat of an affected sheep is drier and stronger in flavour than normal and until recently was regarded by Scottish farming families as being highly nutritious. It was prepared for consumption by the family either as a thick soup, Breay brey, or as a stew, Breay mutton. I can find no published evidence of aetiological pathology or disease resulting from this gastronomic fashion. — GEOFFREY R. HORTON, general practitioner, Kinross, Angus, Scotland.

Wapni.—A vernacular remedy for many ailments, both real and imagined, in Western cultures. In Scotland it is widely used as an antispasmodic, usually for berberic lesions (both simple and zoster). When applied early in the outbreak it seems to do no harm—and often a little good. It is, however, not so effective when applied to lesions that lie within easy reach of the tongue. There, so far as I can discover, no studies to compare the relative merits of "milk" or "blended" spart in this context. — GEOFFREY R. HORTON, general practitioner, Kinross, Angus, Scotland.

Wapni.—A vernacular remedy for many ailments, both real and imagined, in Western cultures. In Scotland it is widely used as an antispasmodic, usually for berberic lesions (both simple and zoster). When applied early in the outbreak it seems to do no harm—and often a little good. It is, however, not so effective when applied to lesions that lie within easy reach of the tongue. There, so far as I can discover, no studies to compare the relative merits of "milk" or "blended" spart in this context. — GEOFFREY R. HORTON, general practitioner, Kinross, Angus, Scotland.