Patients' satisfaction and reported acceptance of advice in general practice

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SUMMARY. Patients' views were sought by questionnaires and home visits on how satisfied they were with the care they received from their general practitioners and how much of the advice received they were prepared to accept. The results showed a high degree of satisfaction and a higher level than has been found in hospital. Studies like this may identify difficulties which some patients may have and help doctors to make difficult advice easier to follow.

Introduction

Two important criteria of the success of doctor-patient communications are:

- (1) Patients' satisfaction with these communications,
- (2) How far patients accept advice from doctors (compliance).

An increasing amount of information is being collected about the levels of patient dissatisfaction with aspects of hospital care. In a review by Ley (1972) the range of dissatisfaction reported in different studies was 11-65 per cent with a median of 33 per cent. There is also considerable evidence that patients do not comply with advice they receive from doctors. Reviews by Ley and Spelman (1967) and in the first annual report of the Research Units in Doctor-Patient Communication (Ley et al., 1971) report a range of non-compliance from 8-92 per cent with a median of 44 per cent.

It is argued by the authors of these reviews that adequate comprehension and memory of information are necessary although not sufficient conditions for compliance with advice, and also that by increasing comprehension and memory increased satisfaction can be obtained. Ley et al. (1973) have shown that in hospital increases in patient satisfaction can be produced by using a procedure designed to ensure adequate comprehension of information given to the patient.

Further investigations of memory and comprehension problems in medical care are in progress. For this purpose studies of the consultation in general practice have some advantages over those in hospital. In particular it is easier to establish exactly what information is given to patients during a consultation in general practice than during a prolonged hospital stay, where information can reach the patient from many sources at various times. The results of such studies should have implications for increasing levels of satisfaction and compliance in general practice.

There is, however, as yet little information about patient satisfaction with medical information received in general practice. Cartwright (1967) provides some relevant general data. Only three per cent of patients in her sample claimed to have changed their

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doctor in the preceding five years because they were dissatisfied. Cartwright does, however, suggest that because of the delay necessary when changing doctors this figure may be an underestimate of the level of dissatisfaction present at any one time.

Answers to more specific questions about consultations revealed the following: Ninety three per cent of patients felt that their doctor was good at listening to what they had to say, 88 per cent that he was good at taking his time and not hurrying them, and 75 per cent that he was good at explaining things to them fully. Although these results are predominantly favourable it appears that one in four patients was not fully satisfied with doctors' explanations.

Varlaam et al. (1972) compared the views of people who attended a single-handed practice with those who attended a group practice. Sixteen per cent of the former expressed some complaints about their doctor compared with 20 per cent of the latter, the difference being not significant. Only five per cent and three per cent respectively were dissatisfied with the attention they received from their doctor; only five per cent and three per cent were dissatisfied with their doctor's knowledge, examination and prescribed treatment while 15 per cent and ten per cent were dissatisfied with the duration of consultations. No specific data are reported about patients' satisfaction with the amount they were told by the doctor. Further relevant data comes from a Harris Poll on general practice (1972) quoted in the Journal of the Royal College of General Practitioners which included a question asking respondents whether they would have liked to know either more or less about the treatment they received. Twenty five per cent reported that they would have preferred to be told more.

Sidel et al. (1972) in their detailed survey General Practice in the London borough of Camden provide many data obtained from interviews with the doctors themselves, relating the variables examined to present patterns of care, to future changes, and to the doctors' own satisfaction with their work. This study does not include data from patients, but does emphasise the need to examine the views of both patients and doctors in order to identify the areas and causes of dissatisfaction in general practice.

In view of the above failures of communication our study was undertaken in order to collect data about:

- (1) Patients' satisfaction with information which they receive,
- (2) Patients' views about compliance with medical advice,
- (3) The relationship between satisfaction and compliance.

Method

Description of the practice

The practice in which the survey was carried out is situated in a predominantly workingclass area of South Liverpool, and has about 7,000 registered patients. The team comprises three doctors, a health visitor, a district nursing sister, reception and secretarial staff, and a social worker attached to the practice. It operates using an appointments system for all consultations, excluding emergency home visits, with surgeries from approximately 08.45 to 18.00 hours, five days a week.

The practice team undertakes continuing research into aspects of general practice. Members of the team expressed interest in obtaining information not only on the satisfaction of patients with communication, but also on satisfaction with other aspects of the practice, such as use of the appointments system. A questionnaire was thus designed to obtain this information as well.

Sampling

The patients seen comprised a sample of those attending for the first time with a new problem, or for the first time with a recurring episode of a previous problem. A pilot study was first carried out to test the suitability of the questionnaire to be used in the main study.

The main survey involved interviewing patients at home after consultation. Eleven two-hour general surgery periods were sampled during a period of three weeks. Antenatal, postnatal, and immigrant patient clinics were not sampled.

During each two-hour sampling period all patients entering the surgery were approached and asked if they would help in a survey the aim of which was to find out patients' views about visits to their general practitioners. It was explained that cooperation would involve a short visit by the interviewer to the patient's home at some time in the next week. Confidentiality of individual results and the autonomy of the interviewer from the practice team were emphasised.

After each surgery the doctor concerned eliminated from the study those patients, if any, whose health might have been adversely affected by an interviewer's visit. The few patients eliminated consisted of several suffering from psychiatric problems, notably anxiety neuroses or mild chronic psychotic disorders, those suffering from bereavement anxiety/depression and those with emotional-sexual problems, who might have been embarrassed by visits from an interviewer. Table 1 presents the data about patients approached, selected, and interviewed.

TABLE 1
PATIENTS APPROACHED, SELECTED AND INTERVIEWED

	Number	Per cent
Number of patients approached	209	100
Number of 'follow-up' attenders	111	53 · 1
Number of refusals	19	9.1
Number eliminated by doctor	9 ′	4.3
Number of 'first-attenders' selected for		
interview but unavailable for interview	9	4.3
Number of first attenders interviewed	61	29.2

Although this fact was not known formally by the doctors, all first attenders who had agreed to help and who were not eliminated, were selected for follow-up interview. Two follow-up periods, one and seven days after consultation, were selected, in order that the relationship between satisfaction and time since consultation could be examined. Patients were categorised by age and sex. Within each age-sex group each patient selected was randomly allocated to one or seven day follow-up interview.

Interview procedure

Interviews were conducted by one of three interviewers. Mean interview time was approximately 15 minutes. All interviews were of the following pattern:

- (a) The patient first completed a written questionnaire to assess satisfaction with both communication and non-communication aspects of the visit to the surgery.
- (b) The patient then completed a written multiple-choice compliance questionnaire designed to provide information about his opinions and attitudes towards following the doctor's advice.
- (c) The interviewer then asked the patient what sort of problems, he/she, or "people-in-general" experience that make it difficult to follow doctors' advice.

Results

The information about satisfaction is presented first, followed separately by that for compliance. Because time of follow-up interview was not related to any of the dependent variables the results for all patients are presented together.

(1) Satisfaction

(a) Non-communication aspects

The level of satisfaction with non-communication aspects of the visit was predominantly high. Eighty-two per cent of the sample felt that they were able to make an appointment for a time that suited them either 'always' or 'most times', and for 92 per cent the last appointment made had been at a time that suited them. When asked how long they had had to wait to see the doctor after arrival at the surgery, 48 per cent felt the time was 'about right', 21 per cent 'a little too long' and 31 per cent 'much too long'.

An average of 13 minutes' waiting was considered acceptable to patients if they arrived on time. Patients were approximately evenly divided into those who preferred to see the same doctor on each visit (59 per cent) and those who had no preference (41 per cent). Ninety per cent of patients preferred the appointments system to a waiting-in-turn system.

(b) Aspects of communication

Satisfaction with communications appeared to be fairly high. Data about this are shown in table 2. This table summarises the results of the data obtained from the satisfaction questionnaire in which patients were asked whether they had wanted to know about different categories of information (diagnostic, prognostic) and if so whether they received enough information about the relevant topics.

Satisfaction with the amount of information received is summarised for all patients who indicated that they did want information. The data are then reported separately for those patients:

TABLE 2

Amount of information received by all patients requiring it, and subdivided into: (a) those patients not needing a hospital appointment and (b) those needing a hospital appointment (percentages in brackets)

Category of information	Amount of information received	All patients who required information		(a) Patients not needing a hospital appointment		(b) Patients needing a hospital appointment	
		Number	Per cent	Number	Per cent	Number	Per cent
Diagnostic information	Enough Almost enough Definitely not enough None	37 6 2 8	(70) (11) (4) (15)	31 3 1 3	(82) (8) (2) (8)	6 3 1 5	(40) (20) (7) (33)
Aetiological information	Enough Almost enough Definitely not enough None	16 2 0 8	(61) (8) (0) (31)	12 1 0 3	(75) (6) (0) (19)	4 1 0 5	(40) (10) (0) (50)
Treatment information	Enough Almost enough Definitely not enough None	33 3 0 6	(79) (7) (0) (14)	27 2 0 2	(86) (7) (0) (7)	6 1 0 4	(55) (9) (0) (36)
Prognostic information	Enough Almost enough Definitely not enough None	24 3 0 4	(77) (10) (0) (13)	20 1 0 2	(87) (4) (0) (9)	4 2 0 2	(50) (25) (0) (25)

- (i) for whom a hospital appointment was not considered necessary,
- (ii) for whom the doctor considered that a hospital appointment was necessary.

The results in table 2 indicate little dissatisfaction with communications among those patients not needing a hospital appointment (N=44), such dissatisfaction as was present being mainly that experienced by patients for whom the doctor required hospital specialist information (N=16). There is no marked variation in levels of satisfaction with the different categories of information (diagnosis, aetiology, treatment, and prognosis).

The answer to a question about general satisfaction with communications showed 49 (82 per cent) of the sample to be completely satisfied. A comparison of the satisfaction of the two groups, those needing and those not needing hospital appointments, showed significantly more of the latter to be completely satisfied.

Using a more stringent criterion of satisfaction based upon a composite satisfaction score (appendix 1) 32 of the 57 patients for whom this score could be collected (56 per cent) felt that they had been fully informed about every category of information in which they wished to know something. Chi-square analyses were then carried out to relate satisfaction, using composite satisfaction scores, to the other variables under consideration. Satisfaction was not related significantly to time of follow-up, nor to age or sex of patient, nor to type of consultation (self νs accompanying child). It was, however, significantly related to rated total comprehension of information, complete satisfaction being associated with reported complete comprehension (p < .05). Table 3 shows the data about comprehension of the different categories of information for those patients who wished to know about the category in question and did receive some information.

TABLE 3

Numbers and percentages of patients reporting different levels of comprehension with different categories of information received

:	Category									
Reported level of comprehension	Diag Numbe		Aetiol Number		Hospi appointr Number	nents			Prog.	
Completely Partly Not at all	41 3 0	93 7 0	15 3 0	83 17 0	13 1 0	93 7 0	31 5 0	86 14 0	22 5 0	82 18 0

The data in table 3 do not suggest major failures of comprehension. Answers to a question about total comprehension were, however, slightly less optimistic, with 75 per cent of patients reporting complete total comprehension. This figure agrees exactly with that of Cartwright's study, but is higher than the actual comprehension that would be predicted from the data of Ley and Spelman (1967). The relationship between satisfaction and rated comprehension is, however, as would be expected by Ley and Spelman.

(2) Compliance

The multiple-choice compliance questionnaire was intended to provide patients' ratings on several relevant opinions about following of doctors' advice. Patients completed the questionnaire with reference to the specific advice received, or, if no specific advice was received, in terms of their past general experience of medical advice.

Nine of the patients received no advice, so responded generally, and of the 52 who were given advice, 32 received one piece, 14 received two, four received three, and two received four separate categories of advice. Table 4 provides data on the frequency of occurrence of different categories of advice and table 5 presents the answers to the multiple choice questionnaire.

	Occurrences				
Advice categories	Number	%			
Medicine to take	25	31			
Tablets to take	28	35			
Food/diet	6	7·5			
Smoking	2	2.5			
Exercise/rest	7	9			
Other	12	15			

Accepting the results of table 5 at face value it appears that the patients, when referring to themselves, claimed to follow very closely the advice which they received, and considered the advice they received to be both important and, if followed, to be effective. They also believed that the doctor expected them to follow the advice given, and did

TABLE 5
RESULTS OF COMPLIANCE MULTIPLE CHOICE QUESTIONS: NUMBERS AND PERCENTAGES (IN BRACKETS) OF SUBJECTS GIVING EACH ANSWER

How difficult has it been/will it be to fo Very difficult	5	(8.2)	
Ouite difficult	2	$(3\cdot3)$	
Ouite easy	22	(36·1)	
Very easy	32	$(52\cdot4)$	(N=61)
How well have you followed/will you fo	ollow the ad	vice?	
Completely	39	(<i>65</i> · <i>0</i>)	
Most of it	15	$(25 \cdot 0)$	
Some of it	6	$(10 \cdot 0)$	
Only a little of it	0	•	
Not at all	0		(N=60—1 subject did n answer)
How important is the advice the doctor	gave you?		
Not important at all	0		
Not very important	5	(8·2)	
Quite important	24	(39.3)	
Very important	32	$(52\cdot5)$	(N=61)
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If you followed all of the doctor's advice	ce and instr		likely are you to get well
If you followed all of the doctor's advice stay well?	ce and instr		likely are you to get well
If you followed all of the doctor's advice stay well? Very likely		uctions, how	v likely are you to get well
If you followed all of the doctor's advice stay well?	48	uctions, how	v likely are you to get well
If you followed all of the doctor's advice stay well? Very likely Quite likely	48 13	uctions, how	v likely are you to get well (N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely	48 13 0 0	(78·7) (21·3)	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all	48 13 0 0 rou to do ab	(78·7) (21·3)	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y	48 13 0 0	(78·7) (21·3)	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely	48 13 0 0 rou to do ab	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ Footi the adv $(85 \cdot 2)$	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it	48 13 0 0 rou to do ab 52 9	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ Footi the adv $(85 \cdot 2)$	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it Follow some of it	48 13 0 0 70u to do ab 52 9	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ Footi the adv $(85 \cdot 2)$	(N=61)
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it Follow some of it Follow a little of it Not follow any of it How important is it to do what the doc	48 13 0 0 vou to do ab 52 9 0 0	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ bout the adv $(85 \cdot 2)$ $(14 \cdot 2)$	(N=61) ice and instructions he gives
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it Follow some of it Follow a little of it Not follow any of it	48 13 0 0 0 rou to do ab 52 9 0 0 0 tor expects'	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ Soout the adv $(85 \cdot 2)$ $(14 \cdot 2)$	(N=61) ice and instructions he gives
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it Follow some of it Follow a little of it Not follow any of it How important is it to do what the doc	48 13 0 0 vou to do ab 52 9 0 0 0 tor expects'	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ bout the adv $(85 \cdot 2)$ $(14 \cdot 2)$	(N=61) ice and instructions he gives
If you followed all of the doctor's advice stay well? Very likely Quite likely Not very likely Not likely at all What do you think the doctor expects y Follow it completely Follow most of it Follow some of it Follow a little of it Not follow any of it How important is it to do what the doc Not important at all	48 13 0 0 0 rou to do ab 52 9 0 0 0 tor expects'	uctions, how $(78 \cdot 7)$ $(21 \cdot 3)$ Soout the adv $(85 \cdot 2)$ $(14 \cdot 2)$	(N=61) ice and instructions he gives

Not important at all 0		
Not very important 0		
Quite important 3	(4.9)	
Very important 58	(95·1)	(N=61)
What does your husband/wife/nearest relative thin	k you shou	ld do about the advice and inst
tions the doctor gives you?		
You should follow it 57	(93.4)	
You should not bother to follow it 0		
Does not mind which you do 4	(6.6)	(N=61)
What do your friends think you should do about th	e advice an	d instructions the doctor gives y
You should follow it 52		-
You should not follow it 0	` ,	
Do not mind which you do 9	(14.8)	(N=61)
How important do you think that people in general	consider do	ctor's advice and instructions to
Not important at all 0		
	$(13 \cdot 1)$	
Not very important 8		
	(42.6)	
Not very important 8 Quite important 26 Very important 27	(42·6) (44·3)	(N=61)
Not very important 8 Quite important 26	$(42 \cdot 6)$ $(44 \cdot 3)$ and instructi	(N=61)
Not very important 8 Quite important 26 Very important 27 How well do people in general follow the advice a	(42·6) (44·3) and instructi (21·3)	(N=61)
Not very important 8 Quite important 26 Very important 27 How well do people in general follow the advice a Follow it completely 13	(42·6) (44·3) nd instructi (21·3) (37·7)	(N=61)
Not very important Quite important Very important 26 Very important 27 How well do people in general follow the advice a Follow it completely Follow most of it 23	(42·6) (44·3) nd instructi (21·3) (37·7)	(N=61)

consider it important to do what the doctor expected. They did not report the presence of active opposition to compliance from friends or relatives.

When referring, however, to 'people-in-general,' a situation in which the pressures to give a socially desirable response can be assumed to be somewhat less, the patients did recognise the existence of a significant degree of non-compliance, a result more consistent with the available data. Most advice was rated as easy rather than hard to follow, but some difficulty was reported.

Chi-square analyses were carried out to investigate relationships between the ratings obtained. The results of these are summarised below.

In the case of the patients' own advice reported compliance was not related to rated importance. In the case of 'people-in general,' however, there was a significant relationship, with advice rated as very important being more likely to be followed completely (p< \cdot 001). Compliance was not related to the perceived efficacy of the advice. Complete compliance was considered most likely where advice was rated 'very easy' to follow (p< \cdot 001).

Difficulty in following advice was not related to the number of pieces of advice received. Thus patients did not consider the doctors' advice more difficult to follow when they received more than one category of advice compared with when they received only one category of advice. Compliance was not related to the number of pieces of advice to follow.

Although a trend in the expected direction was obtained for the relationship between compliance and comprehension, with higher compliance related to higher comprehension, the association was not quite significant ($p < \cdot 10$). Compliance was however significantly related to composite satisfaction score ($p < \cdot 05$) complete compliance being associated with complete satisfaction.

Eleven patients could not suggest any specific problems leading to non-compliance, but the reasons given by the other 50 patients are presented in categorised form in table 6 from which it can be seen that problems of finance, lack of "willpower", the existence of counterpropaganda, and memory were the most frequently cited.

TABLE 6
Incidence of problems cited as causes of non-compliance

	Number of
	mentions
Financial problems (e.g. loss of earnings; cost of prescription or diet) "Willpower" problems (e.g. unable to	18
change smoking, drinking or eating habits) Reported contradictory advice from	14
friends or relatives (N.B. When men- tioning this counterpropaganda patients	
always stressed that they themselves did not follow it) Memory problems (e.g. forgetting to take	12
medicines or tablets) Unpleasant side-effects or other unpleasant	11
consequences of medication Facilities at work (e.g. canteen, insuffi-	6
cient privacy) inadequate	4
Comprehension problems The doctor's manner being " off putting "	3 2

Discussion

This survey has indicated that a high level of patient satisfaction, both with communication and with non-communication aspects of a consultation, can be achieved in general practice. On the basis of the answers to a general question 82 per cent of this sample were quite satisfied with what they were told by the doctor. This compares very favourably with the results of similar studies in hospital. Further research to establish the generality of this high satisfaction level in general practice would be useful, and should such high satisfaction not be universal, techniques to increase it could be applied.

General practice may differ in some important ways from hospital, but equally importantly the two situations are similar in that information is passed from doctor to patient in both. Patient satisfaction, it is argued, will depend to a significant extent upon the way in which this information is presented. This study has shown a significant relationship between patients' satisfaction and their ratings of comprehension of the information received, a finding also obtained by Ley et al. (1972) in a study of satisfaction among surgical patients in hospital.

The relationship between satisfaction and compliance observed in the present study is supported by a finding obtained by Francis *et al.* (1969) in a study of initial visits to an American paediatric outpatient clinic. These authors also obtained a significant positive relationship between compliance and satisfaction levels. They do point out, however, that a large number of highly satisfied patients failed to follow the doctors' recommendations, while some patients highly dissatisfied with their visit followed all of the doctors' instructions.

It is also of interest to note the discrepancy, in this study, between ratings of personal compliance and rated compliance of other people. This suggests that patients are un-

reliable reporters of the degree to which they follow doctors' instructions. Patient reports of compliance might therefore be misleading to general practitioners. In general the relationship between ratings of satisfaction, comprehension, and compliance suggest that these aspects of doctor-patient communications are closely linked.

Patients views about doctors' advice suggest that experimental studies applying established psychological principles can justifiably be carried out in order to make advice easier to understand and remember, to ensure that patients regard advice as important and to identify ways to make "difficult" advice easier to follow.

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REFERENCES

Cartwright, A. (1967). Patients and their Doctors. A study of General Practice. London: Routledge & Kegan Paul.

Francis, V., Korsch, B. M. & Morris, M. J. (1969). New England Journal of Medicine, 280, 535.

Harris Poll (1972). Cited in The Journal of Royal College of General Practitioners, 22, 810.

Ley, P. (1972). Journal of the Institute of Health Education, 10, 23.

Ley, P., Bradshaw, P. W. & Kincey, J. A. (1971). *Patients' compliance with medical advice*. Unit for Research into Doctor-Patient Communication. First Annual Report.

Ley, P., Bradshaw, P. W., Kincey, J. A. & Atherton (1973). Increasing patients' satisfaction with communications. Submitted for publication.

Ley, P., Bradshaw, P. W., Kincey, J. A. & Swinson, R. P. (1972). A study of satisfaction among hospital surgical patients. Unpublished manuscript.

Ley, P. & Spelman, M. S. (1967). Communicating with the patient. London: Staples Press.

Sidel, V. W., Jefferys, M. & Mansfield, P. J. (1972). *Journal of the Royal College of General Practitioners*, **22**, Supplement No. 3.

Varlaam, A., Dragoumis, M. & Jefferys, M. (1972). Journal of the Royal College of General Practitioners 22, 811-816.

APPENDIX 1

The composite satisfaction score was calculated as follows: For each category of information about which a patient wished to know something he was allocated a score according to these criteria:

Wished to know and not told at all =0
Wished to know and definitely not told enough =1
Wished to know and told almost enough =2
Wished to know and told enough =3

Composite satisfaction (CS) was then calculated as:

The sum of satisfaction scores on all categories for which information was required

C.S. = Number of categories for which information was required

Example
diagnosis (3) + aetiology (2) + hospital appointment (not required) + treatment (3) + prognosis (0)

C.S. = C.S. = C.S.

4