Improving doctor-patient communication in general practice

P. LEY, B.A., Ph.D., F.B.Ps.S., Dip.Psychol.

M. A. WHITWORTH, B.Sc., B.Phil.

C. E. SKILBECK, B.Sc., B.Phil.

R. WOODWARD, B.Sc.

Sub-Department of Clinical Psychology, University of Liverpool

R. J. F. H. PINSENT, O.B.E., M.A., M.D., F.R.C.G.P.

L. A. PIKE, F.R.C.G.P., D.R.C.O.G.

M. E. CLARKSON, M.B., Ch.B.

P. B. CLARK, M.R.C.G.P., D.R.C.O.G.

General practitioners, Birmingham; The Birchfield Study Practice, Royal College of General Practitioners

Two of the main problems in doctor-patient communications are:

- (1) That patients are often dissatisfied with the amount of information that they receive from doctors and feel that they have not been adequately informed about their illness.
 - (2) That patients frequently fail to follow advice given to them.

Detailed reviews of evidence on these topics have been provided by Ley and Spelman (1967), Ley (1972a), and Ley (1976a). The first problem is more pronounced in hospitals, where up to 65 per cent of patients have been found to be dissatisfied. Evidence from general-practice studies reveals much higher levels of satisfaction by patients with communications (Varlaam et al., 1972; Kincey et al., 1975; Kaim-Caudle and Marsh, 1975).

For the second problem Ley (1972b) provided a summary table which suggested that about 40-50 per cent of patients do not follow advice adequately. Other reviews came to similar conclusions (Stewart and Cluff, 1972; Mitchell, 1974).

It is probable that patients are more compliant in general practice. Kincey et al., (1975) found that 65 per cent of patients claimed to follow advice completely. Higher levels of patient compliance with advice might be expected if it is true that patients in general practice are more satisfied, as appears from the research of Korsch and her colleagues (Korsch et al., 1968; Francis et al., 1969; Korsch et al., 1971), that there is a strong relationship between patients' satisfaction with the consultation and their following the advice they are given. Kincey et al. (1975) also found some evidence of this relationship.

Much research has now shown that the dissatisfaction patients feel with communications and their subsequent failure to follow advice are in part due to their failure to understand and remember what they are told (Ley, 1976b).

Methods of increasing patients' understanding and memory have been described by Ley (1972c); Ley et al. (1972), Ley et al. (1973), Bradshaw et al. (1975); and Ley et al. (1976a). A summary of these recommendations has been prepared in the form of suggestions for improving doctor-patient communications by Ley et al. (1976b).

Δim

The main aim of our investigation was to assess the effectiveness of these suggestions by Ley et al. in improving communications in general practice.

Method

The main criteria for improvement were: greater recall by patients of the information presented to them, greater reported comprehension of what was said, and greater reported compliance with medical advice. Subsidiary aims were to assess the relationships between reported satisfaction with communications, reported comprehension and reported compliance with advice.

The staff of the Birchfield Road practice agreed to participate in the study, which lasted from February to July 1975. The experiment was conducted in two stages. In the first stage base-line data were collected by a questionnaire sent by post. This questionnaire was sent to patients at about the date when it was expected that they would have recovered from their illness. The questionnaire contained sections on the patient's memory of what he had been told, comprehension, satisfaction with communications and compliance with advice (Appendix).

APPENDIX
SUMMARY OF ANSWERS TO QUESTIONS

	receive about what was wrong with				Per cent giving indicated answer			nswer
C 1.			Phase 1		ough	Almos enough 9·8		None 4·9
			Phase 2	75	.3	7.9	9.9	6.9
C2.	How much information did you receive about the cause of your disease or problem?		Phase 1	18	3 · 2	10 · 1	10 · 1	61.6
			Phase 2	22	2.6	8.5	9.4	59 · 4
C3.	How much information did you receive about what the treatment for your illness or problem would be?		Phase 1	10	0.6	11.2	11.8	66.8
			Phase 2	10	.5	7.4	8.4	72.6
C4.	How much information did you receive about how long it would take you to recover from the illness/problem?		Phase 1	25	· 2	8.2	12.6	54 · 1
			Phase 2	26	5.9	7.5	7.5	58·1
	Questions on satisfaction			A	lll of it	Most of it	A little of it	None of it
C5.	How much did you understand of what the doctor said was wrong with you?		Phase 1		4	9	17	70
			Phase 2		5	5	24	66
C6.	How much did you understand of what the doctor said caused your disease/problem?		Phase 1		15	8	20	57
			Phase 2		13	9	18	60
C8.	How much did you understand of what the doctor told you about the time needed to get you better?		Phase 1		15	3	17	65
			Phase 2		9	1	15	65
	Compliance question		Comp succe	letely essful		uirly cessful	Not too successful	Not really successful at all
B2b.	advice, how successful	hase 1	8		2	9	42	41
		hase 2	9		1	1	44	36

722 P. Ley et al.

		Per cent of patien	its answering Yes
		Phase 1	Phase 2
1b.	If you had tablets or medicine to take, did you:		
	(1) Take the full course of treatment?	<i>78 · 4</i>	<i>77 · 3</i>
	(2) Stop taking it when you felt better?	<i>17</i> · <i>2</i>	<i>18</i> · <i>7</i>
	(3) Stop taking it because you did not		
	think it was doing you any good?	4.3	4.0

Patients recall of what they were told was assessed objectively by comparing the patient's account of what the doctor had said with a record made by the doctor at the time of the consultation. In the second, or experimental, phase of the study, which started in mid-June, the procedure was identical except that the doctors read the suggestions prepared by Ley et al. (1976b), and tried to put them into operation. In the first phase 51 per cent of questionnaires were returned, and in the second phase 46 per cent. This difference was not significant (chi-square=1.35).

Suggestions for improving doctor/patient communication

The suggestions made by Ley et al. (1976b) were:

- (1) Give instructions and advice early in the interview.
- (2) Stress the importance of the instructions and advice you give,
- (3) Use short words and short sentences,
- (4) Arrange the information given into clear categories,
- (5) Repeat advice,
- (6) Give specific, detailed, concrete advice rather than general recommendations.

They were contained in a brief booklet which summarised the evidence for each.

The attitude of the general practitioners involved can probably be fairly described as tolerantly sceptical of the chances of success. Indeed, there was some anxiety that following the suggestions advocated might significantly impair the effectiveness of the communication.

The sample

The sample of patients consisted of every patient who attended with a new illness or new episode of an old illness. Patients were divided into children (under 16 years of age), adults (17-64 years of age), and the elderly (65 years of age). Table 1 shows the number of patients in each category in each phase of the investigation.

TABLE 1

Number of patients in the different categories in the base-line and experimental phases

Type of patient	Base-line phase	Experimental phase
Child Adult Elderly	54 77 26	35 55 11
All	157	101

Results

(1) Memory

Patients were given scores for their recall which were the percentage of statements made to them that were recalled by them. Analysis of variance showed that patients in the experimental phase recalled significantly more than patients in the base-line phase (p<0.001; table 2).

TABLE 2
Mean percentage recall of information by patients in the base-line and experimental period

	Mean per cent recalled			
Doctor	Base-line phase	Experimental phase		
A	52	61		
В	56	70		
C	57	73		
D	59	80		
Type of patient				
Child	62	73		
Adult	58	70		
Elderly	42	64		

Differences in improvement in recall between different groups of doctors and patients were not significant, but elderly patients recalled significantly less than other groups (p<0.05).

The way in which the data were collected allowed comparisons of memory for different types of medical statement. We found that instructions and advice were significantly less often recalled than other statements. Patients remembered 58 per cent of diagnostic statements, 44 per cent of instructions and advice, and 56 per cent of other statements (p < 0.01).

(2) Reported comprehension, reported satisfaction with communications, and reported compliance

There were no differences between stages in mean reported, comprehension, satisfaction, and compliance. Detailed results for all the questions on these topics are given in the appendix. Patients reported high levels of comprehension, satisfaction, and compliance.

(3) Relationships between comprehension, reported satisfaction, and compliance

A correlational analysis of these variables revealed significant relationships in every case. In both phases high comprehension was associated with high satisfaction and high compliance, and high satisfaction with high compliance. The correlation coefficients and their significance levels are shown in table 3.

TABLE 3
RELATIONSHIPS BETWEEN REPORTED COMPREHENSION, SATISFACTION, AND COMPLIANCE

	Correlation coefficient			
Relationship	Base-line phase	Experimental phase		
Comprehension and				
(a) satisfaction	0.687**	0.640**		
(b) compliance	0.310**	0.520**		
Satisfaction and compliance	0 · 228*	0.670***		

^{*} Denotes statistical significance P<0.05

Discussion

This investigation has shown that what patients remember of what they are told by their doctors can be greatly improved if the doctors try to follow a set of suggestions for improving communications.

^{**} Denotes statistical significance P<0.01

^{***} Denotes statistical significance P<0.001

724 P. LEY et al.

Unfortunately, no improvement was observed in patients' comprehension, satisfaction, and reported compliance. This is probably partly because in all of these aspects initial levels were very high.

However, it was possible to demonstrate strong correlational relationships between these variables. These were consistent with the hypothesis that patients' satisfaction and compliance were dependent on their comprehension of what they were told, and that satisfied patients are more likely to follow advice.

It is particularly interesting that even with skilful, experienced general practitioners, some worthwhile gains can be achieved, especially in view of their initial scepticism about the prospects of success. We expect even greater gains would be obtained by less experienced practitioners, but this hypothesis remains to be tested.

As the results stand they offer further evidence to support the suggestions of Ley and his co-workers that significant improvements in doctor-patient communication can be achieved by using techniques for increasing understanding and memory.

REFERENCES

Bradshaw, P. W., Ley, P., Kincey, J. A. & Bradshaw, J. (1975). British Journal of Social and Clinical Psychology, 14, 55-62.

Francis, V., Korsch, B. M. & Morris, M. J. (1969). New England Journal of Medicine, 280, 535-540.

Kaim-Caudle, P. R. & Marsh, G. N. (1975). British Medical Journal, 1, 262-264.

Kincey, J., Bradshaw, P. & Ley, P. (1975). Journal of the Royal College of General Practitioners, 25, 558-566.

Korsch, B., Gozzi, E. & Francis, V. (1968). Pediatrics, 42, 855-871.

Korsch, B. M., Freemon, B. & Negrete, V. F. (1971). American Journal of Diseases of Children, 121, 110-114

Ley, P. (1972a). Bulletin of the British Psychological Society, 25, 115-120.

Ley, P. (1972a). Journal of the Institute of Health Education, 10, 23-29.

Ley, P. (1972c). Journal of Health and Social Behaviour, 13, 311-317.

Ley, P. (1976a). In S. J. Rachman (Ed.) Advances in Medical Psychology, Oxford: Pergamon Press.

Ley, P. et al. (1976b). In Communications in medicine. London: Oxford University Press for the Nuffield Provincial Hospitals Trust.

Ley, P., Goldman, M., Bradshaw, P. W., Kincey, J. A. & Walker, C. M. (1972). Journal of the Institute of Health Education, 10, 47-55.

Ley. P., Bradshaw, P. W., Eaves, D. & Walker, C. M. (1973). Psychological Medicine, 3, 217-220.

Ley, P., Jain, V. K. & Skilbeck, C. E. (1976a). A method for decreasing medication errors made by patients. (In press).

Ley, P., Skilbeck, C. É. & Whitworth, M. A. (1976b). Some suggestions for improving doctor-patient communication. (In press).

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

Mitchell, J. H. (1974). Health Education Monographs, 2, 75.

Stewart, R. B., & Cluff, L. E. (1972). Clinical Pharmacology and Therapeutics, 13, 463-468.

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

HYPNOTICS

If cold, discomfort or noise, disturb a patient's sleep then he does not appear to come to the doctor for treatment; most patients who present have a psychiatric or psychological cause for their insomnia.

REFERENCE