

Do we tell our coronary patients enough?

Carol P. Trelawny-Ross, M.Sc.

Stephen C. Jordan, F.R.C.P.

From the Department of Mental Health, University of Bristol and the Cardiac Department of the Bristol Royal Infirmary

SUMMARY

Thirty two men and their wives discussed their experiences of the admission to hospital and subsequent rehabilitation following a threatened or confirmed myocardial infarction. Over all, the level of information and understanding about their condition was poor. Patients would have liked to have had more specific advice about rehabilitation and to have been told more about their condition. Thirteen discharging doctors indicated on a short questionnaire what advice they had given to their patients. This exercise confirmed the suspicion that while patients' memory might have been poor, they had not been given extensive information before they left hospital. In particular, although all of the men were married and under 65 years of age, only 38% of the doctors said that they had discussed sexual activity and of the whole sample (31 men) only 25% of the men recalled having been advised on this subject. Patients and their wives felt that they would have worried less if they had been better informed. Persistent symptoms were related more to worry and depression than to the extent of myocardial damage.

INTRODUCTION

Patients have complained to us that they have not been told enough about their condition or given much useful advice about rehabilitation. Others have reported similar findings (1, 2). We felt that it would be useful to investigate the complaint of being poorly informed and to look at the possible consequences.

It has been shown that specific information and advice increases patients' understanding of their condition (3), can increase compliance (4), increases satisfaction with their treatment (5), reduces anxiety and depression (6), and does not increase side effects (7).

Several reasons have been suggested for patients' complaints of being inadequately informed or advised. Doctors may volunteer very little information (8). Information offered may be poorly understood and consequently is more likely to be forgotten or remembered in a distorted version. Patients are frequently reluctant to ask questions of busy doctors, and doctors may be reluctant to encourage them to do so (2). Even when given an opportunity to ask questions, it may be difficult for patients to anticipate what they are going to want to know once they have been discharged (9, 10) and even given an 'ideal' consultation, memory unaided by recall cues may be poor for many patients, especially if they are anxious or depressed. Above all, patients are often so worried about their immediate condition that they do not readily assimilate advice offered.

In this study we have attempted to discover what doctors were advising patients and what patients remembered. We then considered the implications of these findings for the patients in the problems they reported and their outcome at six months.

PATIENTS AND METHOD

Thirty one men who were admitted to a teaching hospital with a suspected myocardial infarction were each seen on four occasions in the course of six months. The men were all married and under sixty five years of age (range 32-64). The patients were all admitted as emergencies under consultant physicians to a coronary care unit, 80% of them spent up to three days there and between 6 and 19 days in a general medical ward and therefore could be considered relatively uncomplicated. The remaining 20% spent longer periods in hospital because of complications or persisting pain.

The severity of their heart attack was estimated by one of us (SCJ) using a modified Norris index (11, 12) (position of the infarct, systolic blood pressure on admission, radiology, previous infarcts) and in addition maximum enzyme levels and occurrences of arrhythmias. The maximum possible score was 20, the range of actual scores was 1 to 15.

The following information was sought at the interviews:

1. How much specific information or advice the patients had been given about smoking, exercise, diet, sexual activity, and driving.

2. Their general level of informedness and understanding was assessed on a 5 point scale. One was scored if the patient reported having discussed his condition and rehabilitation with a doctor or senior member of nursing staff and was able to show that he had a good understanding of both his present condition and his rehabilitation plans and expectations. Five was scored when the patient reported virtually no contact with medical or nursing staff providing information or advice, supported by a very poor understanding of his diagnosis or condition.

3. Patients were asked about the problems and worries they had experienced so far. A 'check list' based on Brown's survey of doctors treating patients with heart disease (13) was used (see Table 4). Patients were then asked if they had had any other problems or worries not mentioned on the list.

4. Outcome was assessed in terms of return to work, exercise, leisure activity, and return to normal sexual activity.

5. Compliance with advice to stop smoking was assessed.

6. Anxiety and depression were assessed using Goldberg's clinical interview schedule (14).

Ratings for 2 and 4 above, and a number of other potential contributors to outcome, e.g. somatic symptoms, weight, and General Practitioner support were

Correspondence to: Mrs C. P. Trelawny-Ross, Department of Mental Health, University of Bristol, 41 St Michael's Hill, Bristol BS2 8DZ.

developed from Goldberg's general rules for scoring.

For this part of the study *t* tests, Pearson product moment correlational and multiple regression analyses were used to assess significance. Details are being reported elsewhere (15).

Rating	<i>n</i>	%
1 (excellent)	6	19
2	6	19
3	11	36
4	7	23
5 (v. poor)	1	3
Totals	31	100

Rating	<i>n</i>	%
1 (excellent)	11	36
2	4	13
3	7	23
4	4	13
5 (v. poor)	5	16
Totals	31	100

RESULTS

The levels of 'informedness' are shown in Tables 1 and 3. Doctors' contributions are shown in Table 2 and may be inferred from Table 2, as part of the 'support' described by the patients was their doctors' willingness to explain and advise. The patients' 'worries and problems' are shown in Table 4. No patients considered themselves to have been without problems of any kind. It can be seen that only 'money problems' are likely to be completely unrelated to levels of information and advice. Patients' and spouses' smoking patterns (Table 5) also reflect information and advice given. The correlations among variables associated with information, advice and outcome at 6 months are shown in Tables 7 and 8.

DISCUSSION

The majority of the patients were not well informed and many had a poor understanding of their condition (Table 1), a few were mistaken in their beliefs about their diagnosis. Some had excellent support from their General Practitioners (Table 2) who may have provided the information and advice that the patients needed. On specific items of advice patients' memory was mixed but the recall rate among those whose doctors reported advising them was considerably better than for the whole sample (Table 3). Of particular note is the low level of advising and memory of advice about sexual activity.

All smoking patients were advised to stop, half of them reported having done so ($t=4.939$ $p<.001$); wives on the other hand did not change their habits (Table 5).

Lack of information and advice was seen by 18 (56%) of the patients to have contributed to their 'worries and problems' (Table 4).

	Recorded by doctor		Patients' recall (<i>n</i> =13)		All patients' recall (<i>n</i> =31)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Smoking	11	85	9	82	17	54
Diet	8	62	6	75	12	39
Exercise	13	100	7	54	14	45
Sexual activity	5	38	2	15	8	25
Return to work	13	100	8	62	NA	
Driving the car	NA		NA		10	32

	<i>n</i>	%
Depression	20	63
Anxiety	19	59
Not knowing what can/can't do	18	56
Worry—long term expectations	16	50
Difficulty changing habits: Smoking	10	31
Diet	4	18
Drinking	3	9
Conflicting advice from doctors	13	41
Feeling useless	13	41
Restrictive wife	13	41
Being overprotected (family and friends)	13	41
'Too ill' to consider returning to work	10	31
Money problems	8	21
Frequent visits to G.P. or Out-patients	8	21
Problems in resuming sexual activity	7 (of 20)	35
Difficulty expressing worries to doctors	5	16

Over 70% of the patients left hospital on prescribed medication and most of them continued with the same range of drugs throughout the six months (Table 6). Many of the men relied on their wives to dole out their pills. Others had 'had a go' to see how they managed without them. One man used his imagination to decide when and how many of his diuretics to take according to whether he was planning to have a light or a heavy drinking lunch. Several of the men who had been given glyceryl trinitrate to take as required said they rarely used it as the chest pain was preferable to the headaches they suffered when they used this drug. Few reported being given specific advice about the use of this or any other drug with the exception of warfarin. Many of the men were concerned about the side effects of their drugs. (It was not possible to gather data about the extent of compliance for the whole sample.)

OUTCOME AT SIX MONTHS

Only just over half of the men could be rated as having returned to normal or optimal levels of activity by six months (Table 7). Several variables were found to have significant correlations with one or more aspects of outcome (Table 8).

In addition to the variables set out in Table 8, having 'symptoms' correlated significantly with how ill the patient rated himself $r=0.785$ (0.001), depression $r=0.693$ ($p<0.001$), with his smoking habits $r=0.433$ ($p<0.001$),

Table 5
Patient and spouse smoking habits (number of cigarettes daily)

Patient	On admission		10 days		2 months		6 months	
	n	%	n	%	n	%	n	%
0	9	29	27	87	23	77	20	65
1-9	8	26	3	9	4	14	7	24
10-40+	14	46	1	3	3	10	4	12
Totals	31 (100)		31 (100)		30 (100)		31 (100)	

Spouse	On admission		10 days		2 months		6 months	
	n	%	n	%	n	%	n	%
0	18	58	22	71	20	65	18	58
1-9	4	13	3	10	5	17	4	13
10-40+	9	29	6	20	6	20	9	29
Totals	31 (100)		31 (100)		31 (100)		31 (100)	

Patients' smoking habits on admission and at 6 months $t=4.939$ $p<0.001$

Table 6
Medication after discharge (number of prescribed drugs)

	10 days		2 months		6 months	
	n	%	n	%	n	%
None	9	29	7	23	7	23
Occasional (GTN)	0	0	4	13	1	3
1 or 2 tablets daily	12	39	9	29	16	53
3 or more	10	32	11	36	6	20
Totals	31 (100)		31 (100)		30 (100)	

Table 7
Activity at 6 months

	Work		Leisure Activity		Exercise		Sexual Activity	
	n	%	n	%	n	%	n	%
Return to:								
Normal	16	52	17	55	14	45	16	57*
Moderate	1	3	7	23	7	23	0	0
Poor	10	32	7	23	10	32	12	45
Retired	4	13	NA		NA		NA	
Totals	31 (100)		31 (100)		31 (100)		28 (100)	

* Normal=no sex for some. NA=Not applicable

Table 8
Correlation (Pearson product moment, 'r') with satisfactory outcome

	Work	Leisure activity	Exercise	Sexual activity
Few symptoms	0.593 ***	0.795 ***	0.826 ***	0.634 ***
Good GP support	0.580 ***	0.436 *	0.408 *	0.183 *
Social class	0.542 *	0.219 NS	0.023 NS	0.368 *
Not smoking	0.358 *	0.533 **	0.433 *	0.358 *
Not overweight	0.377 *	0.217 NS	0.491 **	0.005 NS
Not depressed	0.309 NS	0.646 ***	0.641 ***	0.283 NS
Cardiac damage	0.081 NS	0.341 NS	0.122 NS	0.331 NS

Significance levels *** $p<0.001$ ** $p<.01$ * $p<.05$

(continued on page 119)

Assessment of patients' opinions (continued from page 105)

Advice unclear:

Normal life is contradicted by Do's and Don'ts.
How long shall I feel generally unwell?
At what times can patients do special things?
How far to go without overtaxing the heart?

Advice omitted:

Explaining angina and what brings it on.
What is a coronary bypass and when is it done?
What caused my heart attack?
Was my heart attack mild or serious?
Overcoming initial fear of small physical tasks.
Loss of confidence experienced on leaving the ward.
Indication of mental adjustment needed. This was the most difficult part of recovery.
Side effects of drugs prescribed.

Practical comments on hospital stay:

Call-bell and light control difficult to reach.
Food uninteresting and full of fat.
Would like BBC World Service on hospital radio at night.
Night nurses to chat to sleepless patients.

Personal experiences mentioned:

I found angina frightening.
It took me longer than advised to feel well enough to start work.
No special diet in hospital but told of one on discharge.
Needed more reassurance about twinges of anxiety pain and indigestion pain.
Fear of another attack is always present so how can one get back to normal?
Would feel more secure if given another hospital check-up at 6 months.
There were comments of praise and/or thanks for the help received from 24 patients.

DISCUSSION

It is encouraging that 98% of patients found the sheet helpful and that 97% felt that the details had been adequately explained to them. The rush and pressures of the lives of house physicians and senior house officers is not conducive to careful prolonged discussion.

Topics such as angina, what to do if further chest pains and the feeling of insecurity on homegoing plainly need to be included in advice sheets in future. The items causing worry were those where worry for a while is

inevitable: the increased risk of further infarction and sudden death cannot be explained away and the patient has either to practice denial or develop a philosophy which includes a degree of acceptance of death. In units such as ours, with five consultant physicians responsible for patients in the ward, it is dangerously confusing for nurses and patients if patients are advised and treated too differently. It is likely that a ward sister with extensive experience of coronary care is the ideal person to give detailed advice.

Staff responsible for the care of patients with myocardial infarction should have a rehabilitation policy. We would suggest that there are three phases for consideration.

Firstly, discussion and guidelines given to patient and family before discharge in one study, 47% of patients with their relatives failed to be taught about their illness (4). The GP should be told exactly what advice has been given.

Secondly, patient and family should be encouraged to attend a group discussion 3-6 weeks after infarction. This can reduce feelings of isolation in the patient, help spouses and give feedback to hospital staff (5, 6).

Thirdly, for selected patients with difficulties in returning to normal, graded physical training and teaching in stress management and relaxation should be available (7).

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Do we tell our coronary patients enough? (continued from page 108)

whether he was working on admission $r=0.425$ ($p<0.01$), being overweight $r=0.380$ ($p<0.05$), and with a lack of G.P. support $r=0.356$ ($p<0.05$). The correlation between symptoms and cardiac damage was not significant $r=0.103$ (NS).

CONCLUSIONS

The findings of this study support the work of others (16, 17, 18), that survival and return to work are not adequate measures of successful outcome, and that there is considerable distress among the survivors of myocardial infarction which is associated with social and psychological aspects of the illness. Symptoms which patients consider to be an indication of their medical condition are associated with social and psychological factors rather than measures of cardiac damage (Table 8).

The patients in this study were less well informed and had less understanding of their condition than they would have liked. A better understanding and more information and advice could lead to improvements in both the psychological and the somatic symptoms experienced. Perhaps not surprisingly patients who had good support from their family doctor and those who were not smoking had better outcomes than those who were poorly supported and continued to smoke.

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