Patients’ evaluation of a post-myocardial infarction teaching programme administered by nurses

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Summary

Two-hundred and twenty-eight patients admitted to a District General Hospital Coronary Care Unit with a confirmed myocardial infarction were given a detailed information session by nurses. Information included a detailed programme of exercise during convalescence and attitudes toward diet, smoking and sexual intercourse. Patients were asked to assess the value of these sessions using questionnaires administered during convalescence.

Between 76% and 91% of patients considered the presentation necessary and there was a significant improvement in their understanding of what an infarction was. More than 80% of patients found a booklet entitled Recovering from your Heart Attack particularly helpful. The great majority of patients believed that more health education should be given at school and that members of the general public should be taught the techniques of cardio-pulmonary resuscitation.

The teaching programme appears to have reduced the admitted smoking habits of patients. On admission 56% of patients were smokers. This fell to 7% at the end of 3 weeks, but had risen to 17% at 6 months.

KEY WORDS: smoking, exercise.

Introduction

Considerable interest has focused on the prevention of recurrent myocardial infarction by drugs, but little attention has been given to the re-education of patients in a healthier way of life.

A programme directed at the secondary prevention of myocardial infarction was developed by nurses at the Royal Gwent Hospital, Newport, in response to patients’ demand for more information about their condition and treatment.

The nursing staff were trained by the ward sister who initially developed the programme while undertaking a Joint Board of Clinical Studies Coronary Care Course in the London Chest Hospital. Each nurse was subsequently supervised during her initial sessions with patients. Particular attention was given to smoking habits, diet and exercise. An exercise programme was planned in conjunction with physicians in the hospital following the work of Fox, Naughton and Gorman (1972). In this study we have reviewed the patients’ evaluation of such a programme.

Methods

During the year between August 1981 and July 1982, 228 patients admitted to the Coronary Care Unit of the Royal Gwent Hospital, Newport with a myocardial infarction lived for at least 10 days. Patients’ electrocardiograms were monitored throughout their stay on the Unit. Each patient was given an information and teaching session by nurses working on the Unit. The purpose of the equipment was explained on admission and details about myocardial infarction and subsequent rehabilitation were given 8 days after admission. Each session lasted between 15 and 30 min and during this time the pathological basis of a myocardial infarction was explained in simple terms with the aid of diagrams and the important role of such risk factors as smoking, obesity and hypertension examined. Patients were advised to stop smoking and lose weight. In addition, a programme of exercise during the recovery period was planned. This information was supplemented by a small booklet entitled Recovering from your Heart Attack. Patients were encouraged to ask questions. Advice on return to work or change in occupation was not specifically included in the
information session, but social workers were available to provide appropriate help.

During the first 6-month period, 109 people had a teaching session and at the end of the 6 months were sent a simple questionnaire to assess the value of the session as seen by the patient.

During the second-month period, a questionnaire was given to each of 119 patients at the end of the teaching session and a supplementary questionnaire 2 weeks later. The first questionnaire dealt with the attitude of patients to their care on the Coronary Care Unit and the development of a public cardiopulmonary resuscitation programme and the second questionnaire with the benefit derived from the teaching session.

Results

One-hundred and nine patients completed and returned the first questionnaire (Table 1). Only 82% realized that they had received a teaching session from the nursing staff, although there was an appreciable increase in the number who came to understand the nature of a 'heart attack' (from 38% to 64%). Responses to such questions are limited by the wish of patients to give the correct answer and this is seen in 9 of 96 patients who said they were following all advice given and yet continued to smoke. Patients were anxious to obtain information about their disease; 51% wanted more assistance and 47% felt their relatives should also receive advice. The use of the booklet Recovering from your Heart Attack was particularly helpful to 81% of patients. Very similar results were obtained in the second group of patients who received the questionnaire, 3 weeks after infarction and about 14 days after the teaching session, although in general, the value of the session was felt to be greater (Table 1).

This second group of patients also completed a questionnaire about coronary care on a specialist unit (Table 2). The majority (89%) of patients were aware of cardiac monitoring and were reassured by it (88%). However, a significant number (41%) wanted to know more about their treatment while on the unit. Patients know that myocardial infarction kills and this may well explain their attitude to health education (Table 3). Ninety-one percent wanted more preventive education in schools and 86% believed that cardiopulmonary resuscitation techniques should be taught the general public.

Fifty-six percent of patients admitted with a myocardial infarction admitted to being smokers, 3

| Table 1. Patients' assessment of information session. Patients were asked to assess the value of an information session about secondary prevention of myocardial infarction and post-infarction rehabilitation. All 109 patients completed and returned a questionnaire at the end of the first 6 month period (Retrospective) and 118 of 119 patients returned the questionnaire at the end of the second period (Contemporary) |
|---------------------------------|------------------|------------------|
|                                | Retrospective (%) | Contemporary (%) |
| Session considered necessary   | 76               | 91               |
| Understood what happened       |                  |                  |
| (a) Prior to teaching          | 38               | 27               |
| (b) After teaching             | 64               | 78               |
| Understood pictures used during teaching | 50               | 75               |
| Found information helpful during recovery period | 85               | 94               |
| More information wanted        | 51               | 49               |
| Wanted family present          | 47               | 54               |
| Found post-infarction booklet helpful | 81               | 88               |

| Table 2. Patients' assessment of coronary care. One-hundred and eighteen of 119 patients treated on the Coronary Care Unit completed a questionnaire about their attitudes to the Unit while inpatients. Patients spent 2-4 days on the Unit and completed the questionnaire while recovering on a general medical ward on the 8-10th day after their infarction |
|---------------------------------|------------------|
| Preferred their care to be on a specialist unit | 85               |
| Aware of cardiac monitoring     | 89               |
| Reassured by cardiac monitoring | 88               |
| Adequate rest and sleep         | 84               |
| Approved of restricted visiting policy | 89               |
| Required more information about treatment | 41               |
weeks later the level fell to 7%. Of those patients interviewed 2–8 months after their infarction, only 17% admitted to smoking.

Discussion

Patients with heart attacks are anxious to obtain more information about their disease, its treatment and the effect on their future life. They are reassured, rather than distressed, when such information is made available. Explanations about equipment and procedures are welcomed and indeed nine out of 10 were reassured by cardiac monitors and the technical expertise which they represented.

In the Royal Gwent Hospital, the role of the coronary care unit nurses has been extended to provide patients with details of a post-infarction programme of exercise, diet, sexual activity and the need to stop smoking. Such information needs to be supported by visual aids and in particular, simple written instructions. The value that patients put on such information is confirmed by their wish for more health education and even an interest in cardiopulmonary resuscitation. It is impossible to assess objectively the effect of an information programme. Patients appear to have reduced their smoking, but this may only be a short-term effect, as was shown by Nussell et al. (1978) in West Germany.

The need for information has been shown by Rahe, Scalzi and Shine (1975). Almost 40% of the 24 patients (in Los Angeles) were unaware of the relationship between ischaemic heart disease and smoking and also of how much physical exercise they could take following a myocardial infarction. The coronary care unit nurse is particularly suited to the role of providing this information as he or she is well known to the patient and often a bond has been formed during the distressing first few days after the infarct. The programme should include details about the course, treatment, prognosis and risk factors associated with ischaemic heart disease. A graduated increase in physical activity is recommended and psychological and social support should be available (Cay, 1982). Although patient compliance with instructions about smoking (Nussell et al., 1978), diet (Wagner, Ehnsperger and Mehner, 1976) and exercise (Oldridge et al., 1978) is often limited, this may reflect a failure in communication. Written material is appreciated by more of the patients (81%) than the verbal teaching session with visual aids (76%), although both are complementary.

A myocardial infarction is a life-threatening event which also causes significant morbidity. In recent years, considerable interest has focussed on preventing re-infarction by use of such drugs as beta-blockers, but little attention is given to individual patients who clearly want more information about their condition, its treatment and prevention of a recurrence.

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References


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