Rehabilitation after myocardial infarction: the role of the community nurse

This article explores how the education and training of community nurses and the part they play in the provision of primary health care equips them to undertake home or health centre-based myocardial infarction rehabilitation programmes.

PROVISION OF MYOCARDIAL INFARCTION REHABILITATION PROGRAMMES

The provision and content of myocardial infarction rehabilitation programmes within hospital settings varies widely. Some hospitals offer both inpatient and outpatient programmes, whereas others offer inpatient-only programmes, with little or no support following patients’ discharge from hospital.

Most hospital-based post-discharge rehabilitation programmes are offered as a comprehensive package of services for patients, irrespective of whether they require all the components. The programmes usually begin four to six weeks after discharge and some patients may be excluded on the grounds of age or certain medical conditions.

By concentrating on comprehensive packages, the specific needs of individual patients may not be addressed, whereas individualised rehabilitation programmes can be tailored to suit the needs of the recipients and can begin within a week after discharge, a period when motivation to change unhealthy patterns of behaviour is very high.

BENEFITS OF HOME OR HEALTH CENTRE SETTING

Regardless of their age and the severity of the myocardial infarction, all MI patients can benefit from a comprehensive individualised rehabilitation programme in the home or health centre setting.

Research studies have shown that MI patients stated they did not receive or had forgotten rehabilitation advice given in hospital (Salisbury 1994, Scalzi et al 1980, Rahe et al 1975).

Contact with families during home visits offers the opportunity to give primary and secondary preventive health advice at a time when patients and their families are likely to be most receptive.

In terms of MI rehabilitation the first four weeks after discharge constitute a ‘critical window’ (Salisbury 1994) when the patient and immediate family members become aware of changes necessary in lifestyle and when motivation to change is greatest.

THE ROLE OF THE COMMUNITY NURSE

Working in partnership, and empowering people to take control of their lives and to make decisions which are right for them are central to the practice of community nursing.

Strategies used by community nurses in the promotion of positive health include the use of a broad educational framework which helps patients to clarify their values in relation to health and health behaviours.

Effective rehabilitation programmes need to be holistic and address the physical, psychological and social needs of patients with the aim of empowering them to take control of the rehabilitative process by using their lay knowledge and social networks.

Therapeutic interventions aimed at reducing risk factors need to be delivered by skilled communicators who recognise the importance of feelings, beliefs, values and structural constraints that influence behaviour.

Very few community nursing studies have been undertaken in the field of MI rehabilitation. Salisbury (1994) evaluated the effectiveness of individualised rehabilitation programmes by health visitors in the home setting. The study revealed that a programme of information, support, education, counselling and relaxation carried out by health visitors in the homes of MI patients was more beneficial than the usual care regime offered.

Patients in the experimental group reported significant behavioural change in relation to dietary intake and the programmes were judged by the patients to be valuable and beneficial in resolving problems, increasing knowledge about MI and increasing motivation and self esteem. More patients in the experimental group increased physical activity, stopped smoking and spent fewer days in hospital when readmitted for heart problems. The financial savings from fewer days spent in hospital by patients undergoing the rehabilitation programmes were quite considerable.
EFFECTS OF MI ON PATIENTS' LIVES
An MI is a life-threatening event which disturbs a client's equilibrium and endangers their self-esteem, self-concept and emotional stability. Individuals who experience an MI are suddenly and without warning pushed into the role of patient. This interferes with coping mechanisms used in the past to reduce anxiety caused by stressful situations.

During the early weeks after an infarction, patients may experience a constant sense of uncertainty of what they can and cannot do. They suddenly become aware that they are not sure of the possible outcomes of particular actions. In the early stages of rehabilitation, each daily task is approached with a feeling of uncertainty. This can result in a feeling of helplessness.

According to Johnson (1991), MI patients must achieve a sense of predictability before personal control can be regained. Patients must make sense of the heart attack (Rahe et al 1975). During the immediate post-hospital phase of rehabilitation, patients rely on others for help and support and this engenders a feeling of loss of independence. As patients regain their independence, they also regain a sense of control.

FORMS OF CONTROL
Patients can be taught to take control by influencing events in their lives, thereby reducing the stress they are experiencing. The five main types of control are:

- Behavioural control: the ability to take action to lessen the effects of a stressor through the reduction of the intensity or reducing the duration
- Cognitive control: the use of thought processes or strategies to reduce the impact of a stressor
- Decisional control: the opportunity to choose between courses of action
- Informational control: the acquisition of knowledge about a stressful event - what happened, why it happened and the likely outcomes. Informational control, by addressing the fear people have about the unknown, can help to reduce stress
- Retrospective control: pertains to beliefs about causation. Myocardial infarction patients seek a sense of meaning of the event in order to make the event meaningful in the context of their lives.

Each of these types of control can reduce stress, but cognitive control appears to have the most consistently beneficial effect (Thompson 1981, Cohen et al 1986). Patients with a strong sense of personal control may make a better adjustment to their illness than those clients with a weak sense of personal control.

Patients' fears
Following an MI, patients may experience fear of death, fear of the unknown, fear of disability, fear of loss of control, fear of being made redundant or anxiety regarding sexual performance. It is these feelings that have to be addressed during rehabilitation, otherwise the client may suffer ongoing depression. Those with a strong sense of personal control may adjust better to their illness than those whose sense of personal control is less strong.

Patients' perceptions
A patient's perception of his or her illness is influenced by how the illness presents, particularly the nature and severity of the signs and symptoms experienced. In relation to an MI, the nature of the illness refers to the type of pain experienced, while the severity is the extent, site, intensity and frequency of the pain. Breathlessness and angina may cause considerable inconvenience by restricting activities in relation to work, leisure, family life and other social activities.

These restrictions may cause psychological distress and considerable social disadvantages by interfering with expected social performance, thereby increasing the feeling of loss of independence and loss of control.

ROLE OF THE REHABILITATION PROGRAMME
Integration within a stable social support network (which may include the community nurse) can act as a buffer against stress by providing positive experiences and a set of socially rewarding roles. Protection against negative experiences, provided by the social support network, can help to avoid the possibility of psychological and physical disorders by providing stability, a sense of predictability, and a recognition of self worth. Social support can provide emotional support, esteem support, instrumental support and information support (Sarafino 1990).

Often immediate members of the family need help to understand the purpose of the therapeutic regime and the positive part they can play in the rehabilitative process. Many spouses can become overprotective in the early stages of rehabilitation because of anxiety and uncertainty, and this can act as a disincentive. The needs of the spouse as well as the patient must be addressed during the immediate post-hospital phase of rehabilitation.

Sexual problems
Some patients may experience decreased libido or sexual problems. These problems can be of a psychological nature or the result of side-effects of medication. Male patients may experience a temporary loss of penile erection which may be due to the effects of some antihypertensive drugs. The partner may also experience reduced libido and/or sexual problems.

Early on in the rehabilitation period, patients may have to try new positions during sexual intercourse, to minimise physical movements. Often it is the spouse who may be more concerned about the resumption of sexual activity than the patient, and this can result in the spouse losing interest.

The fears experienced by the patient and the spouse are similar and include the fear of poor sexual performance, inducing chest pain, inducing a heart attack and inducing death during intercourse. Very often sexual problems arise not from physical difficulties, but from psychological problems, such as anxi-
ety, and can be reduced by relaxation techniques or each partner giving sexual pleasure without intercourse.

Discussion with patients should include the importance of being rested and relaxed before intercourse to reduce the stress on the heart; the need to wait an hour after meals; that foreplay gradually prepares the heart for increased activity; and that it may be useful to use glyceryl trinitrate before intercourse. If sexual difficulties persist and are causing either partner problems, it may be necessary to refer the partners to a clinical psychologist.

CONCLUSION
Initial contact with the MI patient and his or her family within the first week of discharge enables the educative process to begin at the most receptive time. Through mutual support and the provision of positive experiences the community nurse can help in setting realistic goals and the attainment of an active role for each patient. Several visits spread over a period of time will be necessary to address the psychological and social needs of patients and their families and to enable behaviour changes to be consolidated.

If the nurse is providing an individualised structured programme of care to all clients, measuring selected outcomes should be part of the evaluation process. Several measures of outcome relevant to MI rehabilitation are available in the form of instruments designed to measure the achievement or non-achievement of stated goals.

In order to use measures of outcome, the nurse needs to be familiar with the natural history of coronary heart disease and must be able to define the objectives of MI rehabilitation interventions against which outcomes are to be measured. For example, if one goal was to increase a client's knowledge of what causes heart attacks, the nurse would select a method of measuring the client's knowledge-base before and after intervention. Similarly, levels of anxiety and depression, physical activity level, dietary intake and smoking can be measured before and after the therapeutic intervention using a variety of scales.

An important aspect of health care is patient satisfaction and this should be routinely assessed. Patient satisfaction with provision of health care in relation to the rehabilitation programmes and their satisfaction with outcomes can be measured using a scale such as the Patient Satisfaction Scale.

REFERENCES


RECOMMENDED READING