Hospital anxiety and depression in myocardial infarction patients

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Abstract

The National Service Framework for Coronary Heart Disease recommends that psychological support should be offered to those patients who require it.[1] A six-month study carried out at Darlington Memorial Hospital looked at psychological support needed by patients following myocardial infarction (MI). The psychological status of MI patients was formally assessed using the Hospital Anxiety and Depression (HAD) scale[2,3] and appropriate referrals were made to psychological support services to improve patient management. The study also measured the impact that formal assessment of the psychological status of MI patients would have on service providers.

Some 80 MI patients from the Darlington primary care trust (PCT) were eligible for inclusion in the study. Psychological assessment was undertaken at four stages during cardiac rehabilitation and 25 patients were eligible for referral for psychological support as a result of high HAD scores measured during the study period. Ten patients accepted referral, a higher number than during the previous six-month period when HAD scales had not been used. Eight patients were referred to occupational therapy services for help with anxiety issues, one patient was referred to the psychology service and one to liaison psychiatry. Both of these patients required help with depression.

The study also found a high degree of patient satisfaction. The support received may also be required by many other groups of patients.

Key words: cardiac rehabilitation, psychological assessment and support, Hospital Anxiety and Depression (HAD) Scale, myocardial infarction.

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Introduction

The relationship between anxiety, depression and coronary heart disease (CHD) is well known. Anxiety and depression may have a role in the aetiology of CHD,[4] as well as adversely influencing the outcome in patients with known CHD.[5] Cardiac rehabilitation helps to reduce cardiac risk factors in patients with CHD by increasing functional capacity and improving physical and emotional quality of life.[6] Previous studies have indicated that cardiac rehabilitation is associated with improvements in depression, anxiety and mood states.[7,8]

Methods

Before October 2004 the Cardiac Rehabilitation/CHD Specialist Nurses in South Durham (secondary care) did not formally assess the psychological status of their CHD patients. Referrals for psychological help were made on a basis of discussion with patients and carers about the patients' levels of anxiety and depression.

It was decided a study would be undertaken with the aims of:

- improving service for patients by formally assessing psychological status using a recognised screening tool and offering appropriate psychological support
- determining how many myocardial infarction (MI) patients scored highly for anxiety and depression on the HAD scale at the start, during and at the end of cardiac rehabilitation

- assessing the impact this would have on the services providing psychological support
- gaining information to support bids for increased resources
- providing information for discussion about new ways of working.

A multi-disciplinary team from the Liaison Psychiatry Department, the Psychology Department and the Occupational Therapy Department all expressed interest in being involved with the project and a referral pathway was agreed. Collaboration also involved nurses and health visitors from primary and secondary care, the service improvement manager from the Coast-to-Coast Cardiac Network, the clinical services manager and two cardiologists from secondary care in South Durham.

It was decided that the Hospital Anxiety and Depression (HAD) scale (www.nfer-nelson.co.uk) would be used as a screening tool, as recommended by the National Service Framework,[1] since it has been validated[2] and is simple, brief and acceptable to patients.[3]

Patients admitted to Darlington Memorial Hospital with MI from the Darlington Primary Care Trust (PCT) during the six-month period from 1st October 2004–31st March 2005 were prospectively screened. They were given HAD scales to complete at three to four days post-MI whilst still in hospital (HAD 1), at one to two weeks post-discharge (HAD 2), at the start of the cardiac rehabilitation exercise/education/support programme (CRP) approximately four weeks post-MI (HAD 3), and at end of the CRP, approximately 12 weeks post-MI (HAD 4).

Results

There were 80 MI patients from the Darlington PCT during the project period and 12 patients were excluded from the study. Of the remaining 68 patients, not all completed each of the four HAD scales for a variety of reasons (see table 1). Only 12 patients in the study completed all four HAD scales.

In total there were 44 high HAD scores from 25 patients (10 men and 15 women). One other patient, who had normal HAD scores throughout, was offered referral on grounds of clinical judgement. Ten patients accepted referral for psychological support.

Table 1. Numbers of patients and reasons for not completing the HAD study

HAD 1. 58 patients completed this stage:
- 17 scored high according to the referral criteria
- 1 patient gave staff concerns on grounds of clinical judgement
- 18 patients were offered referral for psychological support
- 7 accepted

HAD 2. 44 patients completed this stage:
- 12 scored high
- 1 patient gave staff concerns on grounds of clinical judgement
- 5 patients had already been referred for psychological support
- 8 new patients were offered referral
- 3 accepted

HAD 3. 42 patients completed this stage:
- 9 scored high
- 5 patients had already been referred for psychological support
- 4 new patients were offered referral
- none accepted

HAD 4. 24 patients completed this stage:
- 6 scored high
- 4 patients had already been referred
- 2 new patients were offered referral
- none accepted

Reasons for patients being excluded from the study and/or not completing all four HAD scales were:
- emergency transfers for angiograms, angioplasty and/or cardiac surgery and too unwell to complete
- other illnesses/problems making it impossible to complete (Alzheimer's disease, terminal illness)
- declining to complete
- not attending or completing the cardiac rehabilitation exercise/education/support programme

Discussion

The total number of patients who accepted referral as a result of formal psychological assessment (10 out of 68) was much higher than the referral rate during the previous six months when HAD scales had not been used to assess psychological status. During this time only six out of 176 patients accepted referral. Additionally, during the study period a further 16 patients out of 68 had scores high enough to merit referral but declined referral for various reasons.

High anxiety scores were more prevalent than high depression scores during this project. Eight patients were referred to the occupational therapy service for help with anxiety issues, one patient was referred to the psychology service and one to liaison psychiatry. Both of these latter patients required help with depression.

Verbal feedback from patients who had accepted referral revealed a high degree of satisfaction. The work done suggests there is a demand for more psychological intervention for post-MI patients and this may also be required for those with different cardiac conditions and those with other chronic illnesses.

The physical, social and emotional well-being of patients is of paramount importance to healthcare professionals and appropriate psychological support, given in a timely manner, can promote self-confidence and better management of health.

It is hoped this service will develop further, considering the following factors: resources, new ways of working with other health professionals in this area, training, the best places to offer support, its timing for optimum benefit, and rolling out the service to other groups of patients.

There are also plans to incorporate psychological support services into the multi-disciplinary teams to prevent long waits for support, which will, in turn, improve patient care. Patient confidence in their health reduces the number of contacts with healthcare providers and enables resources to be channelled appropriately.

Key messages

- Psychological assessment using a HAD scale for post-MI patients reveals more patients with psychological problems than informal psychological assessment
- High anxiety is more prevalent in post-MI patients than depression
- The project results suggest there is a demand for more psychological support for patients post-MI

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Conflict of interest

None declared.

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