Problems of cardiac rehabilitation coordinators in the UK: are perceptions justified by facts?

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Abstract

The National Service Framework for Coronary Heart Disease recommended in 2000 that cardiac rehabilitation (CR) should be offered to 85% of patients recovering from myocardial infarction or revascularisation. This target is a long way from being met.

Provision of CR might be improved by addressing the problems met by CR coordinators. This study, through a questionnaire and more detailed surveys of CR coordinator experiences, set out to identify these problems. CR coordinators' problems were canvassed in the 2001/2 Annual Survey of CR programmes in the UK and their responses were compared with figures from the same survey and from surveys from the North West and the South East Regions of England. We found their main problems included lack of money (87%), lack of staff (90%), lack of space (74%), lack of sessions (74%), failure of referral of heart failure patients (66%), attendance problems (71%) and waiting lists (55%). All of these perceived problems were confirmed by the figures from at least one of the surveys – and, in most cases, by two or three of the surveys.

These findings point to measures for improving CR provision. These include proper funding on a cost per patient basis, the provision of adequate space and the better use of information technology.

Key words: cardiac rehabilitation, coordinator, funding, physician involvement.

Br J Cardiol 2005;**12**:372–8

Introduction

Cardiac rehabilitation (CR) in the UK, as in many other countries, has grown in a haphazard fashion. CR has seldom been commissioned by purchasers and equally seldom been initiated by cardiologists. For the most part, CR has been set up by local enthusiasts who, seeing the need, have created their own service, usually without clinical backing and often without any financial support. There has been no standard model for the provision of CR.[1]

Several changes over the past few years have improved the situation in the UK. In 1988, the British Heart Foundation (BHF) started to fund new CR programmes and this led to an enormous growth in the provision of CR so that, by the year 2000, every hospital which cared for acute cardiac illness had access to a CR programme – there were, in total, more than 300 programmes in the UK.[2] Also in the year 2000, the National Service Framework for Coronary Heart Disease (NSF for CHD) was published and included a chapter on CR.[3] The NSF set out Standards, Targets and Milestones which aimed to see CR offered to at least 85% of all myocardial infarct and revascularisation patients. The latest available figures indicate that this target is still a long way from being met.[2] Standards for the provision of CR were strengthened by the guideline published by the Scottish Intercollegiate Guidelines Network (SIGN) in 2002 and adopted by the British Association for Cardiac Rehabilitation (BACR).[4]

One way of helping to achieve the NSF target would be to identify the problems suffered by CR coordinators so that these could be tackled. Since 1997 the BACR, with funding from the BHF, has surveyed all the CR programmes in the UK with an annual questionnaire to the responsible coordinators.[2,5,6] For the year 2001 we included a series of questions asking the coordinators what problems they faced in providing their service.

This paper reports those responses and a comparison with actual figures which might validate the CR coordinators' perceptions. These figures come from three sources – the figures from replies to other parts of the BACR/BHF annual survey, and those gleaned from two other more detailed Regional surveys – one from the North West Region in 2001/2 which examined CR provision in 35 CR centres and the other from the South East Region in 2001 which included 37 centres.

Methods

The three surveys included in the analyses are:

1. The BACR/BHF annual survey

In 2002, all the identified CR centres in the UK were sent a questionnaire which sought the following information about their activities for the year 2001:

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- number, age, gender and diagnoses of the patients treated
- number of sessions of exercise and education
- total budget
- outcomes and medication.

The questionnaire included a section asking whether the coordinators encountered any of the following problems:

- logistic – including lack of money, staff, space or sessions
- non-referral of diagnostic categories
- difficulty in recruiting – the elderly, women or ethnic minorities
- attendance problems – due to transport, accessibility or timing
- waiting list.

2. Review of cardiac rehabilitation in North West England[7]

Between October 2001 and February 2002, 35 CR centres in the North West region were reviewed against the parameters of the NSF for CHD. The working group included a practitioner from each centre and was coordinated by a member of the Regional Office's CHD Core Team. Information on service provision was gathered by a mixture of responses to questionnaires and structured presentations and group discussions on each service scheduled over 11 separate meetings. Information sought included:-

- diagnostic groups treated
- how patients access the CR programme
- accommodation and exercise facilities
- travel arrangements
- timing and length of sessions
- patient monitoring
- access to specialist help
- staffing levels
- number of patients treated annually in each service
- methods of recording and communicating information
- programme budgets.

3. South East Regional CHD Task Force Cardiac Rehabilitation Project[8]

In June 2001, a team of CR practitioners developed an ideal model for the provision of CR. CR coordinators from 37 programmes in the region used a questionnaire to evaluate their own services against this model. Information included in the evaluation included:

- staffing
- funding
- number of patients treated
- conditions treated
- what assessments were carried out before and after the programme
- content of the CR programme, including number of sessions for exercise and other activities
- scope of other activities in different phases of CR.

The survey identified gaps in CR provision and made recommendations for improvements.

Results

The BACR/BHF survey included 302 centres and received responses from 235 (78%). Within this, 220 of the 235 (94%) coordinators replied to questions about the problems they encountered.

The problems reported by the coordinators in the BACR/BHF survey have been compared with the findings from the three surveys for all problems reported by more than half the respondents. They are tabulated in table 1.

The main findings are:

Lack of money: 87% of coordinators cited this. Both the BACR/BHF and the North West Region (NWR) surveys found that only a minority of services held their own budgets. The mean budget for the budget holders was £256 per patient.

Lack of staff: 90% of coordinators cited this. The NWR survey found that, on average, the CR centres had less than half the number of staff recommended by the SIGN guideline.

Lack of space: 74% of coordinators cited this. In the NWR survey 80% thought that they had inadequate space and only 11% had their own accommodation.

Lack of sessions: 74% of coordinators cited this. The BACR/BHF survey found that 72% of services offered less than 16 sessions for the whole CR course – below the minimum recommended by the SIGN guideline. In the NWR survey most services could only offer one session per week and in the South East Region (SER) survey, this was true for 35%.

Patients not referred – heart failure: 66% of coordinators cited this. The numbers of centres that could offer treatment to heart failure patients were 27%, 3% and 25% for the three surveys.

Attendance problems: This was cited by 71% of coordinators. In the NWR survey all services had experienced transport difficulties but only one could offer evening sessions to provide for patients who had returned to work.

Waiting lists: 55% of coordinators cited this. In the BACR/BHF survey, 54% of services had waiting lists which were up to 20 weeks long. In the NWR survey 21% had waiting lists.

Discussion

Problems faced by CR coordinators in the UK and their perceptions are supported by the findings of the three surveys. These problems are present even for a service which is falling well short of the provision which has been recommended by the NSF for CHD and by the SIGN Guideline 57. Currently only about 30% of myocardial infarction patients, 45% of coronary artery bypass graft patients and 10% of angioplasty patients attend CR in the UK.[2] Much will need to be done to approach the NSF requirement for 85% of each group being offered CR.

The main deficiency underlying the problems faced by the

Table 1. Problems reported by cardiac rehabilitation coordinators

Coordinators' perceptions	Percentage of coordinators	Findings from BACR/BHF Survey	Findings from NWR survey	Findings from SER survey
Lack of money	87%	Only 45% had defined budget. Funding/patient varied from £50 to £712 (mean £256)	Only 40% had defined budget	
Lack of staff	90%		Had less than half the staff hours needed. Only 40% had clerical support	Lack of staff cited as 1 of 3 reasons for inadequate provision
Lack of space	74%		80% had inadequate space. Only 11% had own accommodation	Lack of space cited as 1 of 3 reasons for inadequate provision
Lack of sessions	74%	72% of centres offered less than 16 exercise sessions per course	Most could offer only one session/week	65% could offer two sessions/week
Patients not referred: heart failure	66%	27% of services offered treatment to heart failure patients	Only one service offered treatment to heart failure patients	Only 25% of services could offer treatment to heart failure patients
Attendance problems	71%		All services experienced transport problems. One out of 35 services offered evening sessions	
Waiting list	55%	54% of services had waiting lists, mean 8 weeks, up to 20 weeks	21% of services had waiting lists	

coordinators is lack of funds – this, in turn, contributes to lack of staff, lack of sessions and inadequate space. While the Department of Health has laid down what is required from CR, it has not backed its recommendation with any requirement for hospital trusts to support CR financially. The Department of Health Choice Initiative[9] included the recommendation that a proportion of the cost of revascularisation procedures should be used for rehabilitation – but the proportion of the cost to be used in this way was not given.

The BACR/BHF survey found that, for those who held a budget, the allowance per patient treated varied from £50 to £712, median £256 (year 2000 costs).[4] The SIGN Guideline 57 suggests a level of staffing which would, in 2004, cost between £327 and £396 per patient. A recent study has investigated the cost of providing CR in England and found the average cost per patient to be £354 for staff and £486 total.[10] However, the mean figure conceals a very wide variation in staff costs – from £186 per patient for centres with two or fewer key staff to £542 for centres with more than five key staff. On this evidence, those CR coordinators who do hold their own budget are receiving about 70% of what they need to cover staff costs. Unfortunately, underfunded CR centres are the least likely to have the time and resources, particularly clerical help, to seek improvements in their funding.[10]

Delays in patients joining the CR programme were found to be due both to waiting for investigation before referral and to waiting lists. The presence of a waiting list is a serious obstacle – and was presumably the result of the lack of staff time and space – knock-on effects of lack of adequate funds. We believe that the CR programme has most to offer cardiac patients soon after the acute event, supporting them during recovery and helping them to adopt healthy lifestyle changes at a time when they may be most receptive. It is also probable that if the start of CR is delayed, patients will be less likely to join the programme. Moreover, if they are back at work when a place becomes available, they may only be able to enrol in evening sessions, an option available in just one of the 35 North West Region programmes.

Limitations

The main weakness of this study is its retrospective nature. We used the results of three surveys which were differently structured and were not specifically designed to answer the questions raised by the coordinators' problems. The surveys used differently expressed questions to give data about lack of facilities. Nevertheless we believe that the findings do validate problems reported by the CR coordinators. However, these findings cannot be generalised to other countries where the structure of support is very different to that found in the UK.[11]

Our questionnaire did not include 'lack of doctor support' as a possible problem for the coordinators. However, we do believe that lack of medical support is an important contributor to the lack of funds and facilities suffered by CR. An earlier survey[2] found that a cardiologist was involved in just 19% of UK CR programmes. This is very different to the situation in many other European countries where most CR programmes enjoy the active involvement of a cardiologist – in some countries all programmes have a cardiologist on their staff.[11] The recommendation of the physician has repeatedly been shown to be one of the most important factors in deciding whether patients attend and comply with CR programmes[12,13] and it seems likely that the active involvement of a cardiologist would be an even greater incentive. Cardiologists also have the power to influence funding of pro-

Key messages

- The provision of cardiac rehabilitation (CR) in England is grossly inadequate
- CR coordinators face many problems in trying to provide an adequate service
- The main problems perceived by CR coordinators are lack of money, staff, space and sessions
- These perceptions are confirmed by the results of three national and regional surveys of CR
- CR coordinators can best be helped to achieve NSF targets by improved funding and by the support of cardiologists

grammes of treatment which they support – a power not generally afforded to nurses.

Recommendations

We have several recommendations to improve CR provision:

- The cost per patient of providing CR to the standard set out in the SIGN Guideline should be met by the NHS Hospital Trusts – so that enough staff (including clerical) can be employed and sufficient sessions provided, including evening sessions, to treat all the eligible patients in the catchment area.
- Each CR programme should be provided with adequate space by the hospital trust.
- In each hospital trust a cardiologist should be responsible for overseeing the CR programme and ensuring that coordinators can recruit their own patients under his or her clinical guidance.
- Each CR programme should be resourced to operate an information system to monitor patient throughput and measure outcomes.

When the demands of the NSF can be met, CR services should consider expanding their role to include heart failure and angina patients. On present evidence, this ideal is a very long way from being achieved.

Conflict of interest/funding

None declared. HJNB is in receipt of an NHS R&D Grant. The BACR/BHF survey was funded by a grant from the British Heart Foundation.

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