

CARDIAC REHABILITATION FOR WOMEN: ONE SIZE DOES NOT FIT ALL.

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Accepted for publication January 2005

Key words: women, myocardial infarction, cardiac rehabilitation, New Zealand

ABSTRACT

Aim:

To investigate women's perceptions of the contribution of cardiac rehabilitation to their recovery from a myocardial infarction.

Background and Purpose:

Cardiac rehabilitation programs have been based on research with almost exclusively male participants. It was unclear if cardiac rehabilitation programs meet the needs of women.

Method:

Ten women who had experienced one or more myocardial infarctions were interviewed. Data from these interviews were analysed using Glaserian grounded theory.

Findings:

The core category that emerged from the data was 'regaining everydayness'. Participants worked to regain their 'everydayness' through a basic social process of 'reframing'. Reframing involved coming to terms with what they had experienced and fitting it into their lives. Other categories related to symptom recognition and recovery.

Conclusion:

Cardiac rehabilitation programs contributed to overall recovery from a myocardial infarction in different ways for each participant. Although programs provided information for participants, they failed to provide the type of support needed to effectively aid reframing and recovery. Programs did not meet the needs of all participants and it was apparent that one size does not fit all.

INTRODUCTION

According to the New Zealand Ministry of Health (MOH) coronary heart disease (CHD) is the leading cause of death for New Zealanders. In 1999 CHD accounted for 25.4 % of male and 21.1 % of female deaths (New Zealand Health Information Service 2003). Not only is mortality from CHD a problem in New Zealand and internationally, the burden of disease resulting from CHD is also high. In 1996 New Zealand women lost 25,526 years to premature mortality and 4,296 years to disability as a result of CHD (Tobias 2001). Cardiac rehabilitation (CR) programs were developed to lessen the burden of disease both for society and for the individual sufferer. However these programs have been based on research using mostly male participants.

CR is a dynamic multidisciplinary intervention that assists individuals who have survived a myocardial infarction (MI) or other cardiac event to achieve the best level of functioning possible (Higginson 2003; Mitchell et al 1999). The aims of CR are: to help individuals to adjust to their illness; limit or reverse the disease; modify risk factors for future cardiac illness; improve return to occupational and social functioning; and reduce the risk of re-infarction or sudden death (Dinnes 1998; Higginson 2003; Mitchell et al 1999; Petrie and Weinman 1997; Wenger et al 1995).

Internationally CR has three recognised phases: phase one - the inpatient phase; phase two - the outpatient phase (up to 12 weeks post event); and phase three - the maintenance phase (AHA 1998; NZGG 2002; Parks et al 2000). CR generally provides participants with education on topics including: basic heart anatomy and physiology; the effects of heart disease; the healing process; risk factor modification; the resumption of physical and sexual activities; psychosocial issues; the management of symptoms; investigations; individual assessment; and referral to other health professionals if required (NHFA 2004; NHFNZ 2000). In New Zealand CR is based on the World Health Organisation (WHO 1993) guidelines.

Phase one CR is generally an automatic part of in-patient hospital care for all MI patients, integrated within the acute treatment plan. In New Zealand phase two CR programs are of four to ten weeks duration, for

one or two afternoons per week depending on the health service providing the program (NHFNZ 2000). Programs may be based in hospital grounds or at community based sites. CR nurses are largely responsible for the initiation of phase one CR during hospitalisation and most patients are also visited at home by the CR nurse after discharge and encouraged to attend phase two.

LITERATURE REVIEW

CR has been shown to benefit patients with a wide range of cardiac conditions including following an MI. Research findings demonstrate an increase in functional capacity (Adams et al 1999; Cannistra et al 1992; Lavie and Milani 1995; Lavie and Milani 2000) and a decrease in mortality (Naughton et al 2000) for both men and women after CR. CR has been linked to: decreased levels of anxiety and depression; improvement in general health and self-esteem (Conn et al 1992); shorter hospital stays; better emotional and spiritual recovery; and greater compliance with lifestyle recommendations aimed at reducing cardiac risk factors (Guzetta and Dossey 1992).

There is some debate about women's rates of referral and attendance at cardiac rehabilitation programs. Studies by Cochrane (1992), Ades et al (1992), Everson et al (1998), and Allen et al (2004) found that women may not be referred for CR as readily as men despite both groups having similar clinical profiles. However other research by Burns et al (1998) did not identify gender as a predictor of referral.

Halm et al (1999), Everson et al (1998) and Wallwork (1996) suggest that women's attendance at phase two CR is generally lower than that of men. Parks et al (2000) performed an audit of the phase two CR program at Auckland Hospital and found that women were less likely to attend than men, with 36% of eligible women attending in comparison to 49% of men.

Halm and Penque (1999) identified that women experience different cardiac symptoms and present in a different manner than men when having an acute cardiac event. It was therefore considered possible that women also cope with symptoms and illness in different ways. Women and men are known to have different roles and responsibilities within society, so women's needs in relation to CR may be different to those identified from research with male populations. The aim of this study was to gain understanding of women's perceptions of the contribution of CR to their recovery from an MI.

METHOD

Grounded theory, as informed by Glaser (1978), was used as the methodology. Prior to commencing this study ethical approval was obtained from the relevant regional health and university ethics committees.

Sample

Eligible participants were women admitted to two New Zealand north island hospitals with a diagnosis of MI who had subsequently been referred for phase two CR. Participants were obtained through purposive and theoretical sampling. Ten women participated, ranging in age from 50 to 89 years old. Three participants had experienced more than one MI.

Data collection

Semi-structured in-depth interviews were used to obtain data. Written informed consent was obtained prior to the first interview and with permission the interviews were audio-taped. All interviews were undertaken by the lead author. Field notes were recorded after each interview providing key phrases, descriptions of the situations, body language and events that occurred during the interview. Field notes were then used as data (Glaser and Strauss 1967, Glaser 1978, Schrieber and Stern 2001). Data were also obtained through the use of theoretical memos during data analysis. Interviews took place between September 2001 and April 2002. Literature related to the emerging categories was included in the data analysis.

Data analysis

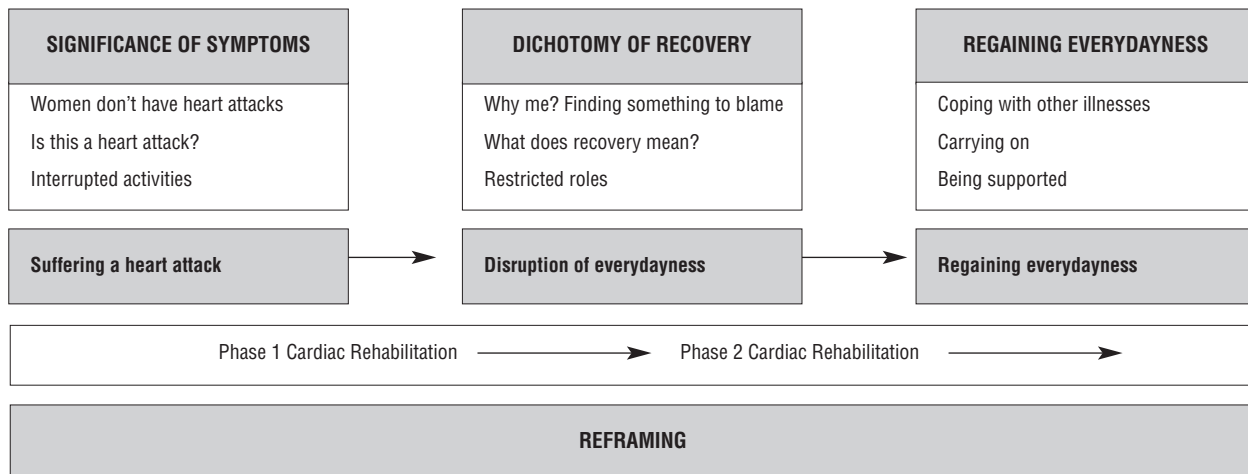
Data were analysed using constant-comparative analysis which involves the joint collection and analysis of data using 'explicit coding and analytic procedures' (Glaser and Strauss 1967, p. 102). Where possible, each interview was analysed prior to the next interview. All forms of data were coded and compared for instances of the substantive categories. Although complete data saturation was not reached due to the small number of participants and time constraints, the core category and basic social process (BSP) were presented to the participants and also discussed with other women who had attended CR.

The women described complementarity and fit between their experiences and the theoretical analysis. An audit trail of theoretical memos and field notes was maintained so that the process of analysis could be retraced. Although a substantive theory did not emerge from this research, valuable insight into women's recovery was gained.

FINDINGS

This study was based on an assumption, derived from literature and clinical experience, that CR would have some positive impact on women's recovery from an MI. This assumption was challenged in terms of the ways in which women framed their experiences of their MI, especially in relation to their pre-understandings of what an MI would be like, their understandings of their treatment, in terms of hospital admission, and the effects that those experiences had on their recovery. These factors all then impacted on what the women thought CR would entail and how it would meet their needs.

Figure 1: Reframing: A continuum of recovery



The way that CR contributed to overall recovery varied for each participant and therefore was not a reliable factor in recovery. Considering the way phase one CR is included in the acute hospital treatment, it was not surprising that most participants were unaware that this had been part of their care.

Eight of the ten participants attended some or all of phase two CR, although some participant's attendance was prevented by physical access issues, work pressures, and co-morbidities which affected, for example, their mobility. These barriers are important considerations as they reflect how the complexity of women's lives was unable to be accommodated in the programs. Women in paid employment also struggled to attend during work hours when they had recently returned to work. Margaret provides an example of this,

'The fact that I work up here isn't a great deal of help but I am going to try, work permitting, to take Wednesdays off, and that's...that's the day they had the meetings here, and certainly go to the next one at least and then I'll see, I'll see how I feel about it, you know, whether I think it is worthwhile to go again or whether it's not' (Margaret).

The phase two CR focused on information and advice about making lifestyle changes, such as increasing exercise, smoking cessation, and dietary changes, and information about risk factors and those that may have contributed to the cardiac event. Participants identified how this advice did not include information about how these changes could actually be implemented. For example, women were informed of the dietary changes they should make but at home they were responsible for preparing food for others who did not want to make those changes, making it harder to modify their lifestyle.

'My daughter rang up said 'mum I need to lose weight but I can't do it and it wouldn't hurt you either' and I said 'no' so we are going to Weight Watchers, which is...yeah a lot better. But when you have got somebody (husband) in

the house that likes their sausages, eggs and chips and things like that, it makes it very difficult' (Beth).

Although the content of different CR programs was similar, the information covered varied greatly. Participants reported that they did not ask questions during group sessions because they did not feel comfortable and some believed they only had their questions answered because others in the group, most often men, asked for the same sort of information.

Most participants felt that the CR nurses had more time to spend with them than general ward nurses, and this made them appear more approachable. However there was a noticeable difference in the amount and type of support offered by CR nurses to different participants and this support did not appear to be related to individual's perceptions of their need. For example, four participants were visited at home by the CR nurse at least once, one participant was visited three times, and six were not visited at all.

Participants also expressed a need for peer support that was not met by attending phase two CR. Feelings of isolation were expressed by several participants, who felt they had nothing in common with the other people in their CR group.

'I just thought it would be nice talking to someone in the same boat as I was but there wasn't, you know, as I said they have all had bypasses and angiograms and pacemakers, nobody was in my boat' (Beth).

No participants mentioned attending or being referred to a phase three CR program.

The BSP which emerged from the data was that of 'reframing' which was central to the recovery process and allowed most of the participants to fit their MI into their lives. The disruption to everydayness caused by suffering an MI affected roles and responsibilities in ways that were unique to each individual.

It is clear from findings that recovery was not a stationary or rapidly occurring process for these women, rather it seemed to exist on a continuum (figure 1), beginning before MI symptoms were recognised and extending through to 'regaining everydayness'. The participants in this study identified with different stages on this continuum.

For some the process of 'regaining everydayness' involved returning to the life they had before their MI. For others it involved adapting to a new 'everydayness'. There was no specific timeframe for this process, however it was clear from the data that some participants who had experienced their MI two or three years before being interviewed, were still working toward this goal. Because of the limited time frame of CR it is clear that phase one and two CR did not support this continuing recovery. No participants were involved in phase three CR therefore any benefits this may give have not been investigated.

Regaining everydayness was more difficult for participants when they did not attribute their symptoms to an MI. Attending CR did not necessarily change perceptions of symptoms and causes because rehabilitation information tended to focus on the classic symptoms and most participants in this study did not experience these symptoms. Instead some participants felt they were unusual or atypical and one reported having difficulty accepting that she really had suffered an MI. Other illnesses often seemed to cause more disruption than the MI symptoms they experienced, which created confusion.

Participants also wanted to know why they had suffered an MI and what it would mean to their lives. CR programs assisted this by providing information about possible causes, which participants were able to use to identify a possible cause for their own MI. Participants blamed factors such as smoking, stress, inherited tendencies and medications.

'As I say, I attributed it to stress because I have got a very sick husband (...), I have got to do all the thinking for him and see to everything so I have a fair old burden on my shoulders and I think that contributed, you know, together with my daughter, to my heart attack' (Elizabeth).

The participants went through a process of reframing that involved recognising the significance of their symptoms, working out what recovery meant for them, and attempting to 'regain everydayness'. CR contributed to this process in varying degrees by providing information about their illness and education on ways they could reduce their risk of further heart problems. It is apparent however that with or without CR all of the women in this study 'recovered' to varying degrees.

DISCUSSION AND IMPLICATIONS FOR CARDIAC REHABILITATION

The findings of this study provide useful insights into the role that CR plays in women's recovery from an MI. In order to 'regain everydayness' the women in this study had to 'reframe' their lives to incorporate their MI experience. To do this it was necessary to recognise the significance of their symptoms and establish what had caused their MI. CR provided them with some information related to possible causative factors and helped to explain what had happened to them.

However this focus on the risk factors associated with an MI and modification of these factors also implies that the individual's behaviour can be blamed. This blaming may occur whether or not the individual health care professional actually blames the patient, because the language used contributes to the presumption that responsibility for the illness lies with the patient (Gunderman 2000). Health professionals need to be aware of the potential for blaming and actively work against this.

Some of the participants in this study were not advised to attend phase two CR. Women who wish to attend organised programs should be supported to do so. Literature identifies reasons for not attending CR including transport issues, work and family commitments, and feelings of having nothing in common with the group (Filip et al 1999; Mcsweeney and Crane 2001; Scott 2003) and these were also issues for participants in this study. It is clear that CR needs to be flexible to meet the needs of individual clients.

The desire of women to return to 'everydayness' must also be taken into account. Supporting women to regain their everyday roles and responsibilities may make them feel more positive. Burell and Granlund (2002) suggest that single gender groups may enhance the therapeutic efficacy of CR and improve women's participation.

Although participants in this study generally felt positive about the phase two CR it is clear it did not meet all their needs. Of particular concern was that lack of emotional support for recovery. Moore (1996) found that women wanted more emotional support from health professionals. Research examining the lifestyle changes of women post MI identified social support as an inhibitor and facilitator for making changes in health behaviour (Crane and McSweeney 2003; McSweeney and Coon 2004). Health professionals need to have a greater awareness of the individual needs of women who have experienced an MI, including acknowledging that although health professionals have expert knowledge and skills, which can be applied to the rehabilitation of women who have experienced an MI; the women themselves are also experts (Kamwendo et al 1998). Participants tended to attend phase two CR soon after hospital discharge at a time when they were trying to return to their normal roles, and possibly as a result,

CR seemed to slow their return to normal life rather than assisting it.

CR has been developed from research based predominantly on male populations (Brezinka and Kittle 1996; Wenger and Hellerstein 1992) and therefore fails to meet the specific needs of many women. For participants, suffering an MI caused feelings of surprise and shock. Most did not attribute their symptoms to an MI and the symptoms experienced were significantly different to those that are publicised as the 'classic symptoms'. Despite much research recognising that women may experience symptoms that are different or less severe than they expect (Dempsey et al 1995; Dracup et al 1997; Johnson and King 1995; LaCharity 1999; Murray et al 2000), public health literature still presents information about 'classic' symptoms (NHFA 2004; NHFNZ 2004; Revington 2004). There is a need to provide both women and health care professionals with more education related to the signs and symptoms of heart disease in women so that they are able to recognise the significance of such symptoms (O'Farrell et al 2000). There also needs to be an educational focus on women sufferers of CHD in the media rather than the current focus on men.

CONCLUSION

CHD is currently a major health issue for women and will continue to be so in the foreseeable future due to demographic changes and lifestyle factors. In this study, the impact of CR on women's recovery from an MI was variable especially in helping women reframe and regain everydayness. Programs did not meet women's needs for education or support and CR needs to be flexible enough to meet individual and group needs.

Further research into how health professionals assess the education and support needs of women is necessary. Research investigating factors which help or hinder women's recovery as well as the effect of roles and responsibilities on women's recovery from an MI would also be of value. As currently structured CR does not meet the needs of women because it appears to be based on an assumption that everybody needs the same information and support. This study clearly shows that one size does not fit all.

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