THE HEART MANUAL DEPARTMENT

WOMEN & CARDIAC REHABILITATION

Around 35, 000 women are admitted to hospital following a heart attack in the United Kingdom each year (British Heart Foundation, 2019). Recent research has highlighted inequalities for women in many areas of heart disease, including:

- Awareness
- Diagnosis
- Treatment
- Risk factors
- Prevention
- Cardiac Rehabilitation

This interactive training guide focuses on issues facing women following myocardial infarction and cardiac rehabilitation. It has been developed for all Heart Manual facilitators. For more experienced facilitators, this may be act as a brief update of current evidence. Whereas for allied health professionals from differing backgrounds, or those new to cardiac rehabilitation, this guide aims to provide an introduction to the issues facing women for your own development and support your awareness of how you can use the Heart Manual programme and associated resources to best support your patients. This guide will take around 20 minutes to complete.

GETTING STARTED

Over the page you will find how to use this training guide. You might find it useful to have a copy of your Heart Manual facilitator login details handy.

The link below will take you to the Heart Manual Facilitator area where you can access many of the resources highlighted in this training guide.

If you have any further questions or need support, you can contact our office on 0131 537 9127 or heart.manual@nhslothian.scot.nhs.uk

https://services.nhslothian.scot/TheHeartManual

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HOW TO USE THIS GUIDE

In this interactive guide there are several features to enhance your learning experience.

Where you see a yellow box, there is a question and space to write either a reflection or answer below. Nothing you write will be shared and no one else can see what you write. These can be saved for your own development by saving the PDF file before exiting.

Underlined blue text are hyperlinks, which will take you directly to websites relating to Heart Manual resources or published studies for further reading.

Buttons at the bottom corner of each page will navigate between each section. If you wish to jump to different sections, you can do so by clicking on the page number in the contents section.

BEFORE YOU BEGIN

Take a moment to note down what you would like to achieve from this training guide. This could be something you would like to learn, or perhaps simply dedicating twenty minutes to refreshing your knowledge.

What I would like to achieve from this guide is...

What are the specific gender issues facing women in heart disease?

Awareness of Myocardial Infarction & Heart Conditions

Coronary heart disease is the leading cause of death in women (British Heart Foundation, 2017). Worldwide there is a lack of awareness, with both patients and practitioners underestimating the risks of heart and circulatory disease in women, particularly young women (Mosca et al., 2005; Leifheit-Limson et al, 2015; Lehto et al, 2012).

Partly because of this lack of awareness, women typically present to hospital later than men while having a heart attack. Research has shown that on average, men tend to arrive between 1 hour 24 minutes and 3 hours and 30 minutes after symptom onset whereas women tend to delay arrival between 1 hour 48 minutes and 7 hours 12 minutes (Nguyen, Saczynski, Gore and Goldberg, 2010).

In particular, young women who experience heart attacks may be further disadvantaged. Misconceptions exist that young women don't have heart attacks, and young women in particular may experience different types of heart attacks, such as spontaneous coronary artery dissection, known as SCAD. Young women, on average 44-53 years old, make up approximately 90% of individuals experiencing SCAD and it is commonly associated with pregnancy (Macaya et al, 2018).

Diagnosis

Some studies have suggested that certain symptoms present at more or less frequently in men and women (Rubini et al, 2014). However, there is inconclusive evidence to support this. Both men and women typically report chest pain as the most common symptom (Ferry et al, 2019). Despite this, women are 50% more likely, compared to men, to receive the wrong diagnosis initially according to one study between 2002 and 2013 (Wu et al, 2018). One reason for this may be because women who have a NSTEMI heart attack are 34% less likely to receive a coronary angiography within 72 hours, as recommended by the European Society of Cardiology guidelines, compared to men (Roffi et al, 2015).

Take a moment to note down what impact this may have on the patient? What section of the Heart Manual might you use?

Using the Heart Manual: Eliciting what the patient understands and believes what has happened to them may be an important first step in addressing early misconceptions. Directing them to part one 'Recovering in Hospital' may be particularly useful for addressing misconceptions early. Signposting to the emergency information section and recommending them having it somewhere they can access easily may help reduce any fears they may have.

Treatment and Care

One study (Wilkinson et al, 2018) found that when comparing the treatment of men and women against the quality standards recommended by the European Society of Cardiology:

- Women who had experienced a STEMI heart attack were around 3% less likely to receive a timely blood reperfusion.
- Women who had experienced a NSTEMI heart attack were 34% less likely to receive a coronary angiography imaging test within 72 hours of hospital admission.
- Women were 4.2% less likely to recieve dual antiplatelet therapy.
- In Scotland, one study has suggested that women are less likely to receive coronary angiography and revascularisation procedures, such as percutaneous coronary intervention (Jackson et al, 2019).

Risk Factors & Prevention

Whilst men and women share the same risk factors for coronary heart disease, women may need to be particularly aware of the increased risk from smoking, diabetes and high blood pressure as one study suggested that this may increase risk in women, more so than men (Millett, Peters and Woodward, 2018). Supporting women in particular to manage these risk factors for secondary events is discussed on page 6.

Heart Manual Resources: You can access more information on risk factors on the facilitator area using your logon details here.

Using a patient-centred treatment decision to refer to cardiac rehabilitation, reflect how these specific gender issues may influence the clinical response in your own practice and that of the team you work within.

Heart Manual Resources: In addition to women, there are other under represented groups in cardiac rehabilitation. You can find out more about this by accessing the training chapters on the facilitator area using your logon details here.

What are the barriers to recruiting more women in cardiac rehabilitation?

Research has shown that women are substantially less likely to be referred, enrol and complete cardiac rehabilitation programs compared to men. In the United Kingdom, the proportion of female attendance ranges between 15% to 38% (The National Audit of Cardiac Rehabilitation, 2019).

This may be explained by a range of potentially modifiable, not easily modifiable and non-modifiable barriers highlighted below (Supervía et al, 2017). These barriers may not be unique to women, but may present disproportionately among female patients because of the later age of women typically experience a heart attack and are invited to cardiac rehabilitation (Bittner, 2018).

Potentially Modifiable Barriers

- Lack of information on or familiarity with cardiac rehabilitation
- Negative beliefs or perceptions of cardiac
- Transportation issues

Not Easily Modifiable Barriers

- Family obligations
- Financial concerns
- Lack of social support
- Lower educational level
- Psychological distress, such as depression
- Geographical location

Non Modifiable Barriers

- Age
- Comorbidities (including musculoskeletal, depression, diabetes and obesity)
- Ethnicity
- Employment

Research suggests that enrolment interventions are more successful if they are delivered face to face by a healthcare professional. However, patients were seen to more likely to adhere to unsupervised programs (Bittner, 2018). One way of doing and addressing some of these barriers may be to offer home-based cardiac rehabilitation programs, such as the Heart Manual.

How do you think you could address some of the potentially modifiable barriers in recruiting women to cardiac rehabilitation programs in your own practice?

Some other feasible and effective approaches that have been suggested to overcoming these barriers include a combination of:

- Systematic, automated referral systems
- Liaison and discussion between cardiac rehabilitation nurse (or other allied healthcare professional) and patient contact
- Early post-hospital enrolment
- Strong, supportive endorsement of cardiac rehabilitation by a healthcare professional
- Motivational letters inviting them to cardiac rehabilitation programmes

(Gravely-Witte, 2010; Supervía et al, 2017; Bittner, 2018)

How can women be supported in cardiac rehabilitation to manage their risk factors?

Typically, women are less likely than men to meet the same risk factor targets after having a heart attack. Whilst women do tend to have better blood pressure control, they are often do not achieve the same reduction in lipid and glucose levels, obesity and improvements in physical activity (Zhao et al, 2017). Women typically are less likely to be prescribed medication compared to men. In particular, research has shown that women are 2.7 times less likely to receive statins and 7.4 times less likely to recieve beta-blockers in England and Wales (Wilkinson et al, 2018).

Depression and low mood when people start cardiac rehabilitation is one of the risk factors for non-completion among women. Some studies suggest that psychosocial distress at the start of cardiac rehabilitation tends to be higher among women than men (Sanderson et al, 2005). Screening for low mood and signposting to relevant sections of the Heart Manual in early sessions may be beneficial for supporting some individuals.

Heart Manual Resources: The Anxiety & Depression chapter on the facilitator area discuss psychological distress in greater detail. This can be accessed here.

Other successful approaches include conveying understanding, acceptance, and interest in the patient as an individual. Expressing empathy for unhealthy lifestyle practices may be another way of building rapport and helping the patient to understand and accept the need for change. Reflecting this back to them so that they can hear their own reasons to change and collaboratively create solutions to specific barriers, challenges and opportunities they face (Thomas et al, 2019).

Heart Manual Resources: There are several useful resources on the facilitator area which patients may benefit from to reinforce sections of the Heart Manual and your facilitation of such. These include:

- Importance and Readiness Assessment Scales
- Setting SMART Goals
- Agenda Setting Chart
- Lifestyle Factors Chart
- Goal-Setting Chart
- The Exercise and Activity Plan

Reflecting on your own practice, how do you view the barriers women tell you about either engaging in cardiac rehabilitation or more specific health behaviours? How might your own views or opinion influence their engagement?

Skills and communication styles, such as Motivational Interviewing OARS techniques, may be useful for supporting recruitment of women onto cardiac rehabilitation programs, as well to support health behaviour change. In particular, this may help challenge negative beliefs or perceptions of cardiac rehabilitation as well as provide information and familiarity. Building insight, motivation for change and self-efficacy in a safe non-judgemental space may be one strategy for understanding the importance to the individual of barriers to engagement and facilitating change.

Heart Manual Resources: The Health Behaviour Change and Cardiac Belief chapters on the facilitator area discusses using motivational interviewing and Leventhal's (1984) Common Sense Regulation Model in greater detail. You can access this with your logon details here.

What actions could you take in your workplace to address some of the issues facing women in relation to myocardial infarction and cardiac rehabilitation? What support might you need to feel confident to question and influence in your workplace?

Well done! You've now reached the end of this training guide.

Look back at the intention you set on page 2. Did you achieve what you set out to do? If so, what have you taken away from this for your own practice? How will you know if have achieved this?

It may be that you have further questions. Following the links to the literature either throughout this guide or in the reference list may answer some of these.

If you have feedback or suggestions for the Heart Manual team from this resource, please send it to: heart.manual@nhslothian.scot.nhs.uk

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