# Cardiac Rehabilitation Referral: An Information Gap

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### **Abstract**

Cardiac rehabilitation (CR), consisting of exercise and diet modifications, has been proven to promote a healthy lifestyle that can extend life, particularly for survivors of cardiovascular events. Nonetheless, there is a long-standing concern regarding the underutilization of CR in general and especially by women. The American Association of Cardiovascular and Pulmonary Rehabilitation recommends all eligible persons be referred and participate in a CR program. However, participation and adherence to CR remain low. There appears to be a CR referral information gap in many instances, and thus focus groups that were conducted investigated four main research questions. First, what did CR mean for these former CR participants? Second, how did participants find out about CR? Third, what kind of referral information was received? Last, what information should prospective cardiac rehabilitation program participants receive? The poster will present the background and motivation for the study, preliminary results, and discussion of these results.

Keywords: cardiac rehabilitation, referral, information needs

## Introduction

It is a well-known fact that heart disease is still the primary cause of death in many parts of the world. According to the American Heart Association (2012), heart disease is the No. 1 cause of death in the United States today. Cardiac rehabilitation (CR), consisting of exercise, diet, and lifestyle modifications, has been proven to promote, maintain and even extend life, particularly for survivors of cardiovascular events. Grace, et al. (2002) states, "it is now well established that cardiovascular mortality can be reduced by approximately 25% when patients participate in a multifactorial CR program" (p. 127). Nonetheless, there is a long-standing concern regarding the underutilization of CR, especially by women (Daniels, et al. 2012; Sanderson, 2010).

The American Association of Cardiovascular and Pulmonary Rehabilitation recommends all eligible persons be referred and participate in a CR program. However, participation and adherence to CR remain low. Although a number of factors contribute to these low rates, one important aspect, which was investigated in this study, is whether a patient receives CR referral information upon discharge form the hospital at all. According to analysis of data from the American Heart Association's Get With The Guidelines program, only 56% of eligible coronary artery disease (CAD) patients were referred to cardiac rehabilitation (Brown et al., 2009). There appears to be a CR referral information gap in many instances, and thus the authors set out to employ focus groups to examine cardiac rehabilitation referral experiences, particularly as they may impact the heart health of women. This poster will present preliminary results of the first part of this study, which involved focus groups with former CR participants.

This study investigated four main research questions. First, what did CR mean for these former CR participants? Second, how did participants find out about CR? Third, what kind of referral information was received? Last, what information should prospective CR program participants receive?

Acknowledgement: Eleanor M. and Frederick G. Kilgour Research Grant, School of Information and Library Science, University of North Carolina at Chapel Hill.

Gollop, C. J., Chen, A. T., & Wu, W.. (2013). Cardiac rehabilitation referral: An information gap. *iConference 2013 Proceedings* (pp. 682-684). doi:10.9776/13315

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# Methods

In the first part of this study, two focus groups were conducted at a fitness center that offered cardiac rehabilitation programs. All of the participants had previously participated or were currently participating in CR. In both sessions, five men and two women participated; thus, altogether there were 10 men and 4 women.

## Results

With regard to the first question, participants came up with a number of themes concerning the meaning of CR. In addition to improving one's physical condition, one participant said, there was an emotional component, as well as learning not to overdo it, and "knowing how hard to push for yourself later on when you leave." The program helped them to change their lifestyle and improve their habits, not only in terms of exercise but also in other ways, such as diet. There was also a social component of CR programs that people found supportive and facilitating.

An important point was that some participants' perceptions of CR and their need for it changed during the program. Some thought that it was "just all exercise," but as they went through the program they realized that there was more – that "it [was] not just a temporary program, but it's something that's long term and the class [would] get you started." These experiences corroborate the results of a study by Janssen, De Gucht, van Exel and Maes (2012), in which they found that patients' illness perceptions changed significantly over the course of cardiac rehabilitation. Among others, they experienced an increased sense of illness coherence, a greater sense of treatment control, and a lessened emotional impact of the disease.

As mentioned earlier, the literature shows that only a fraction of those who are eligible for CR are actually referred. Thus, a second research question was: how did those who participated in the focus groups find out about CR? Among the focus group participants, some were referred and some were not. In a number of cases, participants had responded to follow-up phone calls. Some individuals pointed out that personal referrals were helpful in getting people to enroll.

With regard to the third research question, the kinds of referral information received, subjects noted a variety, among them, brochures, booklets, personal visit in hospital, recruitment call (post hospital discharge) and no referral. The final question asked information prospective cardiac rehabilitation program participants should receive. The most salient point was that the information should explain what CR was all about. Many mentioned that it was not explained to them until after they had arrived for the first session. Many said that the information should attempt to address assumptions that people make about cardiac rehabilitation. Making material available through different modes of delivery such as print, video, smart phones and face-to-face contact would also be helpful. In addition to health care providers, the participants mentioned that former CR participants could talk to those potentially eligible to participate: "have graduates from rehab program, volunteer time at UNC Hospital or wherever and go and make personal contact with people who are facing going to cardiac rehab and tell personal experience." Lastly, participants concurred that it took time to process information; thus, having it presented multiple times was helpful.

#### **Discussion**

The preliminary findings from this study contribute to existing work on CR in various ways. First, the results facilitate a deeper understanding of what prospective participants may need to know about CR that they may not know initially, what preconceptions they may have, and what helped them to reconceptualize the meaning of CR. Next, the study investigated the channels through which individuals came to know of CR, and what modes of information presentation, the types of information, and delivery would be effective in promoting enrollment. This knowledge can be useful in the future for the development of interventions for promoting CR enrollment and adherence.

The results from this research are part of a larger study involving CR participants. Future focus groups will attempt to investigate perceptions of CR, suitable recruitment strategies and appropriate design of CR informational materials tailored to different demographic audiences. As stated earlier, women maintain lower rates of participation in CR programs than men. The demographic in this current study (four women and 10 men) seems to reflect the extant literature (Daniels, et al 2012). Nonetheless,

an emphasis on gaining a better understanding of CR referral practices relative to women with cardiovascular disease remains imperative.

The poster will present the background and motivation for the study, the preliminary results summarized above, and discussion of these results. The authors would like to close with a quote from one of the participants, who said that it was not just about exercise, "It was a whole total program. And that's what I think didn't come out here. It has to be explained. There's more to it than just getting on the treadmill or running around the track."

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