

Participants' Experiences of a Sexual Counseling Intervention During Cardiac Rehabilitation

A Nested Qualitative Study Within the CHARMS Pilot Randomized Controlled Trial

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Background: International guidelines recommend sexual assessment and counseling be offered to all patients with cardiovascular disease during cardiac rehabilitation. However, sexual problems are infrequently addressed. The Cardiac Health and Relationship Management and Sexuality (CHARMS) intervention is a complex, multilevel intervention designed to increase the provision of sexual counseling in cardiac rehabilitation. It was piloted in 2 cardiac rehabilitation centers to assess the acceptability and feasibility of the intervention and to inform and refine a definitive cluster randomized controlled trial protocol. **Objectives:** The aim of this study was to explore the experiences, perceptions, and opinions of patients, partners, and cardiac rehabilitation staff who participated in the CHARMS staff-led patient education class. **Methods:** A qualitative, descriptive study using semistructured interviews to collect the data. Cardiac rehabilitation staff ($n = 8$) were interviewed when the intervention commenced in their center and 3 months later ($n = 6$). Patients ($n = 19$) and partners ($n = 2$) were interviewed after delivery of the class; 7 were interviewed again 3 months postintervention to explore temporal changes in opinions. **Results:** Most cardiac rehabilitation staff were comfortable delivering the CHARMS intervention but would prefer a less structured format. Some staff perceived discomfort among patients. Few patients reported discomfort. Most patients and partners considered that the intervention was a welcome and acceptable part of a cardiac rehabilitation program. **Conclusion:** Incorporating sexual counseling into cardiac rehabilitation programs is feasible. Although the

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views of the patients and staff diverged on a number of issues including the perceived comfort of patients, its inclusion was welcomed by patients and was acceptable overall to both staff and patients.

KEY WORDS: cardiac rehabilitation, cardiovascular diseases, sexual assessment and counseling, sexual dysfunction, qualitative

This article documents the experiences of patients, partners, and cardiac rehabilitation staff who participated in the Cardiac Health and Relationship Management and Sexuality (CHARMS) intervention pilot study. The CHARMS intervention aims to improve sexuality-related outcomes for patients with heart disease through increasing the provision of sexual assessment and counseling in hospital-based cardiac rehabilitation programs by cardiac rehabilitation staff.

Patients with cardiovascular disease are more likely to experience sexual problems compared with the general population. Sexual problems can negatively impact the well-being and quality of life of patients.¹ Furthermore, partners may experience anxiety or fear as a result of the patient's cardiac condition; sexual concerns are among the most common stressors reported by partners of people with cardiovascular disease.^{2,3}

Sexual counseling provides information, reassurance, and guidance to patients and partners to allay concerns and support a safe return to sexual activity.^{4,5} Patients have expressed a need and a desire for sexual counseling,⁶ and international guidelines support the provision of such counseling to both patients and their partners.² Despite this expressed patient need, sexual health problems are rarely addressed during cardiac rehabilitation.⁷ Two key reasons for this have been identified: first, the personal and sensitive nature of the topic that prohibits patients from raising the issue⁸ and, second, the unpreparedness of health professionals in terms of lack of training, knowledge, comfort, and skills to confidently discuss sexual health problems with their cardiac patients.^{9,10}

The CHARMS baseline study was undertaken in 2013 and examined the prevalence and treatment of sexual problems among patients attending cardiac rehabilitation in Ireland.⁷ Forty-seven percent of the 382 patients surveyed reported no sexual relations in the previous year, and nearly half of sexually active respondents reported at least 1 sexual problem. The study also found, consistent with previous literature, that sexual problems were infrequently addressed during cardiac rehabilitation or in other healthcare contexts for reasons such as lack of education, training, and confidence on the part of healthcare professionals.^{11,12} However, patients reported that they would welcome information and wanted the issue of sexuality to be addressed in an explicit way throughout and after the rehabilitation process by confident and knowledgeable professionals.¹³

After the CHARMS baseline study, Byrne et al developed the CHARMS intervention.¹⁴ The aim of the intervention was to improve sexuality-related outcomes

for patients with heart disease through increasing the provision of sexual assessment and counseling by staff in hospital-based cardiac rehabilitation programs. This is a complex, multilevel intervention targeting both staff and patients, the details of which are described elsewhere.^{14,15} In brief, this intervention includes (a) training and support for cardiac rehabilitation staff, (b) a 30-minute staffed patient education class about sexuality and cardiac disease, (c) a patient information booklet, and (d) an awareness raising poster.

In compliance with guidance from the Medical Research Council,¹⁶ the CHARMS intervention was piloted in 2016/17 to assess its acceptability and feasibility and to inform and refine the planned rollout of the intervention in a definitive cluster randomized controlled trial (RCT). The details of the pilot study protocol are published elsewhere.¹⁴ The added value of incorporating qualitative methods into pilot and feasibility studies and RCTs is increasingly recognized.¹⁷⁻²⁰ Using qualitative methods with pilot or full RCTs enables researchers to capture a more in-depth understanding of the views and experiences of key stakeholders to evaluate the feasibility and acceptability of the intervention, improve the design of future trials,^{17,20} and enhance the understanding and interpretation of overall trial findings.²¹ In the context of this study, a qualitative, descriptive approach was used to provide a more in-depth understanding of the perceptions and experiences of the key stakeholders, namely, patients, partners, and cardiac rehabilitation staff, of participating in the CHARMS intervention and their views as to the feasibility and acceptability of the intervention to inform the future definitive RCT. This article presents the findings from the results of this qualitative component of the CHARMS pilot study.

Setting

The pilot study took place in 2 cardiac rehabilitation centers in Ireland, which provide phase 3 cardiac rehabilitation. Phase 3 cardiac rehabilitation typically starts 4 to 6 weeks postdischarge from acute care, lasts between 6 and 8 weeks, and involves twice-weekly supervised exercise and group-based educational sessions on various topics related to living with cardiovascular disease. Information about sexuality and cardiac disease was provided as part of the cardiac rehabilitation program in one of the participating centers (center 1) and was not routinely addressed in the other center (center 2). Staff from the 2 cardiac rehabilitation centers were invited to attend a 2-hour training intervention

program in sexual counseling. An experienced cardiac rehabilitator, recruited specifically for the study, delivered the training program, which included (1) introducing the rationale for the CHARMS intervention; then (2) introducing international sexual counseling guidelines, (3) the practice of sexual counseling skills, (4) details of the CHARMS patient intervention, and (5) how to implement a plan for the CHARMS patient intervention; and addressing identified barriers to implementation; finally, there was an opportunity for questions and answers. After completion of the training, staff delivered the CHARMS patient intervention: a dedicated 30-minute education class within the existing cardiac rehabilitation program presented through PowerPoint.

Recruitment

Participants in the qualitative study comprised cardiac rehabilitation staff, patients attending cardiac rehabilitation, and partners of patients. All 9 members of the participating cardiac rehabilitation teams who received training on the CHARMS intervention were included in the study and invited to participate in the qualitative interviews; no exclusion criteria were applied. The 6 staff members who delivered the CHARMS patient education class were invited to participate in a second interview 3 months later. All patients who consented to participate in the CHARMS study and who returned a completed survey were included and invited to participate in the qualitative study; no exclusion criteria were applied. Patients whose partners returned a questionnaire were asked whether their partner would consider taking part in an interview and for contact details for that partner. Patients and partners who took part in the interviews were asked for permission to contact them again at a later date for a follow-up interview.

Qualitative Methodology

A descriptive, qualitative approach based on the work of Sandelowski²² (2000) guided the current study. This qualitative approach enables the researcher to stay close to the data facilitating the production of a rich description of participants' experiences.²³ The first staff interviews took place at a point at which those

involved in the delivery of the patient education class had delivered it on at least 1 occasion. All first interviews were individual, face-to-face interviews and took place in the cardiac rehabilitation centers. The development of the semistructured interview guides was based on the aims of the qualitative study, namely, to explore the feasibility and acceptability of the intervention, as well as the participants' overall experiences of participating in the intervention. The interview guides for the staff and the patients/partners were developed to reflect each other, and examples of the questions are presented in Table 1.

Staff members involved in the delivery of the patient education class were invited to take part in second interviews. The second interviews took place a minimum of 3 months after the first interviews and after completion of the delivery of the intervention. The semistructured interview guides for the second interviews were, in the main, individually developed to further probe opinions given during the first interviews. The focus of these interviews was to explore more deeply their experience of participating in the CHARMS pilot intervention and to reflect, through the prism of their experience of the intervention, on comments that they had made during their first interview. Four of the second interviews took place face-to-face, and two were conducted by telephone.

Patients were invited by letter to participate in the qualitative interviews. The letter informed the participants that a researcher would telephone them on a specified date unless they telephoned or emailed to request no further contact. Partners were contacted using the contact details provided by the patients. Patient interviews were also undertaken at 2 time points using semistructured interview guides. These interviews were completed approximately 2 weeks after the delivery of the patient education class within the patients' cardiac rehabilitation program. Interviews took place at a time and place that suited participants. Most of the first patient interviews and one of the partner interviews took place in a private office in the cardiac rehabilitation centers, one took place in a hotel, and 1 patient-and-partner dyad interview took place in their home. The second patient interviews sought to explore any

TABLE 1 Sample Questions

Staff Sample Questions	Patient Sample Questions
How did you feel about your center becoming involved in the CHARMS pilot study?	How did you feel when you were invited to become involved in the CHARMS study?
Regarding the content of the CHARMS program: What worked well? What didn't work well?	Tell me about the content of the class.
What was the response of the group to the class? Did it vary between the groups?	Did it work well as a group session? How was it received by the group?
Did partners attend the session? Why do you think that was?	Did your partner attend? Why/why not?
To what extent would the program be an acceptable/feasible/worthwhile addition to the cardiac rehabilitation program on a permanent basis?	How acceptable/feasible/worthwhile was it for you to receive the CHARMS program as part of your 8-week rehabilitation program?

temporal changes in their perspectives of the CHARMS intervention. All second patient interviews were telephone interviews. Interviews were conducted by an experienced qualitative researcher (M.D.).

Data Analysis

Interviews were audio-recorded and professionally transcribed. Transcripts were imported into Nvivo²⁴ to facilitate data organization, management, and analysis. In keeping with a descriptive, qualitative approach, qualitative content analysis was used to analyze the data. Following a process outlined by Hsieh and Shannon²⁵ (2005), the transcripts were initially read several times to become familiar with the data; open codes were initially used, and then the interview guides were used as a framework for structuring the open coding. The codes were sorted into related and linked categories, which were in turn collapsed under larger categories. The analysis was conducted by 1 researcher (M.D.); a second researcher (D.C.) read all the transcripts and verified the coding and analysis. The rigor of the research was enhanced through this involvement of 2 researchers in the coding and analysis and also by maintaining a clear audit trail detailing the research strategy, data analysis, and findings.^{26,27}

Results

Eight of the 9 staff members who received the CHARMS training took part in the first interviews; 1 staff member was aware that he/she would not be involved in the delivery of the patient education class and therefore did not participate in the first interview. Six of the 8 staff members who took part in the first interviews were involved with the CHARMS intervention for the duration of the pilot study, and these 6 staff took part in the second interviews. The staff members came from a range of healthcare professions including nursing, social work, and occupational therapy.

Successful telephone contact was made with 37 of 42 patients who returned the CHARMS survey questionnaire, and 19 agreed to be interviewed. Nine patient interviews took place over the telephone, and 10 were face-to-face. The length of the interviews varied between 8 and 78 minutes (mean, 40 minutes). Ten participants gave consent to be contacted again with an invitation to participate in a follow-up interview. Seven were successfully contacted again a minimum of 3 months after the first interview to explore changes in their opinions and experiences over time; the other three did not agree to a further interview because they did not feel that they had further information to contribute.

Two partners of patients participating in the CHARMS intervention agreed to take part in an interview; one took part in a joint interview with her partner, and the

other took part in a one-to-one interview. Most patients were not inclined to involve their partners in the study; most commonly, they stated that their partner would not be interested or would not “be bothered.”

The characteristics of the participants are presented in Table 2.

The data are presented by stakeholder group—staff followed by patients and partners—and under 3 themes. A description of these 3 themes is presented in Table 3.

The findings from the staff and patients who took part in the 2 rounds of interviews remained consistent across the interviews, with no changes of view over time identified. Therefore, the data are presented without reference to the time point of the interviews.

Staff Findings

Theme 1: Getting Involved

Generally, staff welcomed the involvement of their center in the CHARMS study. Many were aware of CHARMS from the baseline study, some were interested in the research, and staff in 1 center welcomed the introduction of a new component into the existing cardiac rehabilitation program. Involvement in the CHARMS pilot study was also seen as offering the opportunity to address a topic that some staff perceived as not being fully addressed in cardiac rehabilitation or, indeed, within the hospital generally. However, despite the general welcome for the intervention, some staff were apprehensive and concerned that it might upset patients or make patients so uncomfortable that they would withdraw from the entire rehabilitation program.

But to be giving this very sensitive information...I was dubious as to how well it would be received. (Center2HP4)

I think sometimes raising things with groups, people can be particularly uncomfortable around it [sexual health]. And I think there has been some concern that maybe it might put people off coming into the sessions. That it can be quite off-putting. (Center1HP2)

Theme 2: Experiences of the CHARMS Patient Education Class

The number of staff who delivered the CHARMS patient education class differed between the 2 centers. In

TABLE 2 Participant Characteristic

	Center 1	Center 2
Staff time 1 interviews	n = 4	n = 4
Staff time 2 interviews	n = 4	n = 2
Patient time 1 interviews	9 men age range, 52–76 y mean age, 61 y	8 men, 2 women age range, 43–78 y mean age, 58.6 y
Partner time 1 interviews	0	2 women ages, 43 and 63 y
Patient time 2 interviews	4 men	1 man, 2 women

TABLE 3 Themes

Theme 1: getting involved	This describes participants' reasons for taking part in the CHARMS study and any concerns they had before their involvement.
Theme 2: experiences of the CHARMS patient education class	This describes the perspectives of those involved in delivering the class and those who received the class. Included under this theme are views about the content and timing of the class, the use of PowerPoint as a vehicle to deliver information about sexuality, the response of the group to the class, the involvement of partners, and the issue of follow-up consultations.
Theme 3: reflections	This theme describes the impact that the CHARMS patient education class was perceived to have had on staff and patients and presents the participants' views on the feasibility and acceptability of incorporating the CHARMS patient education class into cardiac rehabilitation programs.

center 1, 2 members of the team delivered the intervention twice, 1 member delivered it 3 times, and the fourth member was available to patients and partners for follow-up consultations including issues related to sexual health. In center 2, a single member of the cardiac rehabilitation team delivered the class, delivering a total of 14 classes; a second member of the team was available for follow-up consultations. The centers also differed in the lead-up to the class. In center 2, the CHARMS patient education class was listed under the "Return to Activities" in the timetable given to patients at the start of their cardiac rehabilitation program and staff did not expand on the content of the class. In center 1, the class was listed as "Resuming Sexual Activity" and staff reminded patients about the topic to be addressed before the class. Staff in this center encouraged patients to attend their exercise class on that day and then choose whether or not they wished to stay and attend the CHARMS class. Some staff in center 1 reported that patients had opted out of the CHARMS class.

Some people came to me and said they're not interested and they were leaving. They didn't wait for it. And that would have happened in every group. They chose not to come? (Participant response): Yea, they chose not to come. (Center1HP1)

However, it was also reported that attendance rates at cardiac rehabilitation programs varied for a range of reasons including work or family commitments, illness, or holidays, and therefore it was difficult to know whether CHARMS impacted on attendance. Both centers positioned the CHARMS patient education class toward the end of the rehabilitation program, allowing group members and staff time to get to know each other or get comfortable with each other.

The group I knew well... If this would be a six-week programme they were in to the end of their fifth week—so they knew me and I knew them. I think that made it much easier. It made, you know, it did make a huge difference, I felt (Center1HP4)

Some reservations were expressed about the standardized CHARMS PowerPoint presentation used to deliver the patient education class, which was considered by most staff members to be quite long and repetitive

with slides containing more text and less images than they would usually use in a PowerPoint presentation. Some considered it a barrier to the flow of interactions within the group, turning the class into a lecture rather than a discussion.

If I'm giving the talk on risk factors, we'll say, I have slides done up, they are mostly photographs and pictures that I talk around. I know that sounds a little bit, like I'm saying they are not capable of understanding but I know it holds their interest more. Plus it allows me to tailor it to the audience...I'll skip through the ones I think are more relevant. And it really creates a more discussion type than a lecture. I just think that has more of an effect on them. (Center1HP3)

In response, some staff reported amending the presentation to suit their own delivery style while retaining the core message. These changes included reorganizing slide sequence, reducing slides while still retaining all the information, and including a film clip.

Staff had little difficulty overall with the content of the educational presentation. However, a concern was raised about the content on hormone replacement therapy and the relative benefits of topical estrogens; it was suggested that this issue was too complex to reduce to advice on a PowerPoint slide. In addition, a number of staff found the slide that focused on the topic of vaginal dryness problematic. They reported that this information was difficult to deliver due to their own embarrassment or the perceived discomfort that this might cause to a mixed-gender group.

...maybe it's me that was uncomfortable just saying it, I can't remember it now like women and lubrication and talking it out like that. Just sounds so, I don't know what the word is, stark or something... I would have said women could have some difficulties after menopause and I would have left that to their imagination. I suppose because I know from saying that as a healthcare professional I know it makes some of the women, there was only two women in the group of men, and they can make the men embarrassed never mind the women embarrassed. (Center1HP3)

Overall, however, although some staff members perceived some discomfort on the part of the patients, "My instinct tells me that they were very uncomfortable

(Center1HP3),” most reported that the class was well received and several spoke of a light-hearted response within the class.

The talk has gone down very well. It’s been actually quite easy with a good few laughs here and there, you know. (Center2HP3)

Nonetheless, many of the cardiac rehabilitators reported that the CHARMS patient education class lacked the interaction that is a feature of classes within cardiac rehabilitation because they felt that the presentation stimulated little discussion. They also reported that the presentation prompted few questions and those that were asked were mainly about medications.

In line with international guidelines, staff were asked to extend a specific invitation to partners to attend the CHARMS class; however, none reported that they did so. Staff described that partners rarely attended any of the classes in the cardiac rehabilitation program that were open to them; only 1 partner attended the CHARMS class, and she attended most of her husband’s rehabilitation classes. Staff suggested that patients would be reluctant to include their partner in a class focusing on sexuality in case it would lead to the unwelcome interpretation by others that a couple was experiencing sexual difficulties,

But I think people are very aware that if they brought a partner in that it would look like they were putting up a red flag saying, yes, you know, we’re attending this talk because there’s something wrong here. So it’ll look very conspicuous. (Center1HP2)

Staff were also asked to encourage patients to talk with a member of the cardiac rehabilitation team if they had further questions or concerns about sexual problems after the CHARMS patient education class. Staff in both centers reported a reduction in patients approaching them with sexual queries, with only 1 patient availing of the invitation to follow up.

Theme 3: Reflections

Reflecting on their experiences of the CHARMS intervention, many cardiac rehabilitators recounted the impact the program had on their practice in terms of raising awareness and prioritizing sexuality and intimacy as an issue. Others felt that their involvement in the intervention gave them the opportunity to examine their own preconceptions and unease about raising the issue with some patients.

And I suppose partly about looking at my own assumptions. Like one of them was widowed and yea trying to look at my own perceptions and expectations and assumptions and say am I right to actually not be asking people questions. Or is it more my discomfort that’s giving me an opt out. (C1CR2)

The most commonly cited benefit that staff members considered might accrue to the patients was that of

awareness. The CHARMS was also seen as an acknowledgement and normalization of the issue of sexual problems, which might empower some patients to address further in their own way and in their own time.

I think even by raising it, it basically gives people the chance to consider whether or not they want to respond.... I think it does give people a sense of, okay it’s not just me.... Even if it may not be one of their priorities at the moment. Or it might not be something they feel comfortable talking to us about. But maybe in time to come it might more of an issue they’ll want to look at. And hopefully if they don’t talk to us about it they might talk to the GP, or another professional. (C1CR2)

Likewise, it was felt that the CHARMS intervention was a support to patients, particularly older patients, because it provided them with the language to discuss the topic should they wish to in the future.

...now people have the language, because a lot of elderly people may not have had the language...And at least they have the language now, and that they know it can be broached in a constructive manner. And they know it can be brought up with the doctor or a nurse again at some stage, and I think that is very good to give them—it is a good thing to have it covered. (C1CR4)

All staff agreed that sexual counseling was an appropriate topic in cardiac rehabilitation programs. Staff in center 2 strongly supported the content and format of the CHARMS class and are committed to including it as a permanent component of their cardiac rehabilitation program in the future.

It is something I am going to keep going.... I probably may not change it that much but the information is good, it goes across to the patients well and I’m definitely going to continue with it. And I think us, as a team, we all agree that it was a very worthwhile thing to be involved with and that it is something we should continue with. (Center2HP5)

However, staff in center 1 were more circumspect about the inclusion of the patient education class. Most reported that a once-off class on sexual health was insufficient and felt that the topic should be integrated during the entire rehabilitation program. They also reported that sexuality was addressed in their cardiac rehabilitation program before CHARMS, although in a less formal, structured way, and, for most, that approach was preferable.

I still have a big question mark over it and at the moment I’m kind of against the whole sit-down, I’m going to tell you all about sex in a didactic way. It doesn’t sit well with me but I don’t think, I think it makes me uncomfortable, that’s my own way of thinking.... It’s out of kilter with the rest of the program to be honest. (Center1HP3)

Patients’ Findings

In the next section, the findings from the patient data will be presented under similar thematic headings as that of the staff data.

Theme 1: Getting Involved

Patients reported that they chose to “get involved” and participate in the CHARMS study for altruistic reasons in the belief that their involvement “might be useful, beneficial to someone maybe” (Center2Patient23) or because of a sense of gratitude or debt to health services or an interest in research or the generation of knowledge. Although almost one-third of the patients spoke of getting involved because they were experiencing sexual problems, most patients and their partners, including those who were experiencing sexual difficulty, reported that they had been unaware of the connection between sexual function and cardiovascular issues.

That they [cardiac patients] can have problems after a cardiac arrest which frankly is something that I would never have thought of. It wouldn't have occurred to me. (Center1Patient13)

Theme 2: Experiences of the CHARMS Patient Education Class

Most patients tended to view the educational class as simply one of the many classes that they attended during cardiac rehabilitation.

So we've had a lot of presentations. They all tend to blur into each other but the presentation certainly didn't strike me as being anyway, you know, out of the ordinary. Just like you might have dietary problems maybe or you know other problems. This is just one of the things that can happen so it fitted in. (Center1Patient13)

Patients generally considered the class content to be comprehensive; however, a few criticized the content for lacking detail and for being “light” or “basic.” Nevertheless, the straightforward approach and directness in dealing with sexual health was welcomed.

Whoever had presented it had just said, ok listen we're all grown up here, let's not try to use too many euphemisms, let's just get in here and call a dog a dog, you know kind of thing. (Center1Patient10)

Patients did not identify any of the topics covered as difficult or inappropriate, and no patient reported being aware of any patient deciding not to attend the CHARMS class.

Nobody dropped out or nobody said they didn't want to take part in it or, you know, anything like that. (Center1Patient13)

In contrast to the perception of some of the staff, most patients stated that they were not discomforted by the topic or content of the class and that they did not detect discomfort or embarrassment from others.

I don't get embarrassed at that sort of thing.... there was a girl in the class as well and I didn't think she was embarrassed either to be perfectly honest. But I wasn't, and I didn't notice anybody else squirming in their seat or anything like that. (Center1Patient13)

Patients generally described the CHARMS class as relaxed and comfortable and reported that the presentation prompted discussion and questions.

We were all quite comfortable and there was discussion and questions. (SJPT017)

A commonly reported response to the class content was laughter, and it was suggested that humor was a predictable and natural response to a discussion about sex and that it served to alleviate embarrassment and thereby promote discussion.

There was a few times when...we were like giggling teenagers ourselves. And it's a kind of, I think it's a natural reaction when you are talking about sex.... the ladies were coy and all the gents were giggling. But no, the information came across well. And there was a good discussion because of the fact that there was an element of humour attached, unintentional humour attached to it, it actually lightened the [atmosphere].... (Center1Patient10)

The skills of the staff delivering the class were identified as key to the positive response of the group.

I thought the person who gave it was brilliant. Because she had a very personal touch, she is just a nice warm unembarrassed sort of person and witty as well. You know, she could actually be witty at times and all of that helped, you know, to keep us all unembarrassed and to keep us all interested. (Center1Patient17)

Consistent with the opinion of the staff members, patients felt that positioning the class toward the end of the rehabilitation program was very important because, by this time, staff and patients knew and were comfortable with each other.

...but to me to have ten or fifteen strangers talking about, you know, problems with erections, problems with vaginal problems with, you know, all that type of thing—I don't think it would have went down well...basically they are all on first term names now, and you have a bit of a joke, and you do your thing, and I think it was much easier to lay it out then, and to ask the type of questions to people, once they were comfortable with one another. (Center1Patient19)

A group setting rather than a one-to-one consultation was considered, by most patients, to be the optimal way of delivering the patient education class on sexuality. They spoke of the security that a group setting offers and the advantage of having queries answered and posed by others without having to ask the question themselves.

...in a group situation there they feel the comfort of the group or hiding in the group—they can be looking aloof but still engaging and getting the information...and nobody is going to feel isolated or singled out. (Center2Patient5)

...what I found in the group session is that what you do is, you feed off other people, you know?...—I mean there was a couple of questions I didn't have to ask because someone else asked them before me, so I got the answer even though I hadn't asked the question. (Center1Patient19)

However, the class was criticized by some participants as “couple focused” and therefore not inclusive of people currently not in an intimate relationship.

...it seemed to assume that everybody had a partner. And I was sitting there, and I hadn't got a partner, you know, ...even just to say that, that perhaps one or two of you are not in a relationship, but that doesn't mean you won't be. Because, you know, I think just those few words would make a difference. (Center1Patient17)

Patients from each center also suggested that information given in the class should be supplemented by written details about how further advice or support could be accessed, although patients in 1 center reported receiving repeated assurances that a particular member of the team was available to offer individual advice or support.

Oh yes she was very, explicit on that, she gave them all the information, she told them if they didn't feel comfortable speaking, ...that there is people there that they can ring and they'll go one-to-one with them, ... (Center1Patient19)

Patients from the other center did not report such assurances.

...I got the impression that a topic was brought up and it was dealt with but there was a feeling of a full stop at the end. You know, the information has been provided now. (Center2Patient5)

No patient recalled receiving a specific invitation for their partners to attend the CHARMS patient education class. However, as with staff, patients were concerned that the presence of a partner could be construed as an indication that a couple was experiencing sexual difficulties. Patients also feared that it would cause embarrassment or would negatively change group dynamics.

I think partners would probably be a bit embarrassed in a group like that...somebody coming in that they wouldn't know the other people in the group and might feel a bit embarrassed. (Center1Patient13)

Theme 3: Reflections

The key benefits identified by patients were a heightened awareness of the connection between sexual function and cardiovascular health and the knowledge that help was available if needed.

You are made aware of a problem that could happen, may not happen but could happen and if it does happen, you have somebody to go and talk to about it. (Center1Patient13)

Patients experiencing sexual difficulty spoke of the reassurance of realizing that such problems were not unique to them.

Believe it or not, it does take a weight off your shoulders because you know you are not the only one. (Center1Patient5)

Whether or not they were experiencing problems, most patients believed that a class on sexuality was an

important and a natural inclusion in cardiac rehabilitation, and some commented that cardiac rehabilitation would be incomplete without such a class.

Yeah, so I think it's a perfect situation to have it is in cardiac rehab.... I think it's a necessary thing for people because you know there was a lot of talk about holistic health and holistic health sometimes overlooks sexual health. And the fact that CHARMS is dragging sex by the scruff of the neck into a general discussion of overall health, I think is brilliant.... To my mind, if the CHARMS element of the cardiac rehab isn't there then it's not complete rehab because you're overlooking one very important element of people's health and that's sexual health. (Center1Patient10)

Discussion

The value of qualitative research in trials is increasingly recognized.²⁸ Qualitative methods in pilot studies contribute important feedback not captured through other methods and help inform the further development of full trials.¹⁹ The juxtaposition of the perspectives of staff, patients, and partners in a single article provides a unique insight into the experience of participating in a sexual counseling intervention from the perspective of those delivering and those receiving the intervention. The views of the staff and the patients deviated on a number of important points emphasizing the value of the multiperspectival approach. Overall, the findings demonstrate that the inclusion of the CHARMS staff-led patient education class was feasible and largely acceptable to the cardiac rehabilitation staff, patients, and partners and gives support for the normalization of sex education in cardiac rehabilitation.

The 2 centers and the staff involved in this pilot study approached and delivered the intervention as intended but did so differently. These differences included the amount of information given to patients before the class, modifications made to the presentation, and the number of healthcare professionals involved in the delivery of the patient education class. Some staff members compressed the number of slides in the presentation while still delivering all the information, and this, and other modifications such as inserting a film clip, served to make the delivery more compatible with their personal education style. The CHARMS intervention was pragmatically designed to have the potential to be implemented into general health services and to be feasible for health professionals to deliver.²⁹ Cardiac rehabilitation centers in Ireland vary in size and multidisciplinary staffing mix,^{30,31} and cardiac rehabilitation programs vary by center.¹⁴ The 2 centers involved in the CHARMS pilot study were diverse in their size and in the populations that they served, and the differing approaches to the intervention were instructive. Context level adaptations within trials do not necessarily constitute a threat to the integrity of an intervention,³² and through the development

of clear parameters and reporting procedures, interventions can be designed to accommodate a degree of tailoring.¹⁶ Indeed, complex interventions may work best if tailored to local circumstances rather than being completely standardized.¹⁶ The modifications made by staff in this study will be reviewed and will usefully inform the development of the planned definitive trial of CHARMS.

Whereas previous studies have reported healthcare professionals' reluctance or difficulty with providing sexual counseling,^{10,33} staff were, on the whole, comfortable with delivering the content of the patient education class on sexual health. Nevertheless, some concerns persisted that a discussion on sexual matters might embarrass or make patients uncomfortable. Such concerns are similar to the findings in other studies.^{34–36} However, these concerns do not reflect the experience of the patients who attended the class, and the findings indicate that most patients perceived the inclusion of sexual counseling as a normal and unremarkable component of cardiac rehabilitation and as a natural component of a comprehensive cardiac rehabilitation program. Although many staff reported that patients did not engage in much discussion or ask many questions during the class, patients were more inclined to report a relaxed and engaged class that prompted both questions and discussion. During the study, a staff member commented that cardiac rehabilitation was a menu from which patients selected the information and advice of personal relevance to themselves, and this seems to accurately reflect the attitude of most patients. Patients may benefit from information that is relevant to themselves and may be interested or even amused by information that is not of immediate relevance to them, but the data in this study suggest that they are unlikely to be upset or offended. These findings suggest that patients' sensitivities may be more robust than some healthcare professionals realize and healthcare professionals can address issues of sexuality with increased confidence that the information provided will not cause distress.

A group setting was considered by most patients to be a positive and safe context for the imparting of information about sex. Various benefits included the security of not being singled out for individualized information and the potential of having one's questions answered without having to ask. Positioning the class toward the end of the rehabilitation program was identified by both staff and patients as a key strategy enhancing the acceptability of the class because participants had built up a rapport with each other and a positive group dynamic had been established.

The findings from this study add an interesting insight into the inclusion of partners in sexual counseling in cardiac rehabilitation. Partners of cardiac patients may be significantly impacted by sexual difficulties, and international guidelines recommend the inclusion of

partners in sexual counseling.^{2,3,12} Cardiac patients and their partners have previously reported a preference for receiving information and support as a couple.³⁷ However, there was a consensus of opinion between staff, partners, and patients in this study that the presence of partners could have a negative impact on the dynamic and comfort of the group. Importantly, it was also suggested that the attendance of a partner could be construed as an admission of a sexual problem and that people would be unlikely to expose themselves to the possibility of such an inference. Given the importance of the provision of sexual counseling for partners, it is clear that consideration must be given to how to adequately cater for their needs.

The concern raised by some patients that the class was "couple focused" is an important one for future development of the CHARMS intervention. Current sexual activity is not an indicator of potential future sexual activity,³⁸ and it is therefore important to avoid alienating or distressing patients who are not currently in an intimate relationship. The authors found that there was little unease or embarrassment reported by patients not currently sexually active or by those who did not expect to be sexually active in the future, reflecting the findings of previous research.³⁹ It is therefore important to consider how adjustments could be made to the intervention to make it more explicitly inclusive of those not currently in a relationship.

All participating staff were committed to the ongoing provision of sexual counseling as part of their cardiac rehabilitation program. The staff in 1 center had previous training in sexual counseling and reported that they already provided much of the information contained in the CHARMS intervention, albeit in a less structured format. Cardiac rehabilitation staff from this center were therefore less inclined to envisage implementing the CHARMS format in its entirety in the future. It may be that the CHARMS intervention may have more value to cardiac rehabilitation centers currently not offering sexual counseling as a routine component of cardiac rehabilitation.

Finally, all staff were to offer patients contact options to avail of follow-up or more intensive help if required. However, a number of patients clearly were unaware of this because they highlighted the absence of an explicit follow-up pathway as a deficit of the CHARMS intervention. In future, therefore, the availability of follow-on support needs greater emphasis and patients should be provided with relevant contact details.

Conclusion

This study provides an in-depth insight into the experiences of patients and cardiac rehabilitation staff who participated in the CHARMS pilot study and their perceptions and opinions of the staff-led patient education

What's New and Important

- A structured intervention addressing sexual activity in cardiac patients such as CHARMS is an acceptable and feasible inclusion in cardiac rehabilitation. It may be of particular value in centers that do not currently provide sexual counseling as an integrated part of the rehabilitation program.
- Patients and partners may be reluctant to involve partners in a sexual counseling intervention in cardiac rehabilitation in case it is perceived as an admission that they are experiencing sexual difficulties. Patients and staff also suggested that the attendance of partners might upset the comfortable dynamic of an established group.
- Patients characterized sexual counseling as a normal and necessary component of a cardiac rehabilitation program, and most considered a group setting as an appropriate context for such counseling.

class on sexual activity. This qualitative study identifies that the class is an acceptable and feasible added component of cardiac rehabilitation. Overall, patients were very positive about the class, characterizing it as both acceptable and necessary. Likewise, cardiac rehabilitation staff were also largely positive, although they would welcome more opportunity to tailor the patient education class presentation to their own teaching style and the particularities of the patients attending their program. It is noteworthy, however, that the opinions and perceptions of the staff members and patients diverged on the response of the patients to the patient education class on sexual activity and their level of comfort with it. However, the concerns of some staff that the inclusion of the class would cause distress to the patients were not realized, and the findings give support for the normalization of a discussion about sex in cardiac rehabilitation programs. The findings of this study provide important data, which will help shape and refine the CHARMS intervention in advance of a future definitive trial.

Limitations

The experiences and opinions in this study were those of rehabilitators in 2 cardiac rehabilitation centers and a small number of patients. These centers chose to participate in the CHARMS pilot study and may therefore have had a particular interest in, or openness to, patients' need for sexual counseling. The participants self-selected when agreeing to be interviewed, and their opinions and experiences may not reflect those who did not agree to be interviewed. Nevertheless, the study provides important insight that will inform the further development of a definitive trial of the CHARMS intervention and may also have relevance to the development of other structured education sexuality classes in health-care settings.

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