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# The Cardiac Health and Assessment of Relationship Management and Sexuality Study

## A Qualitative Inquiry of Patient, General Practitioner, and Cardiac Rehabilitation Staff Views on Sexual Assessment and Counseling for Cardiac Patients

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**Background:** Sexual dysfunction is a problem for some patients with cardiovascular disease. This study was the final phase of the Cardiac Health and Assessment of Relationship Management and Sexuality (CHARMS) study of sexual function, assessment, and counseling for people with coronary heart disease in Ireland. **Objectives:** The aim of this study was to explore the perspectives of patients, cardiac rehabilitation staff, and general practitioners on the provision of sexual assessment and counseling within Irish health services and how it can be optimized. **Methods:** Group interviews with cardiac rehabilitation staff (n = 14) and patients (n = 13) and telephone interviews with general practitioners (n = 9) were conducted. The interviews were semistructured, digitally recorded, transcribed verbatim, and analyzed using qualitative, descriptive analysis. **Results:** All 3 stakeholder groups reported that the problem of sexual dysfunction among cardiac patients was an important issue that was underaddressed in practice. Patients want the issue to be addressed in an explicit way throughout and after the rehabilitation process by confident and knowledgeable professionals. Cardiac rehabilitators widely acknowledged the role that they could play in the provision of sexual assessment and counseling, but many were constrained by a perceived lack of knowledge and confidence. Most cardiac rehabilitation staff would welcome relevant guidelines and training. General practitioners were unlikely to initiate a discussion about sexual dysfunction; however, most were confident that patients would be comfortable in raising it. General practitioners would welcome more awareness raising but did not identify a need for specific training or resources. **Conclusions:** Perspectives differed both across and within stakeholder groups about current services and the development of future services. A disconnect exists between the service that the professionals perceive they give and that experienced by patients. Sexual assessment and counseling should be addressed more explicitly, and patients should be empowered to seek individual assessment and counseling at a time that is appropriate for them.

**KEY WORDS: cardiac rehabilitation, heart disease, qualitative, sexual assessment and counseling, sexual dysfunction**

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Sexual dysfunction is a problem for some patients with cardiovascular disease.[1,2] Both male and female cardiac patients and their partners may experience a loss of libido and a reduction in the frequency and level of satisfaction with sex. Whereas men report problems with erectile dysfunction, significantly less is known about female sexual dysfunction after cardiovascular disease.[3] Sexual dysfunction negatively impacts on mood, quality of life, and interpersonal relations.[4,5]

The Princeton Consensus Panel provides a risk stratification algorithm for the safe management of cardiac patients and sexual problems.[5] Most patients fit into the low-risk category, which means they can safely initiate or resume sexual activity within a few weeks of a myocardial infarction and should be encouraged to do so. Recommendations on when patients with an uncomplicated myocardial infarction can resume sexual activity vary from between 1 week to up to 8 weeks.[6]

The importance of sexual counseling for cardiac patients who experience sexual difficulties has been established, and lack of such provision may have long-term consequences for both patients and their partners.[6] Research has identified that patients are generally receptive to, and desiring of, assessment and counseling for sexual problems[7,8] and increasingly willing to discuss sexual concerns with healthcare providers.[9] Patients who receive sexual treatment or counseling may have increased confidence, reduced fear, and a higher rate of return to sexual activity than those who do not.[6,10] Receiving sexual counseling may enhance the quality of life of cardiac patients and their partners.[11] However, adequate sexual counseling is not frequently provided[1,4,6]; health professionals rarely address the issue with patients, and patients themselves are inhibited from initiating the discussion. Barriers to providing sexual counseling as identified by health professionals include too little time, lack of knowledge or training, negative attitudes and beliefs about sexuality, fear of offending patients, a perception that it is someone else's job, patient's lack of readiness, sexuality not seen as a problem by health practitioners, patients perceived as too ill to address sexual issues, concerns about increasing patient anxiety, and discomfort in discussing the topic and views about the inappropriateness of sex in later life.[1,4,12] Barriers for patients include feeling embarrassed or believing that the physician is not experienced enough to understand the patient's concerns[12] and stereotyped attitudes relating to age and gender.[13] Patients also experience barriers to taking the initiative to raise the issue of sexual problems, including shyness and embarrassment and also patient perceptions of the healthcare providers' time constraints. In addition, older patients express concern about perceptions that sexuality may be considered inappropriate at their age.[14]

The aim of this study was to explore the in-depth experiences of, and beliefs about, sexual assessment and counseling for those with coronary heart disease. We aimed to get views from 3 stakeholder groups in the cardiac pathway: patients with coronary heart disease, health professionals working within hospital cardiac rehabilitation, and general practitioners (GPs). This study was the final phase of the Cardiac Health and Assessment of Relationship Management and Sexuality (CHARMS) study, which has previously reported results of surveys with nationally representative samples of patients, cardiac rehabilitation staff, and GPs.[1,4]

## Methods

The methods for phases 1 and 2 of the CHARMS study have been previously reported.[1,4] This current study involves a subgroup of the participants from the earlier phases. All the interviews in this study were conducted by a trained and experienced qualitative researcher with considerable experience of focus group facilitation (M.D.); the focus groups were cofacilitated by a second experienced researcher (M.B. and S.D.).

### Participants and Settings

#### Patient Focus Groups

Two focus groups were conducted with patients (see Table 1 for description of participants), selected from 2 geographically distinct areas in Ireland. During an earlier phase of the CHARMS study, patients had completed a one-to-one telephone interview about their experiences, as cardiac patients, of sexual assessment and counseling and had volunteered to be contacted with an invitation to a focus group. A total of 66 patients (of 382) agreed to such further contact. Inclusion criteria for the initial interview study were that they were older than 18 years and had attended cardiac rehabilitation services in the hospital center in the previous 2 years but not within the previous 2 months of data collection. In the first focus group area, all contactable patients were invited; patients in the second

**TABLE 1 Characteristics of Patient Focus Groups**

| | Number of Participants Invited | Number of Participants | Gender | Age, Range, Mean, y |
|---|---|---|---|---|
| Focus group 1 | 17 | 7 | 6 men, 1 woman | 43–73, 65 |
| Focus group 2 | 24 | 6 | 5 men, 1 woman | 58–79, 65 |

focus group area were selected for invitation to maximize diversity in gender, age, geographical location, and hospital in which they received their cardiac rehabilitation. Patients received an invite letter and a participant information sheet and were telephoned by the researcher 1 week later to discuss and confirm participation. The focus groups took place in a convenient location for the patients. Patients who attended the focus groups were given €50 gift voucher as a token of appreciation.

The focus group method was chosen because of its potential to generate rich data through the interaction of the individuals in the group and for the security it can offer the participants when the topic is a sensitive one.[15] When it became clear that there would only be 1 woman in each of the focus groups, the researcher informed the women by telephone and offered them the opportunity to withdraw. Both women said that they believed that the topic was important and that they were happy to attend. Throughout the focus groups, the researcher was alert to any signs of distress or discomfort on the part of any of the participants. However, all the participants in both patient focus groups participated confidently, and at the conclusion of both groups, the participants thanked the researchers for giving them the opportunity to have the discussion and voice their opinions.

### *Cardiac Rehabilitation Staff Focus Groups*

Three focus groups of cardiac rehabilitation staff from 3 hospital centers took place (see Table 2 for description of participants). The focus groups took place in the participants' workplace at a convenient time of their choice. Each focus group lasted approximately 1 hour.

### *General Practitioner Interviews*

Nine GPs took part in a telephone interview. The 61 GPs who took part in an earlier phase of the study were invited to participate in an interview. The GPs received a letter of invite, and 11 agreed to a telephone interview. The interviews lasted between 7 and 25 minutes (mean, 15 minutes). Two of the GPs were women and 7 were men; the GPs were geographically spread throughout the country. Interviews, rather than focus groups, were conducted with the GPs because it was impractical to organize focus groups to suit GPs, who were dispersed so widely around the country.

## *Data Collection*

The initial, semistructured interview schedules were developed from the data generated in the earlier phases of this study[1,4] and from the literature; questions evolved to reflect responses or points of interest in the interviews. All interviews and focus groups began by asking the participants to reflect and comment on findings from phases 1 and 2 of the CHARMS study, which were presented at the start of the focus groups (to patients and cardiac rehabilitation staff) or posted in advance of the telephone interviews (to the GPs). The presentation of the findings worked to set the context of the discussion and as an icebreaker, and the first question in the focus groups looked for the participants' response to the findings from the earlier phases. The focus group schedule comprised open-ended questions and provided a framework for the discussion, but the format was not directive and the participants interacted conversationally. The patients were asked to discuss their own experiences of sexual assessment and counseling and how they would like to see services develop. The service providers were asked about their experiences of assessing and counseling cardiac patients in practice, the barriers that they perceive, and how they would like to see services developed. Clarifying and probing questions were used to prompt deeper reflection on specific points. The interview schedules are presented in Table 3.

The information in previously published guidelines on sexual assessment and counseling was summarized and provided to health professionals in a short document circulated during the focus groups (for the cardiac rehabilitation staff) or posted in advance of the telephone interview (for the GPs). The interview schedules for the health professionals included questions about their perceptions of the guidelines and their views on the value of such guidelines within their services. The patients were not given a copy of the guidelines before the focus groups, in case their discussion was

**TABLE 2 Characteristics of Cardiac Rehabilitation Staff Focus Groups**

| | Number of Participants | Gender | Profession |
|---|---|---|---|
| Focus group 1 | 3 | 3 women | 3 cardiac nurse specialists |
| Focus group 2 | 4 | 3 women; 1 man | 1 cardiac coordinator, 1 medical social worker, 1 physiotherapist, 1 occupational therapist |
| Focus group 3 | 9 | 9 women | 2 CNS heart failure, 1 CNS cardiology, 1 CNM cardiology, 1 A/CNM cardiology, 1 CNMs, 1 cardiac rehabilitation, 1 SN cardiac rehabilitation, 1 staff nurse coronary care |

Abbreviations: A/CNM, acting clinical nurse manager; CNM, clinical nurse manager; CNS, clinical nurse specialist; SN, staff nurse.

**TABLE 3 Interview Schedules for Patients, Cardiac Rehabilitation Staff, and General Practitioners**

Patient interview schedule
1. Healthcare providers often seem to think that patients don't want sexual issues to be raised or that they are too ill for this conversation, whereas about half the patients said that they would have liked the issue to be raised. What would you say to that?
2. What do you think patients should be told? Were any of you given any information of this sort?
3. When should patients be given this information? Who should give it?
4. Where: cardiac rehab? GP clinic? Other? Why there?
   a. Would you like to discuss it in a group situation or one-to-one?
   b. Would you like partners to be involved in the discussion?
5. How would you like to be given the information?
6. Do you think that we have covered everything? Is there anything that we have left out?

Cardiac rehabilitation staff interview schedule
1. Did anything surprise you in the results of phases 1 & 2 as outlined by [researcher]?
2. It would seem to be the case that patients would like more opportunity to discuss sex than is currently, generally available. Is it the role of cardiac rehabilitators to provide this opportunity?
3. What currently works within cardiac rehabilitation?
4. Would training make it easier for cardiac rehabilitators to address sexual assessment and counselling?
5. Should this topic be addressed in a group setting or a one-to-one?
6. The use of guidelines—experiences of using them? General awareness of them?
7. Do you make any resources available to patients? In general? About sex?
8. Do you ever refer patients on? Where are they referred to? Issues around referral? Solutions to issues?

General practitioner interview schedule
1. If you had a chance to look at the findings of phases 1 & 2, did anything surprise you in the results
2. It would seem to be the case that patients would like more opportunity to discuss sex than is currently, generally available. Is it the role of GPs to provide this opportunity?
3. What currently works within your service?
4. GP and cardiac rehabilitators roles? How much communication happens between cardiac rehabilitation and GPs.
5. Would training make it easier for GPs to address sexual assessment and counselling?
6. Do you make any resources available to patients? In general? About sex? Example good resource?
7. Do you ever refer patients on?

Abbreviation: GP, general practitioner.

influenced by the content, but were given a copy at the conclusion of the focus group.

### Data Analysis

This study used a qualitative, descriptive design to produce a rich description of the stakeholders' experiences and opinions.[16,17] The digitally recorded interviews were transcribed; the transcripts were read then reread with open coding applied to the data. The open coding and data collection took place concurrently forming "an integrated activity."[18] When data collection and open coding were complete, the coded data were compared and sorted into categories and themes.[19] Before the development of the content description, the transcripts were read again to ensure that the analysis was true to the data.[20] Validity was ensured through peer discussions with another researcher on the project (M.B.) and through the use of substantial quotes, thereby maximizing the participants' voices in the analyzed data.

### Ethical Approval

Ethical approval for the CHARMS study was given by the National University of Ireland Galway Research Ethics Committee. All focus group participants signed consent forms before the start of the discussion.

## Results

The findings are grouped under the headings of the 3 stakeholder groups of patients, cardiac rehabilitation staff, and GPs and presented as themes. The theme of "barriers" is common to all 3 stakeholder groups, and the cardiac staff and GP have a number of other themes in common such as "gender" and "training and protocols." Otherwise, the themes are those that were most pertinent to the stakeholder group and reflect their specific perspectives.

### Patient Focus Groups

#### Early Stages

After a cardiac event, patients found themselves in uncharted waters and in need of information:

> None of us have been here before, thank God, we didn't have heart attacks before, we don't know what to experience. The literature hasn't told us what we should experience. The practitioners haven't told us what our limitations or expectations should be. We haven't been over 60 before so we don't know how active or inactive we should be. So I mean it's a whole new ball game, even

if it was discussed and though with the experience, the practitioners in this case would be able to say well, you know, there are limitations and sexually active and maybe once a week or once a month or whatever they say is satisfactory or maybe not at all if you've had a serious heart attack. I mean those kind of things or topics or discussions would be helpful. (P16)

Most patients were very clear that the issue of sexual activity had not been raised with them after their cardiac event:

They didn't say anything about sex. They never mentioned it. (P18)

Interestingly, 2 patients who had attended cardiac rehabilitation at the same center and within a year of each other described different experiences; 1 reported that the topic was covered and another said that it was not mentioned at all within the program.

### *Timing*

Patients spoke very highly of cardiac rehabilitation in general, and most considered that it was a very appropriate place for sexual activity to be discussed, succinctly put by 1 patient, thus, "that is the place because it is your rehabilitation" (DP28). Nonetheless, patients did not identify that there was 1 optimal point at which the subject should be addressed, and several opinions were offered on the subject. In the case of a planned procedure, some thought it should be raised beforehand, although the opinion was also voiced that at that time "you've enough worries."

For 1 patient, the timing made a difference to his reaction to the subject being broached, when first asked on the ward if he would mind "discussing your sex life" and he considered the question to be inappropriate in such a public place. However, sometime later, he felt free to have the discussion:

But then after a while, I didn't feel as embarrassed, and when she came back around again to check me medication, I said right, we can talk about it. (P210)

Patients identified that their recovery was a process and there were stages during which the resumption of sexual activity was not of current concern to them:

I mean it certainly wasn't on any priority list of dos and don'ts. (P15)

Therefore, the usefulness of a discussion about sexual issues may be dependent on the physical and psychological state of the individual in his/her recovery journey and patients recommended that the subject should be addressed repeatedly so that they could chose that right time, for them, to address the issue further:

I think it should be volunteered first of all and decided for, you know, up to the individual to decide themselves where they're at, if they feel, what they could do with it or if they'd like more information or whatever. (P121)

Raising the issue, even when patients were not ready to engage with the subject or with the subject in that particular setting, was said to be important also in "normalizing" the subject and making it clear that it was a topic that could be discussed. It served to open the subject up for discussion:

That would be the place to get it up and running. Just to kind of open up the book on it. (P215)

### *Information Needs*

Patients recognized that some of their cardiac rehabilitators may consider that they have addressed the issue of sexuality. Such attempts were usually in the context of discussions about exercise or stress:

I would say the cardiac or rehabilitators probably feel they have the area covered, the topic covered in a way maybe a distant way by their emphasis on what you can do and your limitations with regards to stress and activity, maybe in a veiled way they feel they have adequately covered the topic. (P14)

Patients wanted the information on sex to be clear, specific, and directive. Patients discussed the perceived tendency of healthcare professionals to advise them to return to sexual activity when they, themselves, felt that they were ready to do so and described that they did not feel well enough informed to make this decision and feared the consequences of an ill-informed decision:

…it's always put back on me, whatever you're comfortable with yourself but you could be doing a lot of harm even if you're comfortable with it for a while. (P113)

Without the information that they need, some patients were left feeling very vulnerable:

I was nervous, I was very nervous now I have to say…you're afraid, yeah, you are actually afraid. (P29)

Patients were open to the discussion from providers and saw the more general information as not personalized enough; information that was not individualized was perceived to be of limited value:

Well personalised certainly, oh it has to be, because if it's not personalised, I mean there is no point in telling me what he's capable of. I mean this is what I'm saying, it has to be individual because it has to refer to the, capability of the individual. (P123)

Some patients identified that such an individualized discussion of sexual function should include partners. This would have the dual advantage of allowing a couple to discuss issues most relevant to them and may also serve to alleviate concerns about sexual activity. After a myocardial infarction, the fears of partners and other family members lead them to being overprotective toward the patient, and this may extend to the sexual arena based on an overanxious interpretation of advice received:

> The one thing you're told coming out is to take things easy and, of course, your partner, let it be man or woman can take it up wrong. (P219)

### *Barriers*

Patients themselves may be reluctant to bring the topic up because of their perception that the reason it had not been addressed by a health professional was a personal one and that those professionals believed that it was not appropriate for them to be sexually active at their age:

> They probably say, well I'm not going to tell this guy now about, …sexual activity you know, when they look at my age maybe, you know. (P111)

In such instances, the patients' reluctance to initiate the discussion is reinforced by their interpretation of the silence surrounding the subject, reading into it a belief on the part of the health professional that sex is inappropriate for them because of their age.

Patients largely wanted to be given or directed to sources of information that specifically address the issues for cardiac patients. Most lacked skills and/or confidence about using the Internet to search for information, but even those with the skills were skeptical about the quality of the information they might access:

> I suppose I would be reasonably okay on the computer and the Internet and everything but I reckon you have to take everything with a pinch of salt that you read because you don't know. (P117)

### *Patients' Experiences of General Practitioners and Nurse Practitioners*

Outside the context of cardiac rehabilitation, patients identified that GPs and nurse practitioners were preferred sources of support and information. However, the extent to which patients considered that they could turn to GPs and nurse practitioners depended on their perceived relationship with them and also the constraints of their appointments. Patients can find it difficult to bring up the issue of a sexual difficulty because they think it will be outside the remit of a particular appointment and are very cognizant of the pressures that GPs are under:

> …but the GPs are so blooming busy that they just want to hear what you have to do and they'll give you a diagnosis and let you go and the one question I would love, I always wanted a GP to ask me was, is there anything else worrying you? And I think they're afraid to ask that question in case you start off or maybe I would or other people and give them a whole big long story which they're not prepared to listen to at all. But if they said, if you went in and they said is there anything else worrying you and it's very often a case where what you went in with, there might be something else also like I mean that you're thinking of but you don't mention it, you know, something small or that, you know. You don't want to sound ah, you know, it's easier to say nothing. (P219)

Most patients who did raise the topic of sexual dysfunction with their GP did so in the context of asking for a prescription for sildenafil. Although patients received the requested prescription, disappointment was expressed that this did not lead to any follow-up or deeper exploration by the GPs:

> But, like, afterwards, nobody ever approached me and said like, is it working as the fella says. (P111)

The gender of the healthcare provider was identified by only 1 patient as a barrier; patients' primary concern was that the healthcare provider was knowledgeable, confident, and comfortable with the topic.

## *Cardiac Rehabilitation Staff Focus Groups*

Units delivering cardiac rehabilitation develop their programs independently. Differences were apparent in the varying provision of, and attitude to, sexual health promotion within the programs. The level of sexual assessment and counseling that patients receive depends on the importance that staff providing the cardiac rehabilitation attach to the issue, their perception of how important or relevant the issue is to the patient, and their own knowledge about, and comfort in, addressing the issue with patients.

### *Timing of Delivery of Sexual Information and Counseling*

Members of the cardiac rehabilitation team may see patients during their time as inpatients and/or when they attend the outpatient cardiac rehabilitation program. Although it happened occasionally, patients were usually unlikely to raise the issue of sexual activity while they were inpatients because it is not a priority for them and because of the lack of privacy in the inpatient setting. Likewise, many of the cardiac rehabilitation staff did not bring up the topic:

> When you're talking to somebody who is sitting in a bed post heart attack, it's not really something that you want to bring up because, because it's too soon, you know. (CR35)

Patients were characterized as not being able to absorb or retain information that they are given during this phase of their treatment. However, there was also discussion about the reliability of patients' memory throughout the rehabilitation process and some staff questioned patients' assertions in phase 2 of the study that the topic of sex had not been raised with them and suggested that this finding is likely due to memory loss.

Whether the issue of sexual activity was raised with patients on discharge from hospital differed across the centers and between staff. Some cardiology nurses always raise the subject as part of a discussion about medications or resuming normal activities. In other

centers, sex was identified as being a component of the predischarge protocol, but the issue was raised only if the staff deemed it to be appropriate:

> You're gauging the patient, some people you wouldn't know if you'd offend them by bringing it up yourself so you're kind of gauging them. (CR39)

This indicates that in the absence of a formal protocol, cardiac rehabilitators make informal decisions as to the appropriateness of raising the issue based on factors such as age or marital status. For example, some staff suggested that they would not address sexual issues with unmarried or widowed patients or members of religious orders. Some staff in 1 center suggested that it should be standard practice to address the subject at this stage for all patients; such standardization would relieve staff of decision making.

On discharge, patients may be recommended to see their GPs to discuss any sexual problems. However, it was also suggested that GPs are reluctant to become involved in the issue in case there were implications concerning the patient's medication, which would require referral back to hospital services. In general, although thecardiac rehabilitation staff considered that GPs had a very important role in the assessment and treatment of sexual dysfunction, they acknowledged barriers that the GPs faced, including lack of time, personal relationships with patients, and the absence of a referral pathway for patients with more serious sexual problems.

Cardiac rehabilitation staff engage with patients again during the second of the 3 phases of cardiac rehabilitation. In this phase of cardiac rehabilitation, staff commonly provided an opportunity for patients to raise the topic of sex if they so wished, rather than specifically initiating a discussion about sex themselves. One participant outlined her approach:

> I'd often ask an open-ended question, so is there anything else that you're having difficulty with or you'd like to know about in terms of what activities you can do and nobody has ever brought up sex at that point either. (CR114)

### *Setting for Sexual Counseling*

Cardiac rehabilitation staff were very sure that cardiac rehabilitation was an appropriate place for issues of sexual function to be addressed for many reasons, including the duration from the cardiac event and that patients get time to build a relationship with staff during the weeks of the rehabilitation course. However, the way in which the issue is addressed varied across the centers. In 1 center, sex is covered in the formal education component of the rehabilitation, whereas in another, patients are given opportunities to initiate the conversation if they want to do so. Such opportunities may include discussions about emotional and mental health, medications, close family relationships, or discussions about fitness, and patients may be encouraged to meet with a member of the team privately if they want further discussion. The center with the most formal integration of sexual health promotion into their cardiac rehabilitation program was also the center that, proactively, gave the most explicit and comprehensive information.

Some rehabilitators considered the group setting to be a less stressful place to bring the subject up and sow the seeds for the conversation that may need to take place in private at another time.

> I think group sessions for bringing it up are very positive. I think they're very good. There is never any pressure, nobody has ever asked anything indirectly in these group sessions. What's given is general advice, some kind of common myths that are dispelled amongst it, you know, kind of some are misbelieves, the advice is out there. (CR216)

### *Barriers*

Lack of information, a sense of embarrassment, and a fear of offending were the most frequently cited barriers that restricted cardiac rehabilitation staff from engaging in more depth with the topic. The fear of embarrassment was felt in terms both of the staff and the patient:

> I suppose to embarrass myself or embarrass the patient. (CR19)

Another participant was adamant that she did not and would not address the issue of sexual dysfunction because of her concerns about her own lack of knowledge particularly in relation to medications:

> There was a lot of medical knowledge required to properly advise somebody safely in the area and I just felt that I won't have that in phase 2 anyway so I decided I'm not going there because I don't know how to advise. (CR119)

### *Gender and Ethnic Differences in Sexual Counseling*

The gender composition of the cardiac rehabilitation groups is predominately or completely men, and such groups were said to treat the subject in a jocular way. It was noted that when women were present in the group, the group may be more serious but the participants were less inclined to open up. The increasing cultural diversity of the Irish population was identified as an issue that may give rise to difficulties in the future. Cardiac rehabilitation staff were sensitive to the possibility that opening a discussion of sexual function may cause particular offense to members of some ethnic populations; likewise, staff from different cultural backgrounds may find it difficult to assess or counsel patients about sexual activity.

Women were reported to be very unlikely to raise the issue of sex, and most staff reported that they had never brought the subject up with a woman. It was also reported that women would avoid the group sessions when the discussion about sex has been flagged through embarrassment. The rehabilitators considered that few of the women were sexually active because of the age

profile of female cardiac patients. Whereas male patients might be in their 40s or 50s, female patients "are mostly older, much older" and were described as having no experience of discussing their sex lives with health professionals and unwilling to do so:

> You'd see them on the ward and you'd bring up the subject you know. "You don't need to talk to me about that anymore, oh god, no, you know." Very dismissive. (CR218)

The complexity of sexual dysfunction in women was described as more problematic than that of men:

> Men it's a functional problem, women it's an emotional problem. (CR320)

In addition, engaging with the problem was perceived to be more time-consuming, making the rehabilitators less likely to encourage disclosure of a problem:

> …like if you're in a clinic or in a class of 10 people and you start talking about emotions, you could be there all morning. (CR323)

This reluctance to initiate a discussion of sexual dysfunction with the women was exacerbated by the perception that there are few referral pathways for women with sexual dysfunction.

Women, as partners of patients, were identified as contributing to their partner's sexual dysfunction by being overly anxious for their partner after a cardiac event. Women were also perceived, by some rehabilitation staff, to use the cardiac event to bring an end to the sexual aspect of their relationship:

> A lot of the time you'd hear women saying oh great he's not going near me any more to be honest with you, you know.
>
> ...they're getting a bit of peace (laughing). (CR320)

Some cardiac rehabilitation centers offer a group session for partners and families during which partners, usually wives, could bring up issues including sexual problems. However, these sessions were so poorly attended that they were discontinued in 1 center; some rehabilitation staff agreed that this may be because partners were unaware of the session:

> Yeah but you see I think an awful lot of them don't tell their wives, …In case the wife comes in and spills the beans, that oh he had 3 pints Monday night and he you know, or he had a kebab on the way home from work or you know (CR116)

Younger patients and younger partners were perceived to be different:

> I would always say do you want to bring your partner in? Younger people don't mind, you know, they would bring the partner in, it's a joint thing. (CR319)

### *Opening up Discussions About Sex to Normalize the Issue*

However, other rehabilitation staff emphasized the relevance of a discussion about sex for all ages and genders and emphasized the importance of introducing it correctly:

> …by addressing everybody in a group setting they see that this is something that's quite normal and we discuss it with everybody whether you're seventy or whether you're forty or whether you're an eighty year old woman or whether you're a twenty year old man, it's irrelevant. (CR212)

Normalizing the issue was regarded by many as a key function of discussing sexual dysfunction in cardiac rehabilitation. Mass media was also considered to have a role in normalizing conversation about sex and sexual dysfunction, and examples such as radio advertisements concerning erectile dysfunction and prostate problems were cited as very useful. Likewise, the publicity relating to sildenafil was considered to have liberated patients in terms of opening the conversation about sexual dysfunction with healthcare providers.

### *Guidelines and Training*

Most cardiac rehabilitation staff identified that they would welcome relevant training particularly if it was delivered in-house. Many stated that they believed that training would enhance their confidence, and it was apparent that the staff who offered patients the most explicit and comprehensive information were those who had received some previous training. Staff were very positive about the guidelines produced by the research team. Some welcomed it as a resource to guide their own practice, and others, as a resource that could be produced to give to patients. It was suggested that a patient leaflet would be empowering of the patients and would enable cardiac rehabilitation staff to initiate the conversation in a "depersonalized" way; it was also recommended that a leaflet specifically for women should be produced.

## *General Practitioner Interviews*

### *Barriers*

General practitioners were unsurprised by the finding from phase 1 of the CHARMS study that patients would like more opportunity to discuss sexual problems. Although several said that it was the GPs' role to initiate a discussion about sexual problems, only 1 said that he was likely to initiate a discussion about sex. General practitioners discussed a number of barriers that constrained them, including a lack of awareness that it might be an issue for patients. Several physicians contrasted this lack of awareness with the more widespread awareness many physicians may have of the relationship between diabetes and sexual dysfunction. The barrier of shyness was frequently cited, and this may be particularly felt by some rural GPs:

> I might be cautious, I might be shy, I might be bashful about it, I might not want to raise it with them, in fairness now I live in a rural part where I would know practically all the clients…And there would be certain kind of barriers between people as regards raising that topic in a very small community where you would know everybody and they might not want to raise it, they would be shy about that, certainly reluctant about that. (GP179)

General practitioners described attending to an array of issues during a consultation with cardiac patients:

> I think that there's so many other things to do, you know that that's one of the problems we have so you've got to make sure their cardiac medications are in order, you have to go through their symptoms associated with the cardiovascular system to see how stable they are, you have to do the examination for all that. And you know you might be talking about weight reduction, how they get on with their diet, whether they've stopped smoking, so there are so many other things competing. (GP56)

This leaves little time to open up a discussion that may prove embarrassing for the physician or the patient. However, several GPs suggested that if the funding structure of the health services was different and if physicians were remunerated for having such discussion, then the discussion would happen.

> I mean, I can guarantee you that if GPs were being paid for asking questions about sexual, about the sexual life of their post-cardiac patients they'd all ask it. (GP69)

Some GPs have little contact with their cardiac patients, and routine care is given by nurse practitioners who, some GPs suggested, may be better placed to talk about sexual function with the patients.

General practitioners also identified that their own biases or assumptions acted as a barrier to raising the issue. They were aware that patients also find it difficult to raise the issue of sex because of embarrassment or because they consider it to be a waste of the physician's time. Like the cardiac rehabilitation staff, they believed that publicity about medications such as sildenafil and media campaigns such as those around erectile dysfunction contributed to opening up the area of sexual dysfunction for discussion.

Patients, it was said, needed to be "given permission" to raise the subject:

> …for the patient to feel that they have permission to raise this and that they're not going to be judged and that, you know you have to normalise it for them because they are so isolated because they feel they're the only one in the world that has this. (GP132)

### *Gender and Partners*

Patients who did raise the issue were said to be more likely to come on their own than with their partners, although some may have come with their partner's encouragement. However, partners were also identified as contributing to a cardiac patient's sexual dysfunction by their tendency to be overprotective of, or fearful for, the patient:

> The men have had the heart attack and you know the women don't want to deny them but they're worried about causing something so they have an exaggerated sense of responsibility if you like. So that would be one aspect of it, they want to do the right thing if you like, ok and of course that sort of gets in the way a little bit of the spontaneity of sex, so that would happen. (GP56)

Women were considered unlikely to raise the issue of sexual dysfunction, and GPs indicated that this may be because of the age profile of women with cardiac problems:

> I can say that I have never had a woman come to me post MI talking about sexual problems, no…. They tend to be a lot older, an older age group, um, it's just not an issue that's been raised. (GP220)

Or, it was suggested, women may discuss such issues with the nurse practitioners who deliver much of the routine cardiac check-ups. One GP, however, reflected that he had never considered whether his female cardiac patients might be sexually active:

> I'd be less likely actually…. Because it wouldn't really have, yeah I probably wouldn't have thought about it actually and I'm just trying to think off the top of my head, I suppose we have more men, less women and I suppose, yeah I probably fall into the trap of thinking that the whole sex thing is probably sort of, you know of little, you know little importance. (GP194)

### *Setting for Sexual Information Provision and Counseling*

Most GPs considered that cardiac rehabilitation was an appropriate context for the subject of sexual dysfunction to be raised, although several were concerned that a group setting was not appropriate for anything more than raising awareness. Within cardiac rehabilitation, sexual activity could be located in discussions about exercise and diet, and although physicians acknowledged the disadvantages of the group setting, they felt that the subject could be normalized in this way, liberating patients to further consultations if necessary. One GP acknowledged the advantage this would have to him:

> I think absolutely raising awareness and normalising the issue would be the best thing because I do think there's a role there and again it sounds attractive to me because I don't have to deal with this then otherwise, but it's not just from that point of view, you could introduce it and you know you can talk about diet, exercise, you know and by the way you know people get worried about sex and that's an exercise that maybe they might be stressing their heart or whatever and you could very much normalise it in a group setting where nobody was the focus of that but the process of normalising might encourage somebody to seek out privacy and say actually I'm having a terrible time with this. (GP56)

Although GPs considered that the issue should be raised in cardiac rehabilitation, most did not know if it was. There was a belief that problems that were identified during cardiac rehabilitation would be communicated to them, but this had never occurred in the context of sexual dysfunction.

### *Protocols, Guidelines, and Training*

No GP reported use of any protocols or guidelines for sexual assessment or counseling of cardiac patients, instead they relied on their acquired knowledge. General practitioners were not inclined to identify a general need for protocols or guidelines, although information about when it is safe for a patient to resume sex after a myocardial infarction, the safe use of sildenafil for cardiac patients, and specific questions that could be used to open a discussion would be useful. No GPs identified that they had considered the guidelines sent to them by the study team before the interview, although 1 looked at them during the interview and responded favorably to the content and the layout of the information. Some GPs pointed out the limitations of protocols and guidelines in this context, including that guidelines would not overcome barriers such as embarrassment by increasing the GP's comfort with the topic. One GP was opposed to the use of a protocol in this context, arguing that it dehumanizes a consultation that should be primarily be therapeutic rather than diagnostic and reduces the consultation to the level of tick-box medicine:

> In the same way as we baulk at a lot of depression scales and, you know, ticking the boxes, are you, how is your sleep, how is your, you know, exercise, how is your enjoyment of life, how is your interest in sex, are you, so it's too formulaic. (GP56)

Except in the period immediately after an acute event and except in relation to cardiac medications, such patients were not generally considered to be different in respect to sexual dysfunction to other patients. Many GPs identified that they considered the area of sexual assessment and counseling for cardiac patients as one about which there should be awareness raising; however, many also felt that it was not an issue that required a specific course of training. No training was identified by GPs, although The Irish College of General Practitioners was identified as an organization that might offer such training; the pharmaceutical industry was also identified as a potential source.

General practitioners were unlikely to refer patients with sexual dysfunction onto other services most commonly because of their perception that there is nowhere to refer patients to or because the waiting lists were seen to be too long. However, most of the GPs were confident that they could deal with the issues themselves.

## Discussion

Healthcare professionals in this study tended not to initiate discussions about sexual problems with their patients, even though they acknowledged the importance of addressing such issues. Reasons are similar to those found in previous research[1,4,11] and include lack of time, knowledge, and embarrassment. We identified a gap in perceptions between patients and healthcare professionals about the opportunities afforded to patients to raise issues of sexual problems. Many GPs considered that patients would be able to ask them about sexual problems and had experience of requests to prescribe sildenafil. Many cardiac rehabilitation staff considered that they had introduced the issue of returning to sexual activity during discussions about lifestyle, medications, or exercise and, in doing so, had opened the issue up for discussion. However, even when patients recognized these attempts from the health professionals, the invite was not specific enough for the patient to feel reassured or empowered to raise sexual problems. All 3 stakeholder groups referred to the importance of the issue of sexual dysfunction being raised to normalize the problem and thereby liberate patients to raise it as a problem if and when they wanted to do so. It is clear from this research that the message that healthcare professionals believe they are delivering to patients and that which is received by patients may be quite divergent.

The level of sexual assessment and counseling that patients receive depends largely on the beliefs and attitudes of individual healthcare providers. Our findings supported previous suggestions that healthcare providers may experience particular difficulties in addressing the topic of sex with older people.[21] Likewise, it confirmed that patients may be aware of these assumptions, and this awareness acts as a barrier to patients broaching the subject themselves[21] and may act to devalue a patient's view of themselves as a functioning, sexually active person. Indeed, negative attitudes on the part of healthcare providers to sexual activity in later life have been implicated in the reduction in sexual activity and feelings of inadequacy among older people,[22] and our study identified that patients were likely to interpret health providers' silence on the issue as evidence that the providers thought that sexual activity was not appropriate for patients.

The 2 women who participated in this research were adamant about the importance of sexual assessment and counseling for female cardiac patients. However, this sense of importance was not generally shared by the cardiac rehabilitation staff or the GPs, who indicated that managing a woman's sexual dysfunction may be considerably more difficult than managing a man's. The healthcare providers referred to the older age of women who had a myocardial infarction; the

women were perceived as "being passed that" and delighted to be so. Women's dysfunction was said to stem from emotional issues rather than the more easily treated physical or drug-related problems. However, the women participating in our study did not describe significant emotional issues but rather a fear and nervousness stemming from a lack of information.

The other interesting context in which women were characterized by the health professionals was in their role as wives of cardiac patients. Women were considered by some of the professionals to be a contributing factor toward their male partners' sexual dysfunction both through their concern and their use of the event to bring an end to sexual activity. Although partners were perceived as potential contributors to a man's sexual dysfunction, they were unlikely to engage with physicians or rehabilitators except to the extent that they would ask their husband to discuss the problem with a professional. Cardiac rehabilitation staff described that wives of patients did not attend partner sessions in cardiac rehabilitation when such sessions were offered, although some suspected that this was because the cardiac patient did not inform their partner about the invitation. However, most patients reported that partners should be party to sexual counseling, a finding that supports previous recommendations that sexual concerns of couples should be addressed as couples.[23,24] Further research may clarify how to optimally involve partners and whether they would be best supported through information sessions or through written materials.

Some GPs suggested that nurse practitioners may be more appropriate professionals to manage sexual assessment. The importance of same-gender consultations has been previously identified[25] but did not arise as an issue for most patients in this research. Rather, patients were more concerned that the healthcare practitioner was knowledgeable, confident, and explicit. The barriers to enhancing the role of nurses in sexual health management have been documented[24–28]; however, further exploration of the potential for service development in the context of nurse practitioners is important.

All stakeholders agreed that cardiac rehabilitation was an appropriate setting for the topic of sexual activity to be discussed and to normalize it. Likewise, most acknowledged the limitations of the group setting to counsel patients at any level other than a general one. Patients described a need for information that they considered relevant to themselves as individuals and would like to be invited to seek this information from knowledgeable individuals.

Although very few patients in this study reported receiving written information on resuming sexual activity and addressing sexual problems, such information is likely to prove useful,[24,25] especially where memory problems for orally delivered information exist. Patients welcomed the idea of leaflets providing information to them but were clear about their limitations. Patients also want information that is relevant to their personal contexts. Therefore, leaflets would work best as a broad introduction to the issues, with recommendations about where to look for further support. General practitioners, mostly, did not welcome the prospect of leaflets; several were positive about the use of online resources by patients and willing to direct patients to recommended Web sites. Patients, however, were unenthusiastic about the Internet as a source of information. For some, this was because they lacked computer skills, but for most, it was because they did not trust information from the Internet and wanted information that was more personal to their situation.

The healthcare providers' perceived need for training varied. General practitioners were less inclined to indicate that they needed or would take up training, and no GP had considered the guidelines that were sent to them by the researchers. Interestingly, this stands in contrast to the responses of most GPs in the earlier phases of this study,[4] who indicated that they would welcome guidelines. It may be that GPs would be more receptive to training and guidelines about sexual assessment and counseling in general, applicable to multiple chronic illness conditions. Most cardiac rehabilitation staff perceived a need for both guidelines and training. Working to guidelines and/or a protocol was seen as supportive by some, who would welcome the requirement to work through a mandatory topic list. Cardiac rehabilitation staff were generally very positive about the guidelines compiled by the research team, and they were perceived to be useful as a source of information for rehabilitators, as a guide to the content that could be delivered to patients and also as a resource for patients themselves. As in previous studies, the value of materials such as leaflets as an aide to initiating a discussion was identified.[29]

## Limitations

The healthcare provider and patient participants in this study were highly filtered and self-selected and therefore may not be representative of a wider population. Participants are likely to be those with greatest interest in this topic. However, in combination with earlier survey phases of the CHARMS study, the findings reported in this article are useful in guiding the development of interventions for sexual assessment and counseling.

## Summary

Cardiac rehabilitation staff would welcome guidelines and information to support them in educating patients about sexual dysfunction during cardiac rehabilitation.

### What's New and Important

- There is a disconnect between the message that healthcare providers believe they are delivering to patients and that which the patients are receiving: healthcare providers believe they are offering patients an opportunity to raise issues of sexual problems, but patients need a more explicit invite and permission to be able to discuss these issues with their healthcare providers.
- Female cardiac patients may be particularly badly served by the current provision. This stems from the assumptions and biases of healthcare professionals and because of the perceived complexity of managing female sexual difficulties.

General practitioners were more confident in their knowledge and less interested in guidelines and information, although some would like to be able to access information that they could pass onto patients. The consensus across the groups was that sexual dysfunction should be addressed during cardiac rehabilitation either in a group setting or individually to normalize the issue. This should be done in a manner that is more explicit than at present, offering clear permission and invitation to the patient to raise the issue with a member of the rehabilitation team or their GP if desired. The sexual difficulties of some female cardiac patients are less well recognized and addressed than are those of their male counterparts.

## Implications

Cardiac patients want more information about how their disease impacts on their sexuality and sexual counseling. Healthcare providers should explicitly invite patients to discuss their concerns about sexual problems, to empower patients to confidently initiate a discussion about sexual concerns. Guidelines can support and inform healthcare professionals to provide such information and to open the topic up for further discussion. The use of such guidelines may also serve to minimize the extent of variation in practice between rehabilitation centers and also between individual healthcare providers. Female patients may be particularly badly served by current provision, and healthcare providers should examine whether their own assumptions impact on the service they offer.

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## REFERENCES

1. Doherty S, Byrne M, Murphy AW, McGee HM. Cardiac rehabilitation staff views about discussing sexual issues with coronary heart disease patients: a national survey in Ireland. *Eur J Cardiovasc Nurs*. 2011;10(2):101–107.
2. Hardin SR. Cardiac disease and sexuality: implications for research and practice. *Nurs Clin North Am*. 2007;42(4):593–603.
3. Kaya C, Yilmaz G, Nurkalem Z, Ilktac A, Karaman MI. Sexual function in women with coronary artery disease: a preliminary study. *Int Impot J Res*. 2007;19(3):326–329.
4. Byrne M, Doherty S, McGee HM, Murphy AW. General practitioners views about discussing sexual issues with patients with coronary heart disease: a national survey in Ireland. *BMC Fam Pract*. 2010;11:40.
5. DeBusk R, Drory Y, Goldstein I, et al. Management of sexual dysfunction in patients with cardiovascular disease: recommendations of The Princeton Consensus Panel. *Am J Cardiol*. 2000;86(2):175–181.
6. Levine GN, Steinke EE, Bakaeen FG, et al. Sexual activity and cardiovascular disease. *Circulation*. 2012;125(8):1058–1072.
7. Crumlish B. Sexual counselling by cardiac nurses for patients following an MI. *Br J Nurs*. 2004;13(12):710–713.
8. Bedell SE, Duperval M, Goldberg R. Cardiologists' discussions about sexuality with patients with chronic coronary artery disease. *Am Heart J*. 2002;144(2):239–242.
9. Layte R, McGee A, Quail A, et al. *The Irish Study of Sexual Health & Relationships*. Dublin, Ireland: Crisis Pregnancy Agency and the Department of Health; 2006.
10. Klein R, Bar-on E, Klein J, Benbenishty R. The impact of sexual therapy on patients after cardiac events participating in a cardiac rehabilitation program. *J Cardiovasc Risk*. 2007;14(5):672–678.
11. Steinke EE, Patterson P. Sexual counseling of MI patients by cardiac nurses. *J Cardiovasc Nurs*. 1995;10(1):81–87.
12. Gott M, Hinchliff S. Barriers to seeking treatment for sexual problems in primary care: a qualitative study with older people. *Fam Pract*. 2003;20(6):690–695.
13. Albarran JW, Bridger S. Problems with providing education on resuming sexual activity after myocardial infarction: developing written information for patients. *Intens Crit Care Nurs*. 1997;13(1):2–11.
14. Gott M. Sexual health and the new ageing. *Age Ageing*. 2006;35(2):106–107.
15. Kreuger R, Casey M. *Focus Groups: Practical Guide for Applied Research*. Los Angeles, CA: Sage; 2009.
16. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000;23(4):334–340.
17. Sandelowski M. What's in a name? Qualitative description revisited. *Res Nurs Health*. 2010;33(1):77–84.
18. Mellon C. *Naturalistic Inquiry for Library Science: Methods and Application for Research, Evaluation and Teaching*. New York, NY: Greenwood; 1990.
19. Patton M. Qualitative Research and Evaluation Methods. 3rd ed. London: Sage Publications; 2001:688.
20. Cavalli-Björkman N, Glimelius B, Strang P. Equal cancer treatment regardless of education level and family support? A qualitative study of oncologists' decision-making. *BMJ Open*. 2012;2(4).
21. Hinchliff S, Gott M. Seeking medical help for sexual concerns in mid-and later life: a review of the literature. *J Sex Res*. 2011;48(2–3):106–117.
22. Watters Y, Boyd TV. Sexuality in later life: opportunity for reflections for healthcare providers. *Sex Relationship Ther*. 2009;24(3–4):307–315.

23. Ivarsson B, Fridlund B, Sjöberg T. Information from health care professionals about sexual function and coexistence after myocardial infarction: a Swedish national survey. *Heart Lung*. 2009;38(4):330–335.
24. Steinke EE, Barnason S, Mosack V, Wright DW. Changes in myocardial infarction–specific sexual counseling by cardiac nurses. *Dimens Crit Care Nurs*. 2011;30(6):331–338.
25. Gott M, Galena E, Hinchliff S, Elford H. "Opening a can of worms": GP and practice nurse barriers to talking about sexual health in primary care. *Fam Pract*. 2004;21(5):528–536.
26. O'Donovan K. Addressing the taboos: resuming sexual activity after myocardial infarction. *Br J Card Nurs*. 2007;2:165–174.
27. Magnan MA, Reynolds KE, Galvin EA. Barriers to addressing patient sexuality in nursing practice. *Medsurg Nurs*. 2005;4(5)282–290.
28. Jaarsma T, Strómberg A, Fridlund B, et al. Sexual counselling of cardiac patients: nurses' perception of practice, responsibility and confidence. *Eur J Cardiovasc Nurs*. 2010;9(1):24–29.
29. Katz A. Sexuality and myocardial infarction. *Am J Nurs*. 2007;07(3):49–52.