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Australian health professionals' perspectives on discussing sexual activity and intimacy with people who have had a heart attack: a qualitative study

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ABSTRACT

Background. Sexual activity and intimacy contribute to wellbeing throughout adult life, including after a heart attack. Providing support and information about sexual activity and intimacy after a heart attack is recognised as part of a comprehensive approach to cardiac rehabilitation. Previous research shows that patients expect health professionals to initiate discussions about sexual activity and intimacy, but that this seldom occurs. Methods. Drawing on qualitative survey responses from a range of Australian health professionals working in cardiac care and rehabilitation, this research examined their perspectives on discussing sexual activity and intimacy with their patients, and patients' partners. Using a social constructionist approach, thematic analysis was used to identify themes expressed by participants. Results. Discussions about sexual activity and intimacy after heart attack were perceived as nebulous and taboo. The predominance of an illness – rather than wellness – framing of these discussions and a tendency for health professionals to make judgement calls contributed to discussions not occurring. Health professionals also identified a range of intrapersonal, interpersonal and structural obstacles to discussions, including embarrassment, fear of patients' embarrassment, a lack of role clarity, the absence of a clear protocol or training to guide practice, and a lack of time, privacy and patient resources. Conclusions. Such discussions require normalisation, careful timing, sufficient time and adequate privacy. Staff training, a protocol and appropriate patient resources are needed to support health professionals to initiate discussions. Further research is required that investigates the impact of specific resources and training on health professionals' practice and patient outcomes.

Keywords: cardiac rehabilitation, cardiovascular disease, health education, intimacy, qualitative research, sexual activity, sexual counselling, sexual health, social constructionist.

Introduction

Sexual activity and emotional intimacy contribute to wellbeing throughout adult life (Smith *et al.* 2019). Maintaining opportunities for heart attack survivors to enjoy sexual activity and intimacy is an important element of holistic health care. However, sexual dysfunction, anxiety about sex and changes in relationships are common among heart attack survivors and their partners (National Heart Foundation of Australia 2015; Rundblad *et al.* 2017; Arenhall *et al.* 2018).

People who survive a heart attack expect discussions about sex to be initiated by health professionals (Hyde *et al.* 2020). Despite this, few health professionals initiate such discussions (Xu *et al.* 2015; Steinke *et al.* 2016; Lindau *et al.* 2017). Less than half of Australian heart attack survivors received information about sex from a health professional (National Heart Foundation of Australia 2015). An Australian study confirms that patients with cardiovascular disease receive little to no information on sexual wellbeing, despite both wanting and expecting information to be discussed by their health professional (East *et al.* 2021). Previous research has identified barriers to health professionals providing information about sex to heart attack survivors (Hyde *et al.* 2020).

However, there is limited research, and no previous Australian research, exploring health professionals' perceptions about discussing sex and intimacy. This paper addresses the research question: What are Australian health professionals' perspectives on discussing sex and intimacy with people who have had a heart attack?

Methods

Ethics approval

Ethics approval was granted by the University of the Sunshine Coast Human Research Ethics Committee (A/16/900). Data collection occurred in August 2017. Participants gave informed consent, no incentives were provided, and precautions were taken to preserve anonymity and confidentiality.

Theoretical perspective

This study takes a social constructionist approach based on the assumption that understandings of health/illness are socially and culturally produced, and that cultural meanings impact how they are depicted, interpreted and responded to, at individual and structural levels, with real consequences for patients, health care and the recovery process (Conrad and Barker 2010). Sexuality and sexual activity are also socially and culturally produced, so taboos around sex, and understandings of sexual behaviour, vary within and across cultures and historical periods. Certain sexual activities are normalised in particular contexts for particular people (Moran and Lee 2014; e.g. sexual intercourse for young, healthy, partnered adults), and stigmatised or less visible for others. Taking a social constructionist perspective enables us to interrogate health professionals' perspectives on discussing sexual activity with their patients, moving beyond surface level meanings to implicit meanings (Conrad and Barker 2010).

Participants and recruitment

Australian health professionals were recruited purposively, based on their routine or regular interaction with cardiac patients. The sample included doctors (e.g. general practitioners (GPs), cardiologists), cardiac rehabilitation specialists, nurses and a range of allied health professionals. Recruitment of participants was initiated via an email circulated through the researchers' existing networks (e.g. Primary Health Networks) and national professional peak bodies (e.g. Australian Cardiovascular Health and Rehabilitation Association). Promotion of the research, and a link to the research questionnaire, was also circulated via the National Heart Foundation of Australia health professionals receiving the email via these networks were also encouraged to forward the request for involvement to other relevant colleagues, utilising a snowball sampling technique.

Throughout the research, respondents remained anonymous to the researchers, and to the best of our knowledge, none were personally known to any of the researchers. None of the researchers currently work in cardiac care or rehabilitation. Two researchers (AW, CM) are experienced sexuality/sexual health educators, and one researcher (RF) previously coordinated the National Heart Foundation's work in secondary prevention and cardiac rehabilitation.

Data collection

An online, self-administered questionnaire hosted in People Pulse (ELMO, Sydney, https://peoplepulse.com, 2018) was administered to collect quantitative and qualitative data. The questionnaire defined 'sexual activity' as any voluntary sexual behaviour, including, but not limited to, sexual intercourse, oral sex, masturbation, kissing and sexual touching. 'Intimacy' was defined as a feeling of emotional closeness, allowing an open acceptance and sharing of feelings with a partner (Relationships Australia 2019).

The questionnaire was available for 3 weeks (with a reminder after 2 weeks). Feedback from piloting the survey suggested completion took an average of approximately 12 min. Because no standardised or validated survey exploring these themes was available, a questionnaire was developed for this research, based on themes from literature (Barnason *et al.* 2013), including 29 quantitative, four qualitative and five demographic questions. Findings from the quantitative data from responses to the quantitative questions will be reported elsewhere. This paper reports on the findings from the participants' responses to the qualitative questions, which are listed in Appendix 1. There was no word limit for responses or time constraint for completion of this questionnaire.

Data analysis

The data analysis followed the six-step process for reflexive qualitative thematic analysis, with the data interpreted through a constructionist theoretical lens throughout the analytical process (Braun and Clarke 2006). In line with scholarship on reflexive thematic analysis, this six-step process, underpinned by a constructionist theoretical framework facilitates recursive engagement with the dataset, enabling deep understanding and interpretation, producing a robust analysis (Nowell et al. 2017; Braun and Clarke 2023). The first author read the entire dataset to gain an overview of the breadth of content. Field notes detailing points of interest and a narrative for each distinct feature were written. Taking an inductive approach, 83 initial thematic codes were generated, then examined and sorted into preliminary themes. Themes and codes were reviewed to determine whether data extracts coherently and distinctly embodied the themes, including considerable reworking of codes and themes.

A narrative was written for each theme, while verifying that the refined themes reflected the content and identified implicit meanings. The first author coded and identified themes, then all authors discussed and refined the conceptual structure and presentation of the analysis. Each theme is explored below, with illustrative verbatim quotations. Each participant was assigned a pseudonym, and these pseudonyms, occupation and state/territory are used as identifiers.

Results

Participants

No response rate can be calculated, because the methods of survey distribution make it impossible to calculate the number of potential participants. A total of 252 health professionals completed the questionnaire. Of these, 162 respondents answered at least one qualitative question, with 45 answering all four questions. Collectively, the respondents wrote 6399 words. Although the questions referred to sexual activity and intimacy, most respondents used the terms interchangeably. For ease of communication, we refer to 'sex and intimacy' throughout. The demographics of these 162 respondents are shown in Table 1.

Themes identified

Five themes were identified: (1) a nebulous concept, (2) sex is taboo, (3) a judgement call, (4) illness not wellness, and (5) too many obstacles.

The most pervasive theme was labelled 'a nebulous concept'; other themes are interpreted in relation to this. This fundamental theme expressed uncertainty, ambivalence and ambiguity around discussing sex and intimacy with heart attack survivors, and barriers to health professionals doing so. The content of other themes articulates the ways this nebulousness plays out. Although some discussions with heart attack survivors are occurring, the nebulous construction of discussions around sex and intimacy in health care settings resulted in myriad barriers, reducing the likelihood of patients receiving information on these topics. Barriers included structural factors (e.g. physical space), questions of responsibility and the personal judgement calls of health professionals. In addition, because sex and intimacy were framed within an illness - rather than wellness - model, they were 'pathologised'. Evidence quotes were selected to best represent the nature of each theme.

Theme I: A nebulous concept

Health professionals conceptualised discussing sex and intimacy with heart attack survivors as ambiguous and

Table 1. Demographics of online survey respondents that responded to at least one open-ended question (n = 162).

| Characteristic | Category | % | n |
|---|--|-------|-----|
| Profession | Cardiac rehabilitation specialist | 9.9 | 16 |
| | Nurse | 54.3 | 88 |
| | Doctor | 10.5 | 17 |
| | Cardiologist | 4.3 | 7 |
| | General practitioner | 6.2 | 10 |
| | Allied health professional | 25.3 | 41 |
| | Physiotherapist/occupational therapist/exercise physiologist | 11.1 | 18 |
| | Social worker/counsellor/ psychologist | 3.1 | 5 |
| | Other (includes pharmacist, dietitian, scientist, radiographer) | 11.1 | 18 |
| State/territory ^A | Queensland | 32. I | 52 |
| | Victoria | 29 | 47 |
| | New South Wales | 14.2 | 23 |
| | South Australia | 13 | 21 |
| | Western Australia | 6.2 | 10 |
| | Australian Capital Territory | 2.5 | 4 |
| | Tasmania | 1.2 | 2 |
| | Northern Territory | 1.2 | 2 |
| Geographical location ^{B,C} | City/metropolitan | 59.9 | 97 |
| | Regional | 35.2 | 57 |
| | Remote | 2.5 | 4 |
| Years of experience as health professional | >5 years | 95 | 154 |
| | ≤5 years | 5 | 8 |
| Gender | Female | 85.2 | 138 |
| | Male | 14.8 | 24 |
| | Do not identify as either male or female | 0 | 0 |

^AData missing for one participant (0.6%).

^BData missing for four participants (2.5%).

^CTotal <100% due to rounding.

unclear. It took on a nebulous form; its importance, what should be discussed and how, by which health professionals, and who should initiate discussions were unclear. Sex and intimacy were framed by the health professionals as outside their responsibility, with comments demonstrating that other issues tend to take priority during consultations:

The issue is not considered a factor to discuss. (Celia, Nurse, SA)

Often consultation is crowded with other issues preventing this one from being addressed. (Paul, GP, Qld)

Other issues were positioned as essential, but not sex and intimacy. Interestingly, the health benefits of sexual activity are widely understood, but sexual activity was not considered a form of exercise:

Not enough time in cardiac rehab sessions to cover this topic – barely enough time to cover essential issues like smoking, diet, exercise. (Justine, Nurse, Vic)

It was noted that a lack of information and protocol had an impact on health professionals' support for patients. In the following comment, the nebulous nature of discussions is apparent; they are not conceptualised as part of lifestyle, but something distinct:

Information and policies that empower health professionals with their dialogue and timing of the topic. For example, at the same time as lifestyle discussion: physical activity, driving, nutrition, smoking. (Astrid, Nurse, SA)

These quotes demonstrate that sex and intimacy are viewed as neither 'lifestyle' nor 'essential'. There was also ambiguity around whose role it is to discuss sex and intimacy with heart attack survivors. Despite questions being framed as 'what would support *you* to discuss sexual activity/intimacy', participants responded by suggesting that *other* health professionals should discuss sex and intimacy. Suggestions included general practitioners, pharmacists, occupational therapists, sexual therapists and specialists, and social workers, but only rarely did a health professional recognise that this was the responsibility of their own profession:

Occupational therapist available and funded for each cardiac rehabilitation and heart failure service. (Jane, Nurse, Qld)

If the subject arises, I would refer them to their GP or beyond. (Roxanne, Nurse, Vic)

Others expressed a lack of clarity around responsibility, and acknowledged the consequence of this confusion:

I guess cardiologist might think the GP will discuss it with the patient and the GP thinks the cardiologist will discuss it, so it does not happen. (Marcus, GP, NSW)

There was also ambiguity around who should initiate the discussions:

An understanding as to whether this is a topic that should routinely be discussed with the patient, or whether you should wait for an indication from the patient as to whether they would like to discuss sexual activity. (Kathryn, Other, SA) Some respondents believed that a specialist should do this:

Handout information would be ideal with a contact number for specialist support around returning to sexual activity post cardiac events. (Kierra, Occupational Therapist, NSW)

Theme 2: Sex is taboo

The second theme, 'sex is taboo', is closely related to the first. Sex and intimacy were not positioned as topics that could be discussed openly. When asked to consider support for having discussions about sex and intimacy, Gillian's comment instead suggests a way to avoid doing so:

Probably a little brochure to leave on the brochure board so patients can get it discreetly. (Gillian, Cardiac Rehab Specialist, SA)

The adjective, 'little', speaks to a private and secretive nature, which is also exemplified by 'discreetly'. The suggestion of leaving the brochure 'on the brochure board' bypasses any need for health professionals to directly acknowledge the subject. This perspective prioritises the patient accessing information without others' awareness.

Some participants recognised potential embarrassment for patients raising sex and intimacy, but this did not act as a motivator for the health professional to initiate the discussion:

Those that do raise any concerns we do assist with education [...]. Majority of the time they are more embarrassed than the clinician. (Bree, Cardiac Rehab Specialist, Vic)

These two quotes speak to the potential for sex and intimacy to be embarrassing for both the patient and the professional. However, the view was also expressed that it is the patient's responsibility to initiate discussions, with reasons such as perceived comfort level and relevance. In other words, if the patient is comfortable and feels that sex and intimacy are relevant, they will raise it; otherwise, it is not discussed:

Most often I wait for client to initiate discussion in this area. (Tamara, Cardiac Rehab Specialist, SA)

It is important for some people, and they will bring it up if there is open communication already established with other aspects of their rehab. (Lottie, Dietician, WA)

Lottie's comment highlights several issues. First, it recognises that sex and intimacy *are* important to some patients, but the onus is on the patient to initiate discussion. Importantly, it suggests that the patient will only do this if rapport has already been established.

Many participants mentioned reservations about initiating discussions about resuming sexual activity. Roxanne speaks of a lack of confidence, stemming from the taboo nature of sex and uncertainty about navigating this:

It is a sensitive issue, so unless I feel confident that my advice is supportive or useful, I feel it would just end up being an awkward conversation. (Roxanne, Nurse, Vic)

These views were echoed by others, citing lack of confidence regarding both what to discuss, and how to discuss:

Knowing more about what sites and resources are available to improve my confidence in sharing this information. (Lisa, Nurse, Vic)

Additional printed material, awareness of what resources exist, additional training in appropriate conversation techniques and information. (Zachary, Exercise Physiologist, NSW)

Given the taboo nature of discussing sex, the importance of normalising these discussions was raised by several participants. Using resources was suggested as a strategy:

Having more written resources would aid this process and normalise it for everyone involved, like talking about depression or any other area that needs to be raised at their initial visit. (Lisa, Nurse, Vic)

In the following comment, Joshua suggests normalising these discussions by making the information a standard part of consultations:

Stamp of approval. Appears 'routine' to be given that info and therefore reduces embarrassment. (Joshua, Physiotherapist, Vic)

Theme 3: A judgement call

Making a judgement call was a pervasive theme highlighting what health professionals consider when deciding whether to initiate discussions about sex and intimacy. Participants spoke of several considerations guiding this decision. Essentially, these considerations were based on presumptions around who does and does not have sex. There was evidence of a narrow view that only certain demographics are sexually active:

Discussions about sex etc. would embarrass many of our clients, especially discussing with someone they don't

know. Most of our clients are 50+ and many are single. (Violet, Nurse, Vic)

Implicit is the view that those aged over 50 years and single people are not likely to be, or interested in being, sexually active. Age and relationship status also provided the rationale for other health professionals to avoid such discussions:

Many of our patients are elderly or single and not interested in this topic [...] those that are still in a relationship I will often mention this in relation to their medications and their exercise. (Bree, Cardiac Rehab Specialist, Vic)

They are elderly and at a period in their lives when they don't expect to have a very active sex life. (Deborah, Nurse, Qld)

Other participants articulated that discussions would only occur with a partner present:

This is related to whether partners attend sessions. (Saskia, Nurse, Vic)

This decision significantly discriminates against patients without, or attending without, a partner. It also further discriminates against patients from rural/remote areas who may be away from home during cardiac care and rehabilitation. Interestingly, Nicole asserts that addressing sexual activity is not her role, even for partnered patients:

In my experience, patients often do not engage in sexual activity due to partner's disinterest or inability – not in my role to address this. (Nicole, Nurse, NSW)

In the following quote, Penny discusses the importance of patients rebuilding confidence and trust in their bodies. Sex and intimacy are positioned not as part of that process, but as something separate, to happen later. Thus, sex and intimacy are not positioned as holistic aspects of human need integrated into recovery:

This is not an issue that has been raised often with my clients [...] Those I have treated have been women and it was my experience rebuilding their confidence and trust in their bodies was a significant issue that needed time and support to redress. These women were early to mid-40's. (Penny, Other, NSW)

Several participants believed that post heart attack, patients are preoccupied with fear of death and practical day-to-day concerns:

Issues such as return to work, finances, fear and anxiety dominate clients concerns at this stage. (Violet, Nurse, Vic)

Anna accounts for her decision by prioritising other matters, in this comment:

Limits the time available to discuss all the relevant issues e.g., medications post angioplasty/surgery instructions, driving restrictions and returning to work. Sometimes patients are just too overwhelmed to take the volume of information in. (Anna, Nurse, NSW)

While here, Mia speaks of 'gauging' the timing, and indeed, whether to have this discussion at all:

Not all patients want to discuss resuming sexual activity; you need to be able to gauge where a patient and their partner is at, and enter it into conversation at the right time for the patient, not a 'set' time in a program. (Mia, Nurse, SA)

It is not clear from this comment how Mia gauges whether patients wish to have discussions. Mia's comment also reveals the importance health professionals place on patients' relationship status in this decision.

Theme 4: Illness, not wellness

There was a pervasive understanding that discussing sex and intimacy after a heart attack is only relevant if there is a problem. Sexual activity was perceived only as relating to issues such as erectile dysfunction or side-effects of medication. Thus, sexual activity is perceived as medical and pathological, rather than socio-emotional and inherently important. Health professionals claimed to not have the expertise to discuss the issue, or were likely to refer to a doctor or an 'appropriate' sexual therapist.

Patients already using erectile dysfunction medication prior to heart attack are advised to discuss further use of this medication with their treating doctor. (Ruth, Nurse, Qld)

Perhaps a partnership model giving the lead to the client to steer the conversation. Erectile dysfunction is a littleknown area for me to discuss. (Alyssa, Nurse, Qld)

Participants seemed to presume that patients wanting to discuss sex need referral to a sex therapist, reflecting an illness framing, and the professionals' perceptions that they lack expertise to offer advice/support:

More information on sexual therapist including cost to patients. More information on impotence management. (Howard, Nurse, Qld)

Perhaps it could be more easily discussed if the patients were given a questionnaire, and then if problems were

apparent from that, further discussion and referral with consent to an appropriate therapist. (Deborah, Nurse, Qld)

Theme 5: Too many obstacles

The health professionals outlined a range of obstacles to discussions about sex and intimacy. These ranged from structural (e.g. time and physical space) to lack of resources and training. Both a lack of time and privacy were identified as significant barriers to conversations about sex and intimacy:

Our patients are not here long enough to initiate this topic. (Netta, Nurse, SA)

Lack of privacy was also identified as a significant barrier to discussion:

There is no privacy to discuss in public hospital setting. (Sherrie, Nurse, SA)

A lack of resources was reported by health professionals as a major barrier. Participants reported not being aware of credible resources addressing sex and intimacy after heart attack, not knowing where to access resources, being unable to source information on sexual health and not sharing resources with patients:

I wouldn't know where to find resources to support this, and I have been in general practice for 8 years. (Marilyn, Nurse, Qld)

Clear advice does not currently exist, and to find anything on sexual health takes a lot of searching. (Manon, Nurse, Vic)

Health professionals desired a variety of information resources to be available for their patients; for example, social media campaigns, videos, seminars, apps, and information sheets containing patient stories, facts and myths.

Pamphlets would be good to provide to the patient to read in private, then be able to ask questions later. (Netta, Nurse, SA)

Printed resources or websites to refer people to would be helpful. (Amelia, Nurse, NSW)

There were also calls for the information in existing resources to be updated and more localised to the Australian context, as many were from Europe and the USA. Others commented that resources needed to be more appropriate and inclusive for people of various genders, sexualities, languages and cultures. We need information translated into other languages – the info I use is mainly from the Heart Foundation and is in English only. (Claudia, Nurse, NSW)

No Indigenous resource for this. Most of clients Indigenous. (Sally, Nurse, NT)

Information for ATSI (Aboriginal and Torres Strait Islander), CALD (culturally and linguistically diverse) communities and LGBTIQ+ (lesbian, gay, bisexual, transgender, intersex and queer) communities. Also, patients undertaking/undertaken gender reassignment surgery. Keen for insightful education for health professionals and our patients. (Constance, Nurse, Qld)

Health professionals wanted to know where to find information to build their knowledge about speaking to heart attack patients about sex and intimacy. They expressed not being aware of professional development regarding this, and felt that accurate, 'specialist' advice would help.

I have no idea of what resources are available. It is not something I have seen on the programme of any conferences I have been to, and I do not recall ever seeing any material/presentations related to it. (Alexandra, Nurse, NSW)

Discussion

This is the first Australian qualitative research, and one of few studies worldwide, to investigate a range of health professional's perceptions regarding discussing sex and intimacy with heart attack survivors and their partners. Significant barriers to Australian health professionals providing the level of recommended care (Levine *et al.* 2012; Steinke *et al.* 2013) were identified. Australian clinicians are wrestling with similar barriers to effective communication as health professionals in other countries, and in other health care settings (Annerstedt and Glasdam 2019; O'Connor *et al.* 2019; Karani and McLuskey 2020; Urry *et al.* 2022).

These barriers arise from intra-personal, interpersonal and structural factors. Health professionals lacked confidence in their ability to initiate discussions, exacerbated by a lack of training, suitable resources, time, privacy and role clarity. Available resources were identified as unsuitable for diverse populations; for example, culturally and linguistically diverse people, Aboriginal and Torres Strait Islander people or those identifying as LGBTIQ+.

Our findings that sex and intimacy are perceived as nebulous and taboo are consistent with previous research (Ollivier *et al.* 2019) that societal positioning of sex as

taboo, only to be discussed by people of the same gender, and leads to discomfort for health practitioners to initiate discussions. Several respondents avoided discussions because of concerns about patient embarrassment. Paradoxically, many also expected patients to initiate these discussions, despite acknowledgement of their likely embarrassment. We argue that this places undue responsibility on the patient. Hyde et al. (2020) similarly reported that health professionals waited for patients to initiate discussions, whereas patients expect health professionals to do so (East et al. 2021). Clinician embarrassment, combined with fear of patient embarrassment, were identified as barriers among nurses in cardiac care (Karani and McLuskey 2020), oncology (Annerstedt and Glasdam 2019), chronic disease (O'Connor et al. 2019) and mental health settings (Urry et al. 2022).

Medicalised perspectives, viewing sex and intimacy through an illness frame, may undermine confidence to initiate discussions. This finding is consistent with previous research among nurses in various health care settings (Annerstedt and Glasdam 2019; O'Connor *et al.* 2019; Ollivier *et al.* 2019; Karani and McLuskey 2020). Sex and intimacy are viewed as separate to 'lifestyle', only to be addressed when patients identify a problem. This perspective, combined with embarrassment, leads to assumptions that discussions about sex are the responsibility of 'a specialist' – but without clarity about who.

Assumptions about who is/is not sexually active and/or interested in discussing sex and intimacy led to staff making 'judgement calls', which we argue limits patients' access to support and information. This is consistent with themes identified in a recent qualitative systematic review (Karani and McLuskey 2020), which identified personal and sociocultural barriers preventing nurses from discussing sex and intimacy with heart attack patients. Older patients, women, those from culturally and linguistically diverse groups, and those identifying as LGBTIQ+ are particularly at risk of having their sexual health 'made invisible' because of biases and assumptions (Byrne *et al.* 2013; Salehian *et al.* 2017). More holistic views of sexual health reflecting social, spiritual, psychological and physical needs of all patients are required.

Structural barriers to communication about sex and intimacy were frequent, consistent with previous research in this and other fields of medicine and nursing (Salehian *et al.* 2017; Karani and McLuskey 2020; Urry *et al.* 2022). Insufficient time and privacy, generic, out-dated or inappropriate resources, the lack of a protocol, and a lack of training were all obstacles. These structural factors, combined with intra- and interpersonal factors discussed above, result in patients not having their needs met.

Health professionals working with heart attack survivors need good-quality patient education resources, training and a protocol to guide practice in initiating discussions about sex and intimacy. These could be developed in partnership between credible agencies working in heart health and sexual health. Additionally, structural change is needed within clinical settings to reduce barriers of consultation time and privacy. Further research into the most useful approaches to these discussions is required.

The National Heart Foundation of Australia has taken some positive recent steps, by integrating information about sex and intimacy into their patient support program (https://www. myheartmylife.org.au/). This program represents progress towards addressing the gaps identified in this research.

This research was conducted with a moderate-sized sample of Australian health professionals, so may not represent perceptions and practices of other health professionals. Selfselection may have resulted in a sample more interested in this topic than average, and therefore more likely to engage in discussions, or more aware of the obstacles. The high representation of nurse respondents (54%) means that for some themes, evidence quotes from other professions are under- or not represented in this paper. However, we did find that most themes included quotes from all professional groups. Future research should aim to include greater representation from doctors, cardiac rehabilitation specialists and allied health professionals. An online questionnaire had the advantage of collecting data from a wide range of clinicians from around Australia, but restricted our ability to clarify and explore the meanings of some participant comments.

Conclusion

This study identifies significant barriers to discussions about sex and intimacy between health professionals and people who have experienced a heart attack, and their possible partners. Such discussions require normalisation, careful timing, sufficient time and adequate privacy. Staff training, a clear protocol and high-quality, culturally appropriate patient resources are needed. These must also address unhelpful assumptions about who is/is not sexually active, include the needs of diverse populations and clarify roles of health professionals in initiating discussions. Further research is required that investigates the impact of specific resources and training on health professionals' practice and patient outcomes.

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Appendix I. Qualitative questions used in survey

- 1. Are there other factors that have not been raised that impact on your capacity to discuss sexual activity with heart attack patients?
- 2. Is there anything else that would support you to discuss sexual activity with patients who have had a heart attack?
- 3. Are there other factors that have not been raised that impact on your capacity to discuss intimacy/relationship issues with heart attack patients?
- 4. Is there anything that would support you to discuss intimacy with patients who have had a heart attack?