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Original Article

Perceived Barriers to Addressing Sexual Issues Among Cardiovascular Patients

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Abstract

Background: Sexuality is an aspect of quality of life that is important for many patients and their partners, but may be adversely affected by a cardiac event. Therefore, it is necessary that cardiologists assess sexual issues among cardiovascular patients. However, most health professionals avoid talking about sex issues due to some barriers. The recognition of these barriers leads to new information that is helpful for future planning and intervention in Iran.

Objectives: The aim of the present study was to identify the barriers to discussing sexual issues among cardiovascular patients and to discover cardiologists' reasons for not addressing sexual issues.

Methods: Using a self-made questionnaire, a cross-sectional descriptive study was carried out at the seventeenth national congress on cardiovascular update which was held in 2015, and cardiologists' answers were gathered and analyzed.

Results: The study population consisted of 138 cardiologists (87 male and 51 female) with a mean age of 45.42 years. Analysis of data showed that most of the barriers for discussing sexual issues were "Patient discomfort for discussing about sexual issues," "Religious and cultural reasons", "Not having enough time," "Presence of other person" and "Lack of knowledge and skill in dealing with sexual issues." Among the demographic characteristics, cardiologists' gender showed a significant relationship with "Cardiologist discomfort for discussing sexual issues" (P value = 0.005). Female cardiologists had more discomfort than male cardiologists.

Conclusions: From the opinion of cardiologists, patients' uncomfortable feelings, cultural-religious issues and time restrictions were the most important when discussing sexual issues with cardiovascular patients, so these barriers need more attention in the delivery of public health interventions.

Keywords: Barriers, Cardiologists, Cardiovascular, Patients, Sex, Sexual Counseling, Sexual Dysfunction, Sexuality

1. Background

Sexuality is an aspect of the quality of life that is important for many patients and their partners, but it may be adversely affected by cardiac events (1). Numerous studies have shown a high prevalence of sexual dysfunction among both men and women with cardiovascular disease (CVD) (2-5). Various causes, including cardiovascular disease, diabetes, dyslipidemia, medication side effects, cardiac surgery, psychological effects of cardiac disease, and even fear of cardiac events during sexual activity has shown to lead to a higher incidence of sexual dysfunction in cardiovascular patients (6-10). Existing guidelines have recommendations for the clinical management of sexual functions in these groups of patients to help physicians, even though there are similarities and differences between them (11-14). Sexual dysfunction has been shown to adversely affect patients' quality of life and the wellbeing of patients with cardiovascular disease; therefore, it is necessary that cardiologists assess these problems among this

group of patients (14). Nevertheless, studies show that most cardiologists do not routinely ask patients about sexuality and patients often refuse to talk about these issues (15, 16).

Studies have shown that there are various barriers that restrain physicians from discussing sexual issues. The most important barriers to providing sexual counseling as identified by physicians include embarrassment, time restrictions, lack of knowledge or training, issues related to responsibility, cultural background, religious beliefs, and negative attitudes about sexuality (1, 6, 13). Some therapists' demographic characteristics, such as age, gender, length of employment, or education were also important barriers in this regard (17, 18). To the best of our knowledge, there is no study to assess these barriers in Iran. The recognition of these barriers will provide new information that can be useful in future planning and intervention for improving sexual health care of cardiovascular patients in Iran.

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2. Objectives

The aim of the present study was to identify the barriers for discussing sexual issues and to discover cardiologists' reasons for not addressing sexual issues.

3. Materials and Methods

This cross-sectional and non-random study was carried out in Tehran by convenience sampling. The study was granted ethical approval by the Shahid Beheshti University of Medical Sciences in April 2015.

3.1. Sampling and Participants

The study subjects were all cardiologists who attended the seventeenth national congress on cardiovascular update in September 2015. The sample size was calculated to be 96 subjects, and we needed about 135 questionnaires to reach the 96 complete questionnaires, though 300 questionnaires were manually distributed to maximize our sample. Inclusion criteria of the study consisted of informed consent for completion of the research questionnaires and membership as a cardiologist in the Iran Medical Council. The exclusion criterion was inadequate completion of the questionnaire.

3.2. Instruments

The survey was prepared on two sheets of paper; the study information was written on the first sheet and items relating to barrier questionnaires were written on the second sheet. Demographic data included age, gender, marital status, time of practice in cardiology, and region of activity. Due to cultural-religious and structural differences in Iran compared with other countries, the authors designed the questionnaire by reviewing the literature and through discussions with the research steering committee; this process resulted in an initial pool of items. In addition, minor amendments were made through feedback from 5 cardiologists about ambiguity, accuracy of meaning, congruency, and the difficulty of the words and items. We carried out a methodological study to examine the validity of the questionnaires with a panel of experts (consisting of 5 psychiatrists and 5 cardiologists). First, the panel members were asked to rate the items of the questionnaire in terms of importance on a 5-point ordinal scale. The impact score of each item was calculated by the formula of the impact score (impact score = frequency (%) x importance). If the impact score of each item was determined to be higher than 1.5, the item was included in the questionnaire. This process resulted in a 15-item questionnaire that was then reviewed by the experts for opinions on the questionnaires' content validity.

By using a qualitative content validity method, the experts' recommendations on using essential items, observing grammar, using appropriate and correct words, applying correct and proper order of words, and time needed for completion of the questionnaires were adopted. A quantitative content validity method was used to determine the content validity ratio (CVR) and the content validity index (CVI). For determination of the content validity ratio (CVR), the experts were asked to specify whether an item was necessary in a set of items of the instrument on a 3-point ordinal scale, and for determination of the content validity index (CVI), the panel members were asked to rate the instrument items in terms of clarity, simplicity, and relevancy on a 4-point ordinal scale. The higher scores indicate further agreement of members of the panel on the necessity, clarity, simplicity, and relevancy of an item on the instrument. The questions with a CVR and CVI less than the desired amount were modified. After confirming the face and content validity of the question naires with the panel members, 30 cardiologists filled out the questionnaire with twoweek intervals to evaluate the temporal reliability of the questionnaires. The internal consistency of the questionnaires was calculated using Cronbach's alpha value. The reliability was confirmed with a Cronbach's alpha value greater than 0.7.

Finally, the questionnaire was comprised of 10 items focusing on a list of 9 barriers and an open-ended item inquiring about additional barriers.

3.3. Data Analysis

The characteristics of participants are presented as mean and SD (standard deviation) for numerical variables and number (percentage) for the categorical measures. Differences in two mean values were assessed using the student's independent t-test between several couples of independent groups, such as men and women, and one-way ANOVA for differences in three or more independent groups, such as region of activity groups. To assess the independence of two categorical variables, the chi-squared test or the Man-Whitney U test was used. P values < 0.05 were considered statistically significant.

4. Results

The CVR (content validity ratio), CVI (content validity index), internal consistency, and temporal reliability of the questionnaire had acceptable values: 77.7%, 89.7%, 0.783 and 0.808, respectively.

In total, 168 of 300 questionnaires were returned (response rate of 56%), although 30 of them were excluded because of inadequate completion of the questionnaire. Finally, the study population consisted of 138 cardiologists

(87 male and 51 female) whose mean age was 45.42 (SD=9.63) years. Of these, 107 (77.5%) were married. A statistically significant difference was found between the mean age of women and men (mean 39.92 ± 6.719 in female, vs. mean 48.53 ± 9.671 in men; P value = 0.001). Of the 138 participants, 104 (75.4%) were cardiologists and 32 (23.6%) were cardiology fellows; 52.2% of the participants had work experience less than 10 years, 26.1% between 10 to 20 years, and 16.7% more than 20 years. Of the participants, 50.7% were from Tehran and 49.3% were from the other provinces of Iran. Table 1 summarizes the characteristics of the participants.

Table 1. Demographic Characteristics of the Respondents (n = 138)

Demographic Variables	Classification	No. (%) ^a
	30 to 40	44 (33.1)
Age, y	40 to 50	51 (38.3)
	50 to 60	24 (18)
	60 and higher	14 (10.5)
Sex	Male	87 (63)
SEA	Female	51 (37)
Marriage	Single	26 (19.5)
Mairiage	Married	107 (80.5)
Education	Cardiologist	104 (76.5)
Ludcation	Fellowship	32 (23.5)
Years of activity	Less than 10	72 (55.0)
	10 and higher	36 (27.5)
	20 and higher	23 (17.6)
Region of activity	Tehran	70 (50.7)
	Other provinces	68 (49.3)

^aThe number differs because of missing items in the survey data; valid percentage has been shown.

The most commonly reported barriers to discussing sexual problems with cardiovascular patients were, respectively, "Patient discomfort in talking about sexual issues" (73.2%), "Cultural and religious reasons" (52.2%), "Not enough time" (49.3%), "Presence of third parties" (48.6%), and "Lack of knowledge and skills" (47.1%) (Table 2).

Sixteen cardiologists mentioned additional barriers in an open-ended section that were not listed on the barrier menu. These were mainly related to the cardiologists' perceptions of patient feelings or patient situations.

There was no significant association between these perceived barriers with cardiologists' characteristics, such as age, marital status, education, area of activity and years of work experience, but "cardiologists discomfort to talking about sexual issues" showed a statistically significant

Table 2. Number and Percentage of Cardiologists Reporting Agreement with Listed Barriers to Discussing Sexual Health Problems with Patients with Cardiovascular Disease

Barrier Number	List of Barriers	No. (%)
1	Discomfort of patient for discussion about sexual issues	101 (73.2)
2	Discomfort of you for discussion about sexual issues	33 (23.9)
3	Presence of third parties	67 (48.6)
4	Opposite sex of patient	56 (40.6)
5	Cultural or religious reasons	72 (52.2)
6	Not common words and phrases for sexual issues	51 (37)
7	Not enough time	68 (49.3)
8	Not enough knowledge and training	65 (47.1)
9	Ambiguities about responsibility	50 (36.2)
Other	Sexuality is not important for the patient	5 (3.5)
	The patient does not ask about it	4 (2.8)
	Patient has a negative attitude about sexuality	3 (2.1)
	Old age of the patient	3 (2.1)
	Patient is too ill	1(0.7)

relationship with cardiologist gender (Table 3). Female cardiologists recorded feeling discomfort in discussing sexual issues more than male cardiologists did (P value = 0.005).

5. Discussion

As we know, the current study is the first study to investigate the perceived barriers for discussing sexual issues of CVD patients in Iran. This knowledge is necessary for improvement of sexual health in cardiac patients.

Patients feeling discomfort in discussing sexual issues was an important barrier reported by the majority of cardiologists, but cardiologist discomfort was recorded by almost one quarter of cardiologists, especially female participants. The most common barrier in other countries was embarrassment in both patients and physicians (19, 20). In the study that Lindau et al. did with 3,501 women and men after acute myocardial infarction, the vast majority of patients felt comfortable discussing sexual issues with physicians (16). Studies have shown that patients worry about their sexual activities and need education on sexual issues (6, 21). Cardiologists should consider the importance of sexual issues among cardiovascular patients and the necessity for inquiring about sex. Thus, patients or physicians'

Table 3. Association Between the Cardiologists' Characteristics and the Barriers to Sexual Health Care

Variable	Age	Sex	Marriage	Education	Practice	Region
Patient's discomfort	0.122	0.599	0.938	0.588	0.363	0.681
Physician's discomfort	0.685	0.005	0.199	0.562	0.286	0.071
Presence of third party	0.518	0.332	0.694	0.776	0.522	0.302
Opposite sex of the patient	0.921	0.41	0.438	0.483	0.157	0.135
Cultural or religious issues	0.265	0.204	0.278	0.155	0.126	0.612
Not common words or phrases	0.196	0.251	0.212	0.521	0.693	0.852
Lack of time	0.714	0.76	0.694	0.687	0.982	0.076
Lack of knowledge or training	0.792	0.08	0.242	0.776	0.722	0.571
Ambiguous about responsibility	0.375	0.578	0.274	0.461	0.252	0.524

^aP values < 0.05 were considered statistically significant.

personal uncomfortable feelings toward discussing sexual issues should never get into patient sexual care.

Lack of time was reported by almost half of the cardiologists. In previous studies, this barrier also limited physicians' willingness to talk about sexuality with patients (6, 22). Sexual dysfunctions are categorized based on etiology to three types: psychogenic, organic and mixed (23). If psychological issues are an important cause of sexual dysfunction, patients can always be referred to a psychiatrist, but lack of time has been a common reason that physicians don't request psychiatric consultation (24). Although sexuality may not be the first priority for patients, sex is a normal part of life activities and sexual satisfaction is an important determinant of quality of life. Therefore, cardiologists need to consider enough time for sexual assessment and advise patients to learn how to live with their disease so they can return to normal sexual activity (1).

Compared to the research conducted on non-Iranian physicians, more cardiologists in the current study reported cultural and religious issues restraining them from discussing sexual issues (6, 22). This difference may be due to the higher importance of these issues in Iran. A study from California showed that culture and religion were specific barriers to the provision of sexual health care among Iranian-American physicians (25).

About one third of participants reported absence of common words and phrases for communication about sexual issues as a barrier. Lindau et al.'s study showed that cultural characteristics affected the content and nature of patient-doctor communication about sexuality, but patients were generally satisfied with the recommendations they received even though the recommendations differed between countries (16).

Gender difference was a partially common barrier in the current study. Gender of the physicians identified as inhibiting among patients to seeking treatment for their sexual problems (19), but patients felt more comfortable than physicians in communicating about sexual issues (20). However, discussion about sexual issues is essential for addressing sexual dysfunction, regardless of the opposite sex.

The presence of other parties, which was reported by almost half of participants, could be managed by simple request for them to be out of the room. Sexual concerns were the most prevalent stressors among partners of patients undergoing cardiac rehabilitation (1). Presence of the patient's partner can help in taking sexual history, addressing sexual concerns of the couple, and helping them receive the same counseling information regarding the specific cardiac conditions of the patient.

As in previous studies, issues relating to responsibility appear to be an important barrier for dealing with patients' sexual issues (22). Association between cardiovascular disease and sexual dysfunction has been identified (11, 12); therefore, cardiologists have an important role in assisting cardiac patients who experience sexual dysfunction (12, 26, 27). In addition, some antihypertensive drugs can deteriorate sexual function. Then again, sexual dysfunction can contribute to poor adherence to antihypertensive drug therapy; therefore, cardiologists should select medications with the least potential for causing sexual problems in order to improve compliance (28). On the other hand, in assessment of sexual dysfunction, the biopsychosocial parts of sexual problems should be considered (29), and interdisciplinary collaboration is necessary for implementation of a biopsychosocial treatment (30). Thus, cardiologists should not only consider the cardiovascular etiology of sexual problems and their responsibility for sexual assessment, but also their responsibility for referring patients if other biological or psychosocial

causes of sexual problems are suspected.

The perceived lack of knowledge and training in sexual problem assessment was also a more significant barrier in Iran compared with other countries (6, 22), so more sexual medicine training is required in order to give physicians enough knowledge and skills. Cardiologists should consider important benefits of sexual activity, including lower mortality rates and overall incidence of cardiac events (31). Current guidelines and curricula can help cardiologists in sexual assessment and counseling (25, 32-34). In addition, cardiologists can use guidelines that address antihypertensive drug-associated sexual dysfunction (35).

The written barriers in the open-ended section were mainly related to the cardiologists' perceptions of patient feelings or patient situations. People may have traditional attitudes about different issues that cannot be considered to be valid (19). On the other hand, physicians may have stereotypical views on sexuality that prevent them from discussing sexual issues; for example, the view that discussion would be inappropriate with older people or unimportant to women (1, 6, 36, 37). It should be noted that age does not have a direct impact upon how sex is prioritized in later life (38), and sexual dissatisfaction is one of the important causes of marital dissatisfaction, especially in women (39, 40). Thus, these assumptions or stereotypical views should never play a role in the patient's sexual care and all cardiac patients should be assessed regarding their specific cardiac conditions (1).

Most cardiologists did not routinely ask patients about sexual problems (22, 41, 42). Understanding of the perceived organizational, structural, and personal barriers leads to the improvement in addressing sexuality issues and will be useful in sexual counseling interventions (43). Facilitators such as communication skills, exposure to sexual medicine courses, psychosocial orientation, and having liberal sexual attitudes have been identified as predictors of involvement in sexual history taking and could help physicians (44). Cardiologists, especially female physicians who have more difficulty in dealing with sexual issues, need more involvement with these strategies (44).

In the current study, a validated questionnaire was used in which cultural and religious components were taken into account. This study has limitations that must be taken into consideration, and caution needs to be applied when interpreting the results. In this cross-sectional study, non-random sampling was used to select participants, and the sample size was not large. Our survey was based on self-reported responses, which could have resulted in report bias. Also, the study focused on a sensitive issue in Iranian culture, which was another limitation of the study. Non-responders are generally more likely to be uninterested in or dislike the topic being researched. Therefore, the find-

ings may be affected by non-response bias. Finally, time restraints could be involved for the response rate. In spite of these limitations, we believe the study sheds light on perceived barriers among cardiologists.

For addressing these potential sources of bias, all cardiologists were informed that participation was voluntary, and no identifying information was gathered. The survey was prepared on two sheets of paper; attempts to gather cardiologists' responses at the time of gathering were not presented, especially for those who felt discomfort with the research topic. We carried out the study during the national congress, where cardiologists expected cardiovascular topics to be presented, and this could help the deduction of the non-response bias.

The response rate in the current study was higher than studies using mail correspondence (6, 22, 45) and lower than attendance surveys (17, 46-48). In an endeavor to maximize our response rate, two trained psychologists distributed threefold questionnaires at the entrance of the hall. Also, we paid significant attention to questionnaire planning and design (the questionnaire was short, concise and anonymous).

Further research by random sampling and on a greater sample size of cardiologists is needed to assess the extent of such barriers, and changes over time. In addition, evaluation of patient's reasons about discussing sexual issues will be helpful for future planning and intervention. Future research should focus on developing and evaluating interventions to increase and improve sexual assessment and counseling in practice.

5.1. Conclusions

Cardiologists who participated in the study reported various barriers to providing sexual counseling, which must be addressed for the development of sexual counseling interventions. Among these barriers, their perception of patients' uncomfortable feelings, cultural-religious issues, and time restriction were the most important. Barriers such as cultural-religious issues, gender differences, and lack of knowledge and skills were more significant barriers in Iran compared with other countries. Therefore, increased efforts are vital for time-efficient interventions to overcome these barriers in Iran. Many of these barriers may be related to communication status and skill about how to inquire about sex. Inclusion of sexual counseling in cardiologists' educational programs and more attention to communication skills, biopsychosocial orientation, and sexual medicine training will be useful in sexual counseling interventions.

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Footnotes

Authors' Contribution: Razieh Salehian conceived and designed the study, participated in preparing the questionnaire, collected the data, interpreted them, and drafted the manuscript. Mersedeh Karvandi participated in designing of the study. Morteza Naserbakht participated in designing of the study and performed the statistical analysis. Azadeh Mazaheri participated in designing of the study and interpretation of data. Razieh Salehian revised the manuscript. All authors read and approved the final manuscript.

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