Patients' Need for Sexual Counseling in the Cardiac Rehabilitation Service

Pattarika Rittirong, M.D.*,, Wilawan Thirapatarapong, M.D.**, Thanitta Thanakiatpinyo, M.D.****

**Department of Rehabilitation Medicine, Banmi Hospital, Lopburi 15110, Thailand, **Department of Rehabilitation Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand.*

ABSTRACT

Objective: To evaluate the need for sexual counseling among patients with heart disease

Materials and Methods: Data were collected from 363 patients with heart disease attending a cardiac rehabilitation outpatient clinic. Participants completed the questionnaire independently.

Results: The participants consisted of 241 males (66.4%) and 122 females (33.6%) with a mean age of 57.69±14.50 years. Among them, 248 (68.3%) were married. Most participants (91.2%) agreed that healthcare providers should offer sexual counseling to all heart patients of reproductive age, and they wanted their healthcare providers to initiate the counseling. Factors related to the need for counseling were being male (OR=2.07; 95% CI =1.05-4.07), being married (OR=2.04; 95% CI =1.03-4.05) and being 50 years of age or younger (OR 9.05; 95%CI =2.06-39.82). The main obstacles affecting conversations about sexual activity with healthcare providers were feeling embarrassed (45.7%), being physically impaired (45.4%), and having a third person present during counseling (44.9%).

Conclusion: Most patients with heart disease want to receive counseling on how to safely resume sexual activity following their illness. They expect healthcare providers to initiate such counseling during visits to cardiac rehabilitation clinics. It is crucial that healthcare providers provide counseling in a format that is tailored to the needs and preferences of each patient.

Keywords: Heart disease; cardiac rehabilitation; sexual activity; sexual counseling (Siriraj Med J 2023; 75: 522-528)

INTRODUCTION

Heart disease is the leading cause of morbidity and mortality worldwide. One of the most common problems among patients with heart disease is sexual problems, which are found to be more prevalent in such patients than in the general population within the same age range. These issues can adversely impact the patients' quality of life in terms of physical, mental, and marital well-being.[1] Multiple studies have found that 20-70% of male[2-5] and 43-87% of female[3,6] patients with heart disease have sexual problems. There are several factors that cause sexual problems. Physical factors such as dyspnea, fatigue, exercise intolerance, and decreased libido are caused by cardiac problems and side effects of certain medications. Psychological factors, such as fear and anxiety that engaging in sexual activity may trigger life-threatening cardiac symptoms, can also lead to depression. Other factors, such as concerns from partners that sexual activity may result in an acute relapse and death, can also play a role.[1] Both the American Heart Association (AHA) and European Society of Cardiology (ESC) clinical practice guidelines recommend that patients and their partners be offered sexual counseling to safely resume sexual activity, maintain marital harmony, and improve the patients' quality of life.[7,8] Healthcare providers should provide sexual counseling to heart patients who do not have contraindications.[8]

Corresponding Author: Thanitta Thanakiatpinyo
E-mail: ththanitta@hotmail.com
Received 22 May 2023 Revised 8 June 2023 Accepted 10 June 2023
ORCID ID:http://orcid.org/0000-0002-0838-5764
https://doi.org/10.33192/smj.v75i7.263195

Proper sexual counseling is imperative for heart patients, but a previous study found that the rate of patients with cardiovascular disease who had never received appropriate sexual counseling was as high as 66%, while 37% did not want to receive counseling on such matters.[9] Reasons for not wanting to receive counseling include not feeling ready to talk about sex, feeling embarrassed to ask questions, and concerns that counseling sites are not private.[9] In Thailand, sociocultural norms differ from those of western countries, making conversations regarding sex taboo. This is consistent with the results of a study which found that 80% of post-heart-surgery patients had never received counseling about sexual activity, and 62% did not want sexual counseling. However, the study did not address why patients did not seek counseling.[10]

A literature review of research in Thailand revealed a lack of research on the opinions of heart patients regarding sexual counseling following the onset of their illness. This included a lack of studies on appropriate sexual counseling formats tailored to the specific needs of these patients. Therefore, we were interested in conducting research on this issue in order to apply the results of the study to Thai patients appropriately.

Objective

To assess the need for sexual counseling among patients with heart disease, identify factors that contribute to the need for counseling, and explore factors that impede counseling.

MATERIALS AND METHODS

The study was conducted under the approval of the institutional review board (COA no. Si 636/2019) and registered in the Thai Clinical Trials Registry (TCTR20230130007). The research design employed was a cross-sectional descriptive study. Data were collected from September 2019 to September 2020 through questionnaires administered to heart patients aged 18 years and over who had been attending the outpatient cardiac rehabilitation clinic for a minimum of 3 months. Participants were required to have a diagnosis of heart disease, such as coronary artery disease, valvular heart disease, or congestive heart failure. Patients had to be able to read and write Thai language and must not have been diagnosed with dementia. Participants who did not complete the demographic data or completed less than 50% of the sex questionnaire were considered to have provided incomplete information and their data was not included in the analysis.

Sample size calculations were based on data from the Ramathibodi Hospital study[10], which found that the prevalence of postoperative heart disease patients seeking sexual counseling was 38%. This study provided the basis for determining that a sample size of 363 participants would be required to achieve an error in estimation of no more than 5% at a 95% confidence level (type I error = 0.05, two-sided).

Research procedure

We designed a questionnaire that met the objectives of the study by referencing relevant studies conducted in Thailand and abroad. The questionnaire consisted of questions for determining demographic data and questions about the need for sexual counseling. To ensure the questionnaire's face validity, it was pre-tested on a sample of 10 volunteers who were not healthcare providers. Their feedback was utilized to make adjustments to the questionnaire in order to align it with the research aims and the target population. Eligible patients with heart disease who had been attending the outpatient clinic were invited to participate in the study, in accordance with the established inclusion and exclusion criteria. Each participant was required to sign a consent form prior to participating in the study. Participants completed the questionnaire independently and were given the option to not answer any questions they did not wish to answer. To maintain participants' confidentiality, completed questionnaires were kept in sealed envelopes and stored separately from the consent forms which participants had completed to participate in the research. All data collected was later analyzed statistically.

Statistical analysis

Descriptive statistics were employed to summarize demographic data. The prevalence was analyzed using percentages and 95% confidence intervals. Univariate analysis was conducted to examine the correlation between clinical data and the need for sexual counseling, utilizing the chi-square test for categorical data and the unpaired t-test for continuous data that were normally distributed. For continuous data that were not normally distributed, the non-parametric Mann-Whitney U test was used. Multivariate analysis was performed using multiple logistic regression to identify multifactorial correlations, and the degree of correlation was reported as odds ratios with 95% confidence intervals.

RESULTS

A total of 363 heart patients participated in this study, with 100% returning and completing all items of the questionnaire. There were 241 males (66.4%) and 122

females (33.6%), with a mean age of 57.69±14.50 years. The numbers of participants with a diagnosis of coronary artery disease, valvular heart disease, and congenital heart disease were 193 (53.2%), 147 (42.1%), and 45 (12.4%), respectively. Of the 363 participants, 53.7% were able to perform at New York Heart Association Classification level 1, and 248 people were married (68.3%) (Table 1).

Prior to participating in the study, 132 participants

TABLE 1. Demographic and clinical characteristics of the patients (n=363).

Characteristic	Value
Age (years), mean±SD (min,max)	57.69±14.50 (18.00, 88.00)
Sex: male, n (%)	241 (66.4%)
Body mass index (kg/m^2), mean± SD (min,max)	24.472±3.930 (15.24, 41.87)
Religion: Buddhism, n (%)	358 (98.6%)
Marital status, n (%)	
Single	65 (17.9%)
Married	248 (68.3%)
Widowed/Divorced/Separated	50 (13.8%)
Education, n (%)	
Below bachelor's degree level	206 (56.8%)
Bachelor's degree level	106 (29.2%)
Higher than bachelor's degree level	51 (14.0%)
NYHA classification, n (%)	
I	195 (53.7%)
II	162 (44.6%)
III	6 (1.7%)
Cardiac diagnoses#, n (%)	
Coronary artery disease	193 (53.2%)
Valvular heart disease	147 (42.1%)
Congenital heart disease	45 (12.4%)
Aortic disease	16 (4.4%)
Heart failure	4 (1.1%)
Cardiac arrhythmia	29 (8.0%)
Comorbidities#, n (%)	
Diabetes mellitus	88 (24.2%)
Hypertension	159 (43.8%)
Dyslipidemia	113 (31.1%)
Stroke	11 (3.0%)
Arthritis	35 (9.6%)
Peripheral artery disease	5 (1.4%)

#Multiple answers were possible.

(36.4%) had previously received sexual advice from a healthcare provider. Counseling provided by cardiac surgeons, physiatrists, and nurses accounted for 49 people (24.5%), 41 people (20.5%), and 35 people (17.5%), respectively. Most of the patients (97 people, 73.48%) reported being very satisfied with the counseling. In addition to receiving counseling from a healthcare provider, 20.1% of the participants also obtained information about sex through other means, such as studying on the internet or reading hospital pamphlets. Among all participants, 222 (61.2%) participants had no concerns regarding sexual activity.

As for the need for sexual counseling, a high number of participants (66.1%) wanted to receive counseling. The variables that significantly associated with the need for sexual counseling from univariate analysis were entered into multivariate regression analysis. The results of multivariate analysis revealed being 50 years of age or younger (OR 9.05; (95%CI =2.06-39.82), being male (OR = 2.07; 95% CI = 1.05–4.07), and being married (OR=2.04; 95% CI=1.03–4.05) to be independently correlated with the need for sexual counseling, as shown in Table 2.

A majority of the participants (91.2%) agreed that healthcare providers should provide sexual counseling to all patients of reproductive age with cardiac disease. Those who disagreed cited reasons such as old age, being widowed, physical impairments, and not wanting to engage in sexual activity. About half of the participants had a positive attitude towards sexual counseling by healthcare providers, with less than 1% feeling uncomfortable, annoyed, or angry about it. Nearly 80% of the participants wanted sexual counseling to be initiated by healthcare providers. The preferred format of counseling was a doctor/ healthcare provider providing sexual counseling along with other advice, without needing to be requested by patients, followed by using media for preliminary counseling, which allowed patients to study at home and have additional channels they could use to ask for more information later. The types of media that patients wish to use to seek additional information in addition to talking directly to healthcare providers include brochures, medical websites, and social media. Having the opportunity to ask a healthcare provider about sexual problems was deemed necessary to help patients in this regard by 72.2% of the participants. The three main obstacles affecting conversations about sex with healthcare providers were feeling embarrassed, being physically impaired, and having a third person in the exam room (Table 3). The majority of male participants agreed that sexual counselors could be of any gender, while about half of female participants preferred counselors of the same gender (Table 4).

TABLE 2. Univariate and multivariate analysis for factors significantly associated with requirement of sexual counseling.

Factors	Wanted n=240	Not wanted n=54	Univariate analysis* Crude odds ratio (95%CI)	*P*-value	Multivariate analysis** Adjusted odds ratio (95%CI)	*P*-value
Gender, n (%):						
Male	170 (85.0%)	30 (15.0%)	1.94 (1.06,3.56)	**0.031**	2.07 (1.05,4.07)	**0.035**
Female	70 (74.5%)	24 (25.5%)	1.00		1.00	
Marital status, n (%):						
Married	167 (69.6%)	31 (57.4%)	1.697 (0.93,3.11)	**0.085**	2.04 (1.03,4.05)	**0.041**
Others	73 (30.4%)	23 (42.6%)	1.00		1.00	
Age (years), n (%):						
≤ 40	30 (12.5%)	1 (1.9%)	11.08 (1.46,83.89)	**0.020**	16.90 (2.15,132.85)	**0.007**
41-50	46 (19.2%)	2 (3.7%)	8.49 (1.97,36.59)	**0.004**	9.05 (2.06,39.82)	**0.004**
51-60	53 (22.1%)	10 (18.5%)	1.96 (0.91,4.21)	**0.085**	1.96 (0.89,4.32)	0.094
> 60	111 (46.3%)	41 (75.9%)	1.00		1.00	
Arthritis, n (%):						
No	222 (92.5%)	43 (79.6%)	3.15 (1.39,7.15)	**0.006**	2.23 (0.92,5.41)	0.075
Yes	18 (7.5%)	11 (20.4%)	1.00		1.00	

Abbreviations: CI, confidence interval; SD, standard deviation
*p-value < 0.1 indicates statistical significance in univariate analysis
**p-value < 0.05 indicates statistical significance in multivariate analysis

TABLE 3. Patients' opinions about sexual counseling.

Patients' opinion	n (%)
Sexual counseling requirement	
Wanted	240 (66.1%)
Not wanted	54 (14.9%)
Not sure	69 (19.0%)
Feeling when receiving sexual counseling[#]	
Glad	172 (47.4%)
It is necessary	172 (47.4%)
Normal	154 (42.4%)
Relieved	29 (8.0%)
Indifferent	95 (26.2%)
It cannot help	11 (3.0%)
Uncomfortable	3 (0.8%)
Annoyed	3 (0.8%)
Angry	1 (0.3%)
Media used to get information about sexual problems[#]	
Brochures	152 (41.9%)
CDs or DVDs	24 (6.6%)
Medical websites	92 (25.3%)
Social media	52 (14.3%)
Applications	9 (2.5%)
Obstacles to sexual counselling[#]	
Embarrassment	166 (45.7%)
Unstable health status	165 (45.4%)
Presence of third party	163 (44.9%)
No privacy	151 (41.6%)
Not enough time	151 (41.6%)
Old age	147 (40.5%)
Not enough experience	145 (40%)

[#] Multiple answers were possible.

TABLE 4. Preferred gender of health professional for sexual counseling.

Patients' gender	Preferred gender of health professional for sexual counseling, n (%)		
	Male	Female	Any
Male	38 (15.8%)	9 (3.7%)	194 (80.5%)
Female	2 (1.6%)	58 (47.5%)	62 (50.8%)

DISCUSSION

The results of this study indicate that about 36% of the participants had received sexual counseling from a healthcare provider. This trend shows an increase in the rate of sexual counseling compared to a previous study conducted in Thailand between 1996-1998, which examined the need for sexual counseling in patients who underwent coronary artery bypass surgery and/or heart valve replacement surgery. The mean age of respondents in that study was comparable to that of our study, but only 20% of patients in that study had previously received counseling. In terms of patients' need for sexual counseling, this study was higher than the prior study which found that only 38% of participants wanted to receive counseling.[10] This may be due to increased openness and awareness among healthcare providers regarding the importance of sexual counseling. We found that the rate of receiving sexual counseling and patients' need for sexual counseling were similar to the study conducted in a western country.[9] Nevertheless, the rate of sexual counseling in our study was not met the expected rate endorsed in the international guidelines.[7,8]

When studying the factors related to the need for sexual counseling, we found that the need for sexual counseling in males was two times that in females, which was consistent with a previous study that stated although most males had more sexual dysfunction than females, after the onset of cardiovascular disease, most males were still more interested in sexual activities than females. In addition, this study found that female participants were more likely to prefer a sex counselor of the same gender, while most men reported no preference. This suggests that women may have more reservations about discussing sexual issues with healthcare providers of the opposite gender. According to World Health Organization categorization, people under age 50 is a reproductive age group.[11] In our findings, we found that people of an age younger than or equal to 50 years old had a need for counseling about 9 to 16 times higher than those over 60 years old. This may be due to a decrease in sexual desire caused by a decline in sex hormones in advancing age as well as physical and mental limitations, which affect sexual activity. Regarding the marital status factor, we found that participants with partners were twice as likely to need sexual counseling as those who were single. We hypothesize that patients' having knowledge and understanding about sexual activity following the onset of their illness can help them and their partners feel more confident and improve the quality of their relationship and overall life. In terms of the format of sexual counseling, the majority of patients reported that direct consultation with healthcare providers was the most preferred method, which was consistent with a study by Baert et al. that found that over 50% of patients preferred to discuss sexual problems with a healthcare provider.[12]

In this study, we found that the main barriers affecting conversations about sex with healthcare providers were feeling embarrassed, the presence of a third person in the exam room, a lack of privacy at the counseling location, physical limitations, and being of advanced age. This is in line with previous studies.[12,13] Additionally, we found that a lack of knowledge about sexual counseling among healthcare providers was also a barrier, which we believe can have a significant impact on the provision of sexual counseling. These findings indicate that, in addition to addressing issues of location privacy and taking account of patients' age and physical abilities, healthcare providers must also be adequately informed to effectively reassure patients that it is safe to resume sexual activity following the onset of cardiovascular illness.

This study's limitations included the fact that religious factors were not taken into consideration as a possible limitation to receiving sexual counseling, as 99.2% of the participants in this study were Buddhists. Additionally, data on the quality of life or mental health of patients with cardiovascular disease after counseling were not collected. Therefore, future studies on these issues should be conducted.

CONCLUSION

Most patients with heart disease, but especially younger males who are married, are concerned about and need to receive counseling on how to safely resume sexual activity. Healthcare providers should recognize the importance of the issue and increase their skills in providing counseling on such matters. Additionally, the result indicate that the most common barrier of counseling is feeling embarrassed. Therefore, the healthcare providers should be proactive in initiating conversations about returning to sexual activity along with giving other advice and consider tailoring counseling formats to match the needs and preferences of each patient, in order to improve their quality of life.

ACKNOWLEDGEMENTS

This work was supported by Faculty of Medicine Siriraj Hospital grant number R016331004. The authors thank Miss Julaporn Pooliam of the Faculty of Medicine Siriraj Hospital, Mahidol University, for her assistance with the statistical analyses.

REFERENCES

1. Murphy PJ, Sharry JM, Casey D, Doherty S, Gillespie P, Jaarsma T, et al. Sexual counselling for patients with cardiovascular disease: protocol for a pilot study of the CHARMS sexual counselling intervention. BMJ Open. 2016;6(6):e011219.
2. Schumann J, Zellweger MJ, Di Valentino M, Piazzalonga S, Hoffmann A. Sexual dysfunction before and after cardiac rehabilitation. Rehabil Res Pract. 2010;2010:823060.
3. Kriston L, Günzler C, Agyemang A, Bengel J, Berner MM. Effect of sexual function on health-related quality of life mediated by depressive symptoms in cardiac rehabilitation. Findings of the SPARK project in 493 patients. J Sex Med. 2010;7:2044–55.
4. Kloner RA, Mullin SH, Shook T, Matthews R, Mayeda G, Burstein S, et al. Erectile dysfunction in the cardiac patient: how common and should we treat? J Urol. 2003;170(2 Pt 2): S46-50.
5. Mulat B, Arbel Y, Mashav N, Saar N, Steinvil A, Heruti R, et al. Depressive symptoms and erectile dysfunction in men with coronary artery disease. Urology. 2010;75(1):104–7.
6. Schwarz E, Kapur V, Bionat S, Rastogi S, Gupta R, Rosanio S. The prevalence and clinical relevance of sexual dysfunction in women and men with chronic heart failure. Int J Impot Res. 2008;20(1):85-91.
7. Steinke EE, Jaarsmar T, Barnason SA, Byrne M, Doherty S, Dougherty CM, et al. Sexual counselling for individuals with cardiovascular disease and their partners: a consensus document from the American Heart Association and the ESC Council on Cardiovascular Nursing and Allied Professions (CCNAP). Eur Heart J. 2013; 34(41):3217–35.
8. Levine GN, Steinke EE, Bakaeen FG, Bozkurt B, Cheitlin MD, Conti JB, et al. Sexual activity and cardiovascular disease: a scientific statement from the American Heart Association. Circulation. 2012;125(8):1058-72.
9. Byrne M, Doherty S, Murphy AW, McGee HM, Jaarsma T. The CHARMS Study: cardiac patients' experiences of sexual problems following cardiac rehabilitation. Eur J Cardiovasc Nurs. 2013;12(6):558-66.
10. Saowakontha P, Kantaratanakul V, Jitpraphai C. Return to work and sexual activity in cardiac patients after Cardiac Surgery. Rama Med J. 2000;10(2):72-9.
11. World Health Organization [Internet]. Geneva: World Health Organization; c2023. Indicators; 2023 [cited 2023 Jun 8]; [about 2 screens]. Available from: https://www.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/women-of-reproductive-age-(15-49-years)-population-(thousands)
12. Baert A, Pardaens S, De Smedt D, Puddu PE, Ciancarelli MC, Dawodu A, et al. Sexual Activity in Heart Failure Patients: Information Needs and Association with Health-Related Quality of Life. Int J Environ Res Public Health. 2019;16(9):1570.
13. Tantiwong A. Erectile Dysfunction: A Presentation of Sexual Health Problems. Siriraj Med J. 2007;59:248-50.