

NURSES' PERSPECTIVE TOWARDS CARING FOR JORDANIAN MEN WITH SEXUAL HEALTH PROBLEMS

Suhair Hussni Al-Ghabeesh, RN, MsN, PhD¹, Muwafaq Al-Momani, RN, MsN², Ibraheem Bashayreh, RN, MsN, PhD³, Ali Alshraifeen, RN, MsN, PhD⁴, Ahmad Saifan, RN, MsN, PhD³

¹Faculty of Nursing, Head of the Clinical Nursing Department, Al-Zaytoonah University of Jordan, Airport Street, Amman, Jordan

²Princess Aisha Bint Al-Hussein College of Nursing and Health Sciences, Al-Hussein Bin Talal University, Ma'an, Jordan

³Fatima College, Madinnat Zayed/Abu Dhabi, UAE

⁴Faculty of Nursing, Hashemite University, Zarqa, Abdallah Ghosheh, Az-Zarqa, Jordan

Correspondence: Suhair Hussni Al-Ghabeesh: Suhair_alghabeesh@yahoo.com; s.alghabeesh@zuj.edu.jo

Submitted: April 16, 2019. **Accepted:** June 4, 2019. **Published:** July 4, 2019.

ABSTRACT

Purpose

This study examined nurses' role in their practice, nursing education and the impact of culture in Jordan on helping men suffering from sexual problems.

Design and Methods

A cross-sectional study design was used: 265 nurses completed and returned the questionnaire, a 57.4% response rate.

Findings

Overall, sexual health problems appeared hidden and unresolved. This may be a result of culture and society issues, including masculinity, men's health beliefs, religious issues and men's lack of trust in nurses and their keeping things confidential.

Practice Implications

Creating a comprehensive strategy for sexual health care is necessary. This will require education, increased awareness and development of appropriate gender sensitive health services to suit the culture of Jordan.

KeyWords: *sexual health; sexual dysfunction; experience; attitudes; culture and nursing*

INTRODUCTION

In Islam, it is thought that God created people with innate physical, psychological, sexual, social and spiritual needs. Gratifying these needs is essential, in order to maintain a healthy state of equilibrium.¹ Sexual health is connected with other health domains, and therefore, nurses need to recognise the significance of addressing sexual health as part of routine nursing care.² Sexual health is defined as a state of physical, mental and social well-being in relation to sexuality across the lifespan. It has physical, emotional, mental, social and spiritual dimensions.³ A sexual problem, or sexual dysfunction, refers to a problem during any phase of the sexual response cycle that prevents the man or couple from experiencing satisfaction from the activity. It is a major health concern for patients recovering from major acute illnesses or living with chronic conditions. Worldwide, sexual problems are common. It is estimated that more than 150 million men were experiencing these problems in 1995.⁴

Ageing, being male, having chronic diseases,⁵ and comorbidities influence patients' sexual health negatively.⁶ In addition, disease-associated symptoms such as anxiety, fatigue and activity intolerance; physiological changes; and medications all influence patients' sexual health.⁷ Satisfying sexual activity is an important part of the patient's quality of life.⁸ Providing patients with sexual health information helps improve their satisfaction: it decreases the level of anxiety and fear among both the patients and their partners, and it improves their sexual life.⁹ However, information concerning sexual needs is not considered to be a priority.^{10,11}

Nurses have recognised that sexual health assessment for patients is part of their professional role.¹ However, Bdair and ConsTantino¹² found that sexual health was poorly addressed in clinical settings and there are several barriers to address sexual health. They classified these barriers into

four categories: patient related barriers, nurse-related barriers, organisation-related barriers and value-related barriers. The most commonly identified nurse-related barriers were lack of knowledge, training, time, facilities, confidence and comfort. The most commonly identified patient-related barriers were feeling embarrassed, not being interested in a discussion of their sexual concerns and concerns about initiation of a sexual health assessment. Organisational related barriers included a heavy workload, unavailability of educational materials, lack of sexual health assessment being part of the nursing health assessment sheet and privacy issues (e.g. not having specialised rooms). In addition, the value-related barriers consisted of the cultural and social perspectives of patients.¹²

Kim¹³ stated that the greatest barriers preventing nurses dealing with patients' sexual health were related to communication skills, participation in sexual health training,¹⁴ and experience in the obstetrics and gynaecology department. Therefore, understanding nurses' attitudes, education and experiences towards addressing patients' sexual health is an important consideration.

Ferreira et al.¹⁵ in a qualitative study found a group of barriers related to the biomedical model, barriers related to institutional dynamics and barriers related to social interpretations of sexuality. Akhu-Zaheya and Masadeh¹⁰ found that the gender of the nurse was a barrier in discussing sexual concerns and providing sexual counselling needs for patients with cardiac diseases. In so far as the researcher s' awareness, there is no published study that has investigated the nurses' role in their practice, nursing education and the impact of culture on helping men suffering from sexual problems in Arab-Muslim patients. Accordingly, we designed this study to address the following two research questions:

1. What are the views of nurses on their education and preparation to care for men with sexual dysfunction in Jordan?

2. From the perspective of nurses, how do cultural issues (personal, social, nursing and organisational) influence the care they provide to men with sexual dysfunction?

METHODS

Study Design

A cross-sectional survey design was used.

Setting

The study sample was obtained from one major educational hospital, one major private hospital and one major governmental hospital representing three main health sectors within Jordan. Specifically, these were Jordan University Hospital, Prince Hamza Hospital and Jordan Hospital

Study Population

The sample included nurses in the three study sites working in areas where men with chronic illness were treated or counselled, such as general medical, oncology, diabetes, genitourinary, sexual health and reproductive/family planning clinics. There were no restrictions with respect to demographic characteristics such as age, gender, religion or the school of nursing attended. The requirements for being included in the study were that the nurse needed to be Jordanian, qualified (registered nurse) and caring for adult male patients within the specified areas, in addition to being available during the study period. There were 1485 qualified and unqualified (not a registered nurse) nurses employed across the study sites. A total of 686 qualified nurses were eligible for recruitment into this study. Of these, 462 nurses (67%) were available and approached – 210 males and 252 females. The nurses were divided between the study hospitals as follows: 192, 172 and 98 nurses from the Jordan University Hospital, Prince Hamza Hospital and Jordan Hospital, respectively. The researchers approached

all registered nurses who worked at all of the eligible departments and asked them to participate in the study. Nurses who agreed to participate were given a questionnaire for completion.

Instrument

The Sexual Attitudes and Beliefs Survey (SABS) was used to assess the attitudes and beliefs of nursing professionals in relation to their approach to issues of sexuality in the context of practice. It also explored cultural factors that influenced the nurses' role in discussing sexual issues with men. The structured questionnaire is composed of four sections, and it has an estimated completion time of 20–25 minutes. It is a valid instrument with Cronbach's alpha 0.82. It has been shown to be a stable measure with a high test-retest value ($r=0.85$, $p<0.001$). The first section of the questionnaire captures the demographic details of the nurse participant.

The items in section two of the questionnaire are divided into two subsections. There are 12 items on general nurses' attitudes and beliefs on their experience and 10 more about culture-specific issues and factors related to sexual health care in Jordan. These 10 items were developed by the study authors. Section three asks the nurses about their experiences in assessing sexual health needs, importance of the assessment, tools nurses used for assessment and the frequency of specific nursing care activities for men with chronic illness.

Section four explores the nurses' education, training and preparation to care for men with sexual dysfunction. It also invites respondents to highlight future training needs.

Ethical Consideration

Ethical approval for the study was obtained from the members of the Institutional Review Board (IRB) of the selected hospitals. There was no conflict of interest in accessing the nurses who might participate. The aims of the study, benefits and risks were explained. Participants were

informed that their participation was voluntary and that they had the right to terminate their participation at any time without giving any reason and without this decision affecting their work. In addition, not only was confidentiality assured for all participants, but also, they received a detailed description of its protection in the consent form. Written informed consent was obtained from participants who met the inclusion criteria and decided to participate in the study.

All completed study questionnaires and the software of the study have been saved in locked files where no unauthorised persons can reach them.

Data Collection

The first author distributed and collected the questionnaires. The questionnaires were addressed to each eligible member of staff and then returned to a central point in each area in a sealed anonymous envelope to ensure that the anonymity of participants was maintained. The questionnaires were identifiable to the researcher through research codes maintained on the participant master list. Each nurse participant was received a research information pack that included:

- A cover letter inviting nurses to take part in the study
- An information sheet explaining the aim and objectives of the study and what the nurses' participation would involve if they chose to take part in completing the questionnaire
- A copy of the questionnaire
- A return envelope

Data Analysis

Managing Quantitative Data

The quantitative data were entered on the Statistical Package of Social Science (SPSS*20) software. Then, it was cleared and filtered for any

outliers or any missing data. The questionnaire included categorical and continuous data, requiring the application of different tests. Data analysis was applied through the following stages:

Stage one: Descriptive analysis

Categorical and continuous data were presented as frequencies, percentages, frequency distributions, means and standard deviations to provide an overview of nurses' characteristics and distribution between the selected hospitals. Categorical data, including demographic variables, as well as data from questions which asked nurses to respond with closed answers (such as yes/no, often/occasionally, never), were cross-tabulated and presented in tables and graphs where appropriate. Comparisons between hospitals and departments were analysed using a chi-squared test. Continuous data, such as nurses' scores on items related to nurses' attitudes, were assessed by means and standard deviations.

Stage two: Data exploration and statistical analysis

In order to determine the appropriate statistical test, it was necessary to explore data for normality. If the data were normally distributed, the *t*-test was used to compare data between two groups, like male and female nurses, and ANOVA for more than two groups, such as comparing nurses' scores between the three hospitals in the study. However, if the data did not follow a normal distribution, the Mann–Whitney test was used to compare medians between two groups and the Kruskal–Wallis test to compare medians between more than two groups.

Stage Three: Correlation

Correlation analysis was used to test the internal consistency of individual continuous items of the questionnaire. For example, it was important to explore how nurses who were confident in their ability to address patients' sexual concern (item 4) would make time to discuss sexual concerns with their patients (item 2).

RESULTS

Of the 462 nurses who were approached, 265 nurses returned the questionnaires, a 57.4% response rate. Of these, 159 (60.9%) were male. The study sample comprised 113 (43.3%), 77 (29.5%) and 71 (27.2%) nurses from the teaching hospital, a governmental hospital and a private hospital, respectively. Other demographic details are shown in Table 1.

Nurses' Experience in Male Sexual Health Care

Beliefs and attitudes about nurses' actual role to care for men with sexual dysfunction as well as their preparation to provide this care were examined. Factors like religion and gender were also explored for their influence on this role.

Nurses beliefs and attitudes towards sexual health care

The nurses had barriers (gender, hospital and type of experience) to discuss sexual issues with men, with total scores of nurses on SABS ranging from 27 to 68 (mean=44.7, standard deviation [SD]=7.4). Three factors which were significantly related to SABS scores were gender ($t_{259}=-4.5$, $p<0.001$), hospital ($F_{49, 258}=15.8$, $p<0.001$) and

type of experience ($F_{52, 250}=3.3$, $p=0.007$). Female nurses had rated higher scores to show that they had more barriers to discuss sexual issues (mean=47, SD=8.2) than male nurses had (mean=43, SD=6.4). Nurses in the teaching hospital had more barriers to discuss sexual issues (mean=47.5, SD=8.2) than nurses in the private hospital (mean=42.3, SD=4.5) and the governmental hospital (mean=42.9, SD=7.1). Regarding the type of experience, nurses working in the family planning services had the highest barriers (mean=47, SD=8.8) with the least barriers were found in oncology department (mean=40.7, SD=6.6) (Table 2).

Three inter-item correlations showed that nurses who felt that discussing sexual issues was essential to patients' health outcomes were comfortable talking about sexual issues ($r=0.205$, $p=0.001$) and believed that giving permission to patients to talk about sexual concerns is a nursing responsibility ($r=0.4$, $p=0.001$).

Nurses who were more confident to care for men were more likely to make time to discuss sexual concerns with their patients ($r=0.34$, $p=0.001$).

Similarly, nurses who believed that sexual health was too private an issue to discuss with patients were more likely to believe that most hospitalised patients are too sick to be interested in sexuality ($r=0.2$, $p=0.001$), and more likely to refer patients to the physician ($r=0.3$, $p=0.001$). They also believed that sexual issues should be discussed only if patients initiated the discussion ($r=0.4$, $p<0.001$).

Nurses' role in sexual health assessment

Only 16 nurses (6%) considered sexual health assessment to be a priority. Further, a high proportion of nurses (67.3%) agreed that *sexual issues should be discussed only if initiated by the patient* with significant difference on this item between years of experience ($t_{257}=-1.7$, $p=0.009$), gender ($t_{258}=-2.7$, $p=0.007$) and hospitals ($F_{2, 259}=26$, $p=0.001$).

TABLE 1 Demographic Data of Participants

Item	
Age (n = 259)	20–30 years = 153 (58.6%) 31–40 years = 72 (27.6%) 41+ years = 34 (13%)
Gender (n = 261)	Male = 159 (60.9%) Female = 102 (39.1%)
Religion (n = 258)	Muslim = 243 (93.1%) Christian = 15 (5.7%)
Work experience (n = 260)	Less than 12 months = 12 (4.6%) 1–5 years = 127 (48.7%) 6–10 years = 53 (20.3%) Over 10 years = 68 (26.1%)
Qualification (n = 257)	Diploma = 13 (5%) Bachelor's Degree = 228 (87.4%) Master Degree = 12 (4.6%) Doctorate Degree = 2 (0.8%) Other (please specify) = 2 (0.8%)

TABLE 2 Comparing SABS Score with Demographic Data

Factor	No. of groups	t-value	F-value	Significance
Gender	2	$t_{259}=-4.5$		$p<0.001^{**}$
Religion	3	$t_{256}=1$		$p=0.3$
Age	2	$t_{257}=0.063$		$p=0.9$
Hospital	3		$F_{49, 258}=15.8$	$p<0.001^{**}$
Type of experience	7		$F_{52, 250}=3.3$	$p=0.007^{**}$
Primary role	6		$F_{54.7, 248}=1.4$	$p=0.2$
School/university	8		$F_{53, 248}=0.93$	$p=0.5$
Years of experience	4		$F_{55, 256}=1.4$	$p=0.3$
Degree of education	5		$F_{55, 252}=0.4$	$p=0.8$

SABS = sexual attitudes and beliefs survey.

****Highly significant.**

However, the majority of nurses 167 (65%) did indicate that it was important to discuss sexual issues with patients to enhance patients' health outcomes. Half of the nurses believed that assessing sexual health needs of men was a nursing responsibility and an integral part of their nursing role. This was also significantly different between hospitals ($F_{2, 258}=11.8$, $p=0.001$) with the most agreements being found in the private hospital (mean=3.69, SD=0.9).

Consistent with nurses' not prioritising discussions of sexual issues, but contrary to the finding that half of the nurses felt it was a nursing role, 67% of nurses said that whenever a patient asked a sexually related question, they would advise him to discuss the matter with his physician. Female nurses were more likely to refer men to physicians than male nurses ($t_{255}=-3.2$, $p=0.001$) and those in the teaching hospital were more likely to advise patients to discuss this issue with their physicians ($F_{2, 256}=8.35$, $p=0.001$) (mean=4.13, SD=1.4). Consistent with this, the majority of nurses in this study (82%) strongly believed that men preferred to talk to physicians about their sexual health problems rather than nurses.

Actual Care Experiences

Sixty-six per cent of nurses felt they had few experience in caring for men with sexual health problems. Female nurses reported significantly less experience than male nurses ($t_{254}=-5.2$, $p=0.001$). Nurses across hospitals also significantly differed in their feeling about their experience in sexual health care ($F_{2, 255}=8.4$, $p=0.001$), the most agreements were in the teaching hospital (mean=4.36, SD=1.5). Only 16% of nurses made time to discuss sexual issues with their patients. Male nurses made more time than female nurses ($t_{257}=3.9$, $p=0.001$), (mean=2.77, SD=1.3). Nurses in the private hospital had the highest rate of reporting they had made time to discuss sexual concerns with their patients (mean=2.92, SD=0.9) ($F_{2, 258}=8.5$, $p=0.001$).

Gender and sexual dysfunction

Gender was an influencing factor in discussing sexual issues in Jordan culture. Female nurses were more likely to agree that "sexual dysfunction is a taboo subject in Jordan which inhibits men to discuss sexual issues" ($t_{254}=-4.7$, $p=0.001$). Eighty-four per cent of nurses agreed on the item, "I would not talk to patients of the opposite gender about their sexual health needs." Female nurses were more likely to agree than male nurses

($t_{259} = -4$, $p = 0.001$). For females the mean = 5.3, SD = 1.1; and for males the mean = 4.58, SD = 1.7. Ninety-three per cent of nurses agreed that it is more appropriate for a male nurse to discuss sexual health issues with male patients (Table 3).

The overwhelming majority of nurses (90%) believed that men in Jordan find it difficult to talk to female nurses about sexual health problems. There was a significant difference between hospitals ($F_{2, 259} = 5$, $p = 0.002$) with the highest agreement (70/71) in the private hospital (mean = 5.52, SD = 0.7) compared to (102/113) the teaching hospital (mean = 5.27, SD = 1.2) and (61/76) the governmental hospital (mean = 4.89, SD = 1.6) (Table 4).

Interpretation of religion in health care

Religion appeared not a barrier to discuss sexual issues with nurses. Seventy-six per cent of nurses disagreed that "their religion inhibits them when discussing sexual health with patients." Further, more than half of the nurses were able to

help men with sexual health problems by agreeing with the statement: "as a nurse I am able to provide care for men who complain of a sexual health problem irrespective of my religious beliefs." Of these, 98 were male and 42 were female with a significant difference between the two groups ($t_{258} = 3.6$, $p = 0.001$).

Nurses' Training on Sexual Health

Sexual health education was not really found in nursing preparation curricula. Furthermore, only 13 (5%) nurses reported having received additional training as a continuing education on how to meet the sexual health needs of male patients with chronic illnesses. Regarding training on sexual health care, only 87 (30%) nurses felt equipped to care for patients with sexual health problems; and a significant difference was found between hospitals (Chi-square $2 = 55.4$, $p = 0.001$). Nurses from the governmental hospital (47 nurses) felt more equipped to care for patients than nurses from the other two hospitals.

TABLE 3 Sexual Issues Are Taboo to Discuss with a Male Patient in Jordan

	Gender		Hospital			Age	
	Male	Female	JUH	JH	PHH	<40 years	>40 years
Mean	4.58	5.34	5	5.34	4.29	4.89	4.76
SD	1.7	1	1.4	1	1.85	1.5	1.6
p-value	p=0.001		p=0.001**			p=0.4	

PHH = Prince Hamza Hospital; JH=Jordan Hospital; JUH = Jordan University Hospital

**Highly significant.

TABLE 4 Men Find It Difficult to Talk to Female Nurses about Sexual Health Problems

	Gender		Hospital			Age	
	Male	Female	JUH	JH	PHH	<40 years	>40 years
Mean	5.10	5.44	5.27	5.52	4.89	5.21	5.35
SD	1.4	0.97	1.2	0.7	1.6	1.3	1
p-value	p=0.03*		p=0.002**			p=0.5	

PHH = Prince Hamza Hospital; JH=Jordan Hospital; JUH = Jordan University Hospital.

**Highly significant.

This training also differed with gender of nurses (Chi-square $\chi^2=8.5$, $p=0.003$) with the majority of males (64) feeling less equipped compared to females (23).

DISCUSSION

This is the first study in Jordan that has examined nurses' role in their practice, nursing education and the impact of culture on helping men suffering from sexual problems. This study found that female nurses had more barriers to discuss sexual issues than male nurses. Gender, religion and culture were influencing factors in discussing sexual issues among female nurses in Jordan. From the perspective of gender, the majority of nurses believed that men in Jordan found it difficult to talk to female nurses about sexual health problems. In addition, female nurses agreed on the item, "I would not talk to patients of the opposite gender about their sexual health needs." These results were congruent with the results of other studies.^{10,16} This may be explained by the perception of the nurses that sexual problems were a taboo subject, and female nurses were embarrassed to discuss this private issue with male patients.

From a religious and cultural perspective, it is not acceptable for men and women to work together in the same ward or institution in Jordan when separation is possible.¹⁷ And female nurses felt more inhibited by religion than male nurses to discuss sexual issues with male patients. This result was congruent with nurses from different cultures who prefer talking to patients from the same sex if possible.^{10,15} On the other hand, religion appeared not a barrier to discuss sexual issues from the point of view of male nurses. However, even in same sex male wards, male nurses identified tensions regarding discussing, assessing and supporting men with sexual health problems. This finding was not addressed elsewhere in the literature and indicates that same sex policies within a country like Jordan could

necessitate developing male-to-male specific men's health services congruent with their social norms.

It is clear that sexual health care was not actually provided; only 6% of nurses in this study had actual experiences of this care and only 16% of nurses made time to discuss sexual concerns with their patients with male nurses made more time than female nurses. This gap between nurses' beliefs about the importance of sexual health care and their actions providing such care supported findings from Jaarsma et al.⁷ who also found that more than 70% believed that discussing these issues was part of holistic care, however, less than 12% actually provided patient counselling on a regular basis. This clearly showed that it was not lack of training, lack of time or high workload.¹⁸⁻²⁰ This was an important finding of this study which was the beliefs of men in Jordan to discuss sexual health problems with nurses but they may seek help if they felt that these problems could be solved.

Male masculinity,^{10,15} position in society, religious beliefs, managers discouraging nurses from providing sexual health care, a taboo subject, lack of nursing confidentiality and trust were also factors influencing men to open any discussion about sexual issues with nurses.^{19,21,22} These all contribute to the problem being hidden within Jordanian society, and similar practices can also be found in other Muslim and non-Muslim societies such as Taiwan and Western societies.^{19,21,22}

Men in Jordan, from the nurses' perspective, may pay everything they have to solve their sexual problem or at least to find someone who is trustworthy to discuss these problems with him or her. Lack of trust in health system in terms of confidentiality regarding disclosing sensitive issues was found also in other studies.^{9,20} This is not usually because of the risk of being treated by relatives' nurses or wider family members who may reveal their sensitive problem.

This study revealed that sexual health assessment was not a priority for nurses. Similarly, nurses

in other cultures declined to discuss sexual issues. Some of those nurses also believed that it was not a priority; others believed that this is not their responsibility and referred patients directly to doctors, contradicting what they believed regarding their role in providing comprehensive care.^{18,23}

The lack of sexual health assessment in Jordan clarified a gap between what nurses say they believe about the importance of their role in sexual health care and the practice they actually deliver. In Quinn's qualitative study of mental health nurses, the nurses stated that sexual health assessment is not a nursing task. Similarly, in a Finnish study, more than 90% of nurses believed that discussing sexual issues was not a priority for them and felt that it is a physician's responsibility.¹⁸

Our study revealed that only one-third of nurses felt equipped with the knowledge and communication skills to provide sexual health advice. This result was congruent with the results of other studies.^{7,13,14,20} Nurses in our study did believe that sexual health education needs to be included within the nursing curricula. The results of our study suggest that in Jordan male and female nurses should be taught primarily in the context of providing same sex nursing care. This could be a way to target gender-specific male and female sexual health information that is pertinent to their work, reducing embarrassment, while being respectful of the nurses' values and cultural norms.

CONCLUSION

Sexual health care is not being provided by Jordanian nurses even though the majority of nurses agree that discussing sexual issues is essential to patients' outcomes. This study helps fill a knowledge gap by assessing current opinions and practice and providing an evidence base for nursing education in Jordan. It has identified the lack of sexual health knowledge of nurses and more

importantly the need to improve communication skills to facilitate discussions between nurses and patients given the sensitivity of the topic in society.

Implication

Academic nursing curricula in Jordan have ignored discussing sexual health. As nurses believe that discussions of sexual health are important the main implication is that nursing education should include sexual health. As culture, societal norms and religion are externalities that appear to have been preventing assessment of sexual health with patients during their hospitalisation, curricula should be devised and delivered in a way that addresses these issues.

Recommendations for Future Research

Further research on Men's sexual health care needs would be of great value.

Limitations of the Study

The findings of this study were limited by the use of a self-report survey questionnaire. The use of closed questions, such as true or false and multiple-choice questions, may have limited the veracity of survey results. Nurses, particularly females, were also embarrassed to take part in the study, so, the respondents were not representative of the overall population of nurses in these hospitals. In addition, we surveyed only three hospitals.

ACKNOWLEDGEMENTS

The authors are thankful to all participants who made this research successful.

CONFLICT OF INTEREST

The authors declare that they have no competing interest.

FUNDING SOURCES

No external or intramural funding was received.

REFERENCES

1. Salenhian R, Khodaeifar F, Naserbakht M, Meybodi A. Attitudes and performance of cardiologists toward sexual issues in cardiovascular patients. *Sex Med* 2017; 5:e44–53.
2. 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; 12:558–66. <https://doi.org/10.1177/1474515113477273>
3. CDC/HRSA Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment 2014. Record of the proceedings May 21–22, 2014. Centres for Disease Control and Prevention. [cited 2011 May 11]. Available from: www.cdc.gov/maso/facm/pdfs/CHACHSPT/20110511_CHAC_Minutes.pdf
4. Aytac IA, Mckinlay JB, Krane RJ. The likely worldwide increase in erectile dysfunction between 1995 and 2025 and some possible policy consequences. *Br J Urol Internat* 1999;84:50–6.
5. Miner M, Kim ED. Cardiovascular disease and male sexual dysfunction. *Asian J Androl* 2015;17:3–4. <https://doi.org/10.4103/1008-682X.143753>
6. Miner M, Esposito K, Guay A, Montorsi P, Goldstein I. Cardiometabolic risk and female sexual health: the Princeton III Summary (CME). *J Sex Med* 2012;9:641–51. <https://doi.org/10.1111/j.1743-6109.2012.02649.x>
7. Jaarsma T, Fridlund B, Martensson J. Sexual dysfunction in heart failure patients. *Curr Heart Fail Rep* 2014;11:330–6. <https://doi.org/10.1007/s11897-014-0202-z>
8. Levine GN, Steinke EE, Bakaeen FG, et al. Sexual activity and cardiovascular disease a scientific Statement from the American Heart Association. *Circulation* 2012;125:1058–72. <https://doi.org/10.1161/CIR.0b013e3182447787>
9. Byrne M, Doherty S, Fridlund BG, et al. Sexual counseling for sexual problems in patients with cardiovascular disease. *Cochrane Library* 2014;2: 1–12.
10. Akhu-Zaheya LM, Masadeh AB. Sexual information needs of Arab-Muslim patients with cardiac problems. *Eur J Cardiovasc Nurs* 2015;14(6):1–8. <https://doi.org/10.1177/1474515115597353>
11. Schwarz E, Kapur V, Bionat S, et al. The prevalence and clinical relevance of sexual dysfunction in women and men with chronic heart failure. *Int J Impot Res* 2007;20:85–91.
12. Bdair IAA, Constantino RE. Barriers and promoting strategies to sexual health assessment for patients with coronary artery diseases in nursing practice: a literature review. *Health* 2017;9:473–92. <https://doi.org/10.4236/health.2017.93034>
13. Quinn C, Happell B, Browne G. Talking or avoiding? Mental health nurses' views about discussing sexual health with consumers. *Int J Ment Health Nurs* 2011;20:21–8. <https://doi.org/10.1111/j.1447-0349.2010.00705.x>
14. Kim J. Factors influencing barriers to addressing patients' sexual health among clinical nurse. *J Korean Acad Adult Nurs* 2010;22:113–20.
15. Hoekstra T, Lesman-Leegte I, Couperus MF, Sanderman R, Jaarsma T. Care of the patient with heart failure: what keeps nurses from the sexual counseling of patients with heart failure? *Heart Lung* 2012;41:492–9. <https://doi.org/10.1016/j.hrtlng.2012.04.009>
16. Ferreira SM, Gozzo TD, Panobianco MS, Santos MA, Almeida AM. Barriers for the inclusion of sexuality in nursing care for women with gynecological and breast cancer: perspective of professionals. *Rev Lat Am Enfermagem* 2015;23:82–9. <https://doi.org/10.1590/0104-1169.3602.2528>
17. Purabuli B, Azizzade Foruzi M, Mohammad Alizadeh S. Knowledge and attitude of nurses towards sexual activity and training patients with myocardial infarction and their spouses. *Iran J Crit Care Nurs* 2010;2:145–8.
18. Sonbol El-Azhary A. *Women of the Jordan: Islam, Labor and the Law*. Syracuse: Syracuse University Press [Google Scholar]; 2003.
19. Hautamäki K, Miettinen M, Kellokumpu-Lehtinen PL, Aalto P, Lehto J. Opening communication with cancer patients about sexuality-related issues. *Cancer Nurs* 2007;30(5):399.

20. Algier L, Kav S. Nurses' approach to sexuality-related issues in patients receiving cancer treatments. *Turk J Cancer* 2008;38(3):135–41.
21. Saunamäki N, Andersson M, Engström M. Discussing sexuality with patients: nurses' attitudes and beliefs. *J Adv Nurs* 2010;66(6):1308–16.
22. Tsai YF, Hsiung PC. Aboriginal nurses' perception of facilitators and barriers for taking a sexual history in Taiwan. *Pub Health Nurs* 2003;20(4):281–6.
23. Tsai Y. Nurses' facilitators and barriers for taking a sexual history in Taiwan. *Appl Nurs Res* 2004;17(4):257–64.
24. Billington T. Issues of patient sexuality in nurse education. *Br J Nurs* 2012;21:1109. <https://doi.org/10.12968/bjon.2012.21.18.1109>