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Patterns and predictors of healthcare-seeking for sexual problems among cervical cancer survivors: An exploratory study in China.

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Abstract

Purpose of investigation: To understand the sexual healthcare needs among cervical cancer survivors and identify important pre-disposing factors that may potentially influence their willingness to seek healthcare for sexual problems.

Material and methods: Patients with cervical cancer attending Gynecological oncology clinic in a tertiary-care hospital for post-treatment examinations were consecutively recruited between January 2014 and December 2015. Participants were assessed for their interest in sexual healthcare services and likelihood of visiting physicians for sexual problems.

Results: Among 173 consenting adult patients, 92 (53.2%) expressed interest in sexual healthcare services. However, 43 (24.9%) subjects were likely to see physicians to resolve sexual problems and only 5 (2.9%) did that in recent years. Older and diagnosed with advanced stage cancer patients had relatively less interest and willingness for seeking care for sexual problems compared to those younger and early-stage patients. Intention for seeking sexual healthcare was positively associated with time since last treatment. Social aspects expressed as 'feeling embarrassment or shame' and 'worrying about prejudices or stigma' appeared to be the commonest barriers for care-seeking for sexual issues.

Conclusions: Among cervical cancer patients, there may be remained an unmet and needed regarding healthcare-seeking for sexual problems. Urgent interventions incorporating psychosocial support appeared to be the need of the hour.

Keywords: Sexual dysfunction, Cervical cancer, Healthcare service.

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Introduction

Cervical Cancer (CC) is the third most commonly diagnosed cancer and the fourth causing death due to cancer among women worldwide [1]. In China, approximately 58,000 new cervical cancer cases were diagnosed in 2005 [2] and the estimated incidence of CC increased from 1.22/105 in 2003 to 2.59/105 in 2011 [3]. Although survival among CC patients increased considerably owing to the improvements in early detection technologies and treatment modalities [4], survivors remained at higher risks of several morbidities including sexual dysfunction. Persistent or worsening symptoms of sexual problems were reported approximately by 70% post-treatment cases of CC [5-7], thus calling for careful attention to post-treatment sexual dysfunction was an important part of survivor care.

Despite the well-documented occurrences of sexual dysfunction among post-treatment women suffering from CC, little was done to address this issue clinically, psycho-socially or physiologically. Based on available evidences [8,9], majority of women suffering from this morbidity never seek any medical help for it and majority did not even report this to their regular ontological follow up care providers. On the other hand, even recognizing the importance of the assessment of sexual health, physicians caring for women with CC, still refrained from addressing it or counselled patients inadequately about the sexual implications of their cancer or treatment [10]. Although a few physiological and psychosocial factors were identified in previous studies as barriers impeding the interactions between physicians and patients in real practice [8,11,12], information for the development of an evidence-based CC patient-specific approach of sexual healthcare delivery was still remained insufficient. Findings from most of these studies were based on narrative research design and only a few quantitative that addressed the issues, including CC patients just as a subgroup of other gynecologic cancer patients [13,14].

So far, few studies were conducted to measure the prevalence of sexual dysfunction and consequent sexual healthcare needs among CC patients in China. Given the diverse cultural context and heterogeneity in healthcare systems, the implication of sexual health and related healthcare needs were expected to vary among CC patients across regions. Therefore, the objectives of the present study were: 1) to assess the interest in sexual healthcare, among post-treatment CC patients in China, and 2) to identify the potential relationship of willingness for care-seeking from physicians regarding sexual problems.

Material and Methods

Study design and participants

This cross-sectional study was conducted in a tertiary hospital between January 2014 and December 2015 in Changsha of China. All women who attended the gynecological oncology clinic in this hospital for regular physical examinations after treatment were consecutively recruited. Patients were eligible to participate on condition that they were aged 18 y or above, aware of their own cancer diagnosis, as well as physically and mentally able to participate in an interview. After completed the questionnaire on a prior visit, patients diagnosed with other cancers, having significant cognitive impairment or any other psychiatric problems that might interfere with communication were excluded. Women without marital partner were also excluded from the study. Written informed consent was collected from each eligible participant after informing them about the study objectives and procedures in detail. The study content and procedures were reviewed and approved by the Institutional Ethics Review Board (IERB) of the Affiliated Cancer Hospital of Xiangya School of Medicine, Central South University.

Procedures

In the clinic, while waiting for being examined by the physician, patients were approached by trained nurses. After evaluation for eligibility and recruitment in the study, a face-to-face interview was conducted by the nurses. Every participant was asked to complete two individual questionnaires during this interview: a structured questionnaire and the Female Sexual Function Index (FSFI). The interviews took approximately 20 min each and were administered in a private space near the examination room. A nurse was available to help participants if there were any difficulties during the surveys. After the completion of the survey, women were accepted clinical examination and the examining physicians were kept blinded towards the survey results.

The first section of the structured questionnaire included questions regarding socio-demographic and clinical characteristics, such as age, education level, and monthly income, stage of the cancer and length of time since last treatment. Medical records were also reviewed for collecting relevant clinical data as per requirement. The second section began with a brief introduction on possible changes in sexual lives and sexual functioning among women after the treatment for CC. This section comprised of the following 3 items: a. Interest: Determining the interest of the patients for receiving care to address sexual issues, b. Likelihood: The likelihood of seeking healthcare from physicians to address sexual problems, and c. Health-seeking behavior: History of seeking advices or medical help for problems related to sexual health. Patients who were not likely to seek care from physicians were further required to describe the reasons.

The Chinese version of the Female Sexual Function Index (CVFSFI), a 19 item self-administered screening questionnaire, was used for assessing sexual function among the patients [15]. Each item was scored on a scale of 0 (or 1) to 5. For each subject, the total score was calculated by adding individual scores for all items. Higher FSFI scores indicated better sexual function while patients having scores<23.45 were diagnosed to suffer from Female Sexual Dysfunction (FSD) [15].

Data analysis

Statistical analysis was performed using SPSS software 16.0 (SPSS Inc., Chicago, USA). Variables were described by frequencies and percentages for categorical variables and mean ± Standard Deviation (SD) for continuous variables. The Chi-square test was used to compare categorical variables across groups. Bivariate and multivariable logistic regression analyses were conducted to identify factors associated with individual interest and care-seeking for sexual dysfunction. Predictors found significant in bivariate analyses were included in the multivariable logistic regression models. Hypotheses tests were all conducted as two-sided, and a p-value of less than 0.05 was considered significant.

Results

Altogether 195 eligible post-treatment CC patients were consecutively recruited for the present study. Among them, 22 (11.3%) refused whereas 173 (88.7%) agreed to participate. Demographic and clinical characteristics of the participants were shown in Table 1. Overall, the mean age of the participants was 41.7 ± 6.45 (median=48, range=19-79). About half of the patients (54.3%) had education up to Junior high school level or less. The median duration of time since last treatment was 17 months (Range=0-68 months). Majority of patients were suffering from stage II or lower stage cancer, having received combined treatment. According to the cut-off score of 23.45 by CVFSFI, 88.0% of women were diagnosed to have FSD.

Only 5 (2.9%) patients had recently sought advice or medical help for problems related to sexuality. There were 92 (53.2%) participants interested in receiving care for sexual issues whereas 81 (46.8%) were not. The comparison of demographic and clinical variables between two groups revealed that patients with younger age, longer time since last treatment and earlier stage of cancer had higher likelihood of having more interest for receiving healthcare services for sexual problems. Women being diagnosed with FSD were more interested in receiving sexual healthcare consultation compared to their counterparts with no FSD. There was no obvious difference between two groups in terms of education, monthly income or applied treatment modalities (Table 1).

Majority (75.1%) were not ready to seek medical help or advice for sexual problems from physicians. The results of bivariate analysis showed that younger patients were more likely to see a physician for the treatment of their sexual problems. There were no association between patients' likelihood to see a physician for sexual problems and the variables such as monthly income, education level, months since last treatment, applied treatment modalities and cancer stage. Women being diagnosed with FSD showed similar willingness of seeking help from physician when compared to those without FSD (Table 2).

In the final multivariable model, women aged above 56 y old were significantly less interested in receiving sexual problems related healthcare services compared to those aged 18-35 (OR=0.19, 95% CI: 0.06-0.65). Similarly, patients at higher cancer stages III and IV showed a marked decrease in interest as compared to those with stage I (OR=0.27, 95% CI: 0.11-0.65). Patients with longer duration since last treatment and those who were diagnosed with FSD showed increased interest for receiving sexual healthcare. Older patients had lower likelihood of seeing a physician to address their sexual problems (Table 3).

Reasons given by respondents who were not inclined to see physicians were presented in Table 4. More than two thirds of patients rated 'feeling embarrassment or shame' as the most important reason for their unwillingness to see physician and about one third of patients were bound by prejudices or fear of stigma.

Table 1. *Characteristics of participants, by interest in receiving care (n=173).*

Variables	**Interest in receiving care**		**p**
	Yes (n=92)	**No (n=81)**	
Age			<0.01
18-35	13 (14.1)	6 (7.47)	
36-45	29 (31.5)	8 (9.9)	
46-55	40 (43.5)	43 (53.1)	
>56	10 (10.9)	24 (29.6)	
Education			0.2
Junior high school or lower	43	41	
High school or above	49	40	
Monthly income (Yuan)			0.1
Low (≤ 2,000)	26 (28.3)	12 (14.8)	
Medium (2,000-5,000)	44 (47.8)	46 (56.8)	
High (≥ 5,000)	22 (23.9)	23 (28.4)	
Months since last treatment			<0.01
≤ 12 months	31 (42.4)	55 (58.0)	
>12 months	61 (57.6)	26 (42.0)	
Treatment modalities			0.46
Radiotherapy	16 (17.4)	9 (11.1)	
Chemotherapy	10 (10.9)	7 (8.7)	
Surgery	13 (14.1)	9 (11.1)	
Combined treatment	53 (57.6)	56 (69.1)	
Cancer stage			0.01
I	28 (30.4)	12 (14.8)	
II	43 (46.7)	36 (44.4)	
III+IV	21 (22.9)	33 (40.8)	
FSD	18.4		<0.01
Yes	81 (88.0)	57 (70.4)	
No	11 (12.0)	24 (29.6)	
FSD: Female Sexual Dysfunction			

Table 2. *Characteristics of participants, by willingness of seeing physician (n=173).*

Variables	**Likelihood to see physician**		**p**
	Yes (n=43)	**No (n=130)**	
Age			<0.01
18-35	8 (18.6)	11 (8.5)	
36-45	13 (30.2)	24 (18.5)	
46-55	18 (41.9)	65 (50.0)	
>56	4 (9.3)	30 (23.0)	
Education			0.1
Junior high school or lower	25 (65.1)	57 (43.8)	
High school or above	18 (34.5)	73 (56.2)	
Monthly income (Yuan)			0.29
Low (≤ 2,000)	12 (27.9)	26 (20.0)	
Medium (2,000-5,000)	20 (46.5)	70 (53.8)	
High (≥ 5,000)	11 (25.6)	34 (26.2)	
Months since last treatment			0.4
≤ 12 months	19 (44.2)	67 (51.5)	
>12 months	24 (55.8)	63 (48.5)	
Treatment modalities			0.43

Radiotherapy	9 (20.9)	16 (12.3)	
Chemotherapy	5 (11.6)	12 (9.2)	
Surgery	6 (14.0)	16 (12.3)	
Combined treatment	23 (54.5)	86 (6.2)	
Cancer stage			0.3
I	13 (30.2)	27 (20.8)	
II	20 (46.5)	59 (45.4)	
III+IV	10 (23.3)	44 (33.8)	
FSD			0.54
Yes	75 (81.5))	63 (77.8)	
No	17 (18.5)	18 (22.2)	

Table 3. *Multivariate logistic regression model for factors associated with interest or willingness (n=173).*

	OR	**95% CI**
Interest		
age		
18-35	1	
36-45	1.67	0.48-5.81
46-55	0.43	0.15-1.24
>56	0.19	0.06-0.65
Months since last treatment		
≤ 12 months	1	
>12 months	1.64	1.13-2.46
Cancer stage		
I	1	
II	0.51	0.23-1.15
III+IV	0.27	0.11-0.65
FSD		
Yes	1	
No	0.32	0.15-0.71
Likelihood		
Age		
18-35	1	
36-45	0.75	0.24-2.31
46-55	0.38	0.13-1.09
>56	0.18	0.05-0.73

Table 4. *Reasons rated by patients for unwillingness of seeing physician to address sexual matters (n=130).*

Reason[*]	**n**	**%**
Feeling embarrassment or shame	67	51.5
Worrying about prejudice or stigma	41	31.5
Perceived lack of treatment options	6	4.6
Ought to solve it on their own	4	3.1
Considered sex to be non-essential	5	3.8
Practical barriers (time, transportation, and costs)	7	5.4

[*]Patients could give only one reason, namely, the most important reason.

Discussion

Results from this cross-sectional study revealed a substantial discrepancy between the sexual healthcare needs and healthcare-seeking willingness among post-treatment patients of CC in China. Together the current and previous studies indicated that there may be existed huge unmet sexual healthcare needs among post-treatment CC patients for that majority of them had some requirements for seeking healthcare to solve their sexual problems but were dis-satisfied with the services they availed.

In the present study, it was observed that 53.2% participants showed interest in seeking help for sexual problems, suggesting a high level of sexual healthcare needs among CC patients. This was consistent with most of the previous reports. In a cross-sectional survey among women with invasive CC, Groot et al. reported that approximately 80% of the respondents suggested having discussions regarding the sexual problems with their health care providers among their studies [16]. Hill et al. revealed that 46.5% of these patients wanted to seek care from physicians to address sexual issues in a study involving CC survivors as a subgroup [17]. Similarly, Vermeer et al. also indicated that 51% of CC patients reported to have a need for information and/or professional help regarding sexuality in a multicenter cross-sectional study [9]. These findings consistently indicated profound existing need for sexual healthcare services among CC patients.

Despite the huge magnitude of expressed sexual healthcare needs, only a low proportion of patients (24.9%) were practically ready to see physicians for solving their sexual problems and very few patients (2.9%) had actually sought medical help for these sexual problems, suggesting substantial unmet sexual healthcare need among CC patients. As mentioned above in the study, Vermeer et al. found that only 35% of women had initiated a conversation with a professional about medical problems of sexuality [8]. A few qualitative studies also showed that relatively much higher number of Gynecological Cancer Survivors (GCSs) expressed their psychosexual healthcare needs compared to the number of women who actually sought help [9]. Overall, it appeared that sexual healthcare needs remained unaddressed and therefore warranted urgent attention for majority of CC patients.

In the present study, we found that the interest in sexual healthcare among CC survivors was independent on education level, family income and applied treatment modalities, but associated with cancer stage and duration since last treatment. For patients with shorter post-treatment duration and advanced cancer stage, the focus probably remained more on recovering from cancer and ensuring survival than sexual concerns. However, it was found that patients on active treatment, even those with uncertain prognoses valued sexuality a lot, wanted to avail the opportunity of resolving sexual issues as part of their cancer care [18]. A substantial proportion of these patients were also interested about sexual healthcare services. According to available literatures [19], informing patients about possible post-treatment long-term sexual complications early in the course of treatment might alleviate their fear for sexual complications and facilitate in accessing sexual healthcare services. Therefore, sexual healthcare services should be made available for all CC patients, regardless of clinical and demographic characteristics.

Older patients were less interested in sexual healthcare services and less likely to seek services of physician for sexual problems. Although women in advanced age could still be sexually active, most of them probably experienced decreased sexual function. In a study by Howard et al. the authors indicated a strongly negative association between increasing age and most of the sexuality and sexual function related variables [20]. Moreover, other factors associated with older age including multiple comorbidity, might have further decreased the sexual healthcare needs among elderly [21]. However, among patients aged>55 y old, 10.9% were still interested in receiving sexual healthcare and 9.3% wanted to receive physicians for sexual problems. Hill et al. [17] also reported previously that 22.2% patients with gynecologic cancers expected physicians to address their sexual problems. Findings from these studies suggested that the sexual healthcare needs for patients even at advanced age should not be neglected in clinical practice.

In the current study, more than half of patients mentioned the feeling of embarrassment or shame as the principal reason for lack of willingness to consult a physician and consequent poor healthcare-seeking behavior regarding sexual problems. About one third of patients admitted that prejudice or stigma prevented them from appropriate sexual healthcare seeking. All in all, these findings probably implied that psychological factors were the major contributors for the huge discrepancy between interest and practice regarding sexual healthcare-seeking behavior among post-treatment CC patients in China. Therefore, it seemed difficultly to expect patients to bring up a potentially sensitive issue without being solicited. This observation further emphasized the importance of physician-initiated conversation about the disease/treatment-induced issues pertaining to sexual health among these patients. Unfortunately, it appeared that the physicians were not appropriately prepared for dealing with these issues. In 2002, a British survey involving forty-three gynecologists, medical and gynecologic oncologists and nurses reported that only 21% of the healthcare practitioners actually discussed sexual issues with their patients [10]. Another survey among approximately 26,000 men and women from 29 countries indicated that their relation with their physicians were not intimate enough to discuss sexuality [22]. This psychosocial barrier might explain the unchanged incidence of post-treatment sexual dysfunction among CC patients after years of efforts. Future studies should pay more attention to the assessment and intervention regarding motivating patients to seek sexual healthcare services and train physicians on communication skills to provide patients enough comfort so that they can discuss about their sexual problems freely with their physicians.

Some limitations of this study must be noted. Use of a hospital-based sample instead of a population-based one, might have affected the generalizability of the study findings in terms of extrapolation to larger population. But on the other hand, considering the conservative traditional Chinese attitude toward sex and unwillingness to discuss sexual issues openly, hospital-based study was considered a more suitable method of investigation. We also did not include women without marital partners, considering the fact that unmarried women with sexual partners might be subjected to stigma and would not like to disclose their sexual activity status. However, no assumption was made that sexuality and sexual function were worthless to these women. Like other observational studies, the interpretation of the results should be made cautiously.

Conclusions

In conclusion, most post-treatment CC patients were found to suffer sexual problems. However, only a few of them sought medical help from physicians to improve their sexual suffering, mainly due to sexuality associated stigma and prejudice. Therefore, it appeared to be important to integrate the assessment and management of sexual problems as integral parts of follow up care for all CC survivors. Physicians should also be trained properly to be able to appropriately address the sexual concerns of their CC patients throughout the continuum of cancer care.

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Conflicts of Interest

None

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