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Patient Experiences With Communication About Sex During and After Treatment for Cancer

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Abstract

Objective—We studied patients' experiences with oncology providers regarding communication about sexual issues during and after treatment for cancer.

Methods—During development of the Patient-Reported Outcomes Measurement Information System (PROMIS®) Sexual Function measure, we collected focus group and survey data on communication with oncology professionals about sexual problems. We conducted 16 focus groups with patients and survivors (n = 109) and analyzed the discussions for major themes, including experiences discussing sex during oncology visits. During testing of the PROMIS Sexual Function measure, we assessed experiences discussing sexual problems with oncology professionals (n = 819) and measured bivariate associations between asking for information from clinicians and sexual function and satisfaction with sex life.

Results—Most patients and survivors (74%) thought discussions with oncology professionals about sexual problems were important, but whether they had ever received information about sexual function from a provider varied by cancer type (23% lung, 29% breast, 39% colorectal, and 79% prostate). Those who had asked an oncology professional about sexual problems had significantly greater interest in sexual activity as well as more sexual dysfunction.

Conclusions—Sexual problems are a widespread concern among patients and survivors, but there is much variation in experiences of communication about sexual issues and many patients do not receive the information they need from their oncology providers. There are large differences in

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sexual function between patients who do and do not ask providers about sexual problems. Sexual health has yet to be fully integrated into oncology care, even for cancers involving sex organs.

Keywords

Attitude to Health; Communication; Focus Groups; Health Services Needs and Demand; Neoplasms; Physician-Patient Relations; Questionnaires; Sexuality

Introduction

For many of the 11.1 million patients with cancer and cancer survivors in the United States [1], sexual functioning is an important component of quality of life. For a variety of cancer types, estimates of sexual dysfunction after treatment range from 40% to 100% and involve both physical and psychological causes [2]. Sexual dysfunction can cause ongoing emotional distress by reinforcing negative body image [3], disrupting relationships [2], and reminding patients of their cancer experience [4]. On the other hand, maintaining or regaining sexual function can act as an anchor during the disease experience, allowing patients to feel “normal.” Sexual dysfunction may develop at any point during the disease course, including at diagnosis and during treatment and posttreatment follow-up [5,6]. Unlike some other side effects of treatment, sexual problems commonly do not resolve in the first 2 years of disease-free survival but may remain constant and relatively severe [2].

Communication about sexuality with health care providers is important for a number of reasons. Before treatment, patients should be informed about common sexual side effects associated with cancer treatments to help inform their treatment choices. Patients may elect to pursue treatments that carry less risk for sexual problems, such as modified surgical approaches [7], adjustments to the type and dosage of chemotherapy [8,9], or careful selection of the timing and maintenance schedule of hormonal therapy [10]. During and after treatment, patient-provider communication is critical to the identification and treatment of sexual problems that may be distressing for patients and impair their quality of life.

However, open communication may be particularly difficult when it comes to discussing sex. For nearly 3 decades, researchers have documented barriers and opportunities for patient-provider communication about sexual matters in oncology [2,11–18]. Yet, discussions about sexuality rarely occur [16,19–21], and there are no clear guidelines for addressing sexuality during treatment and follow-up visits [2]. There is lack of time during office visits [22], and clinicians may feel uncomfortable with or unknowledgeable about the topic [16]. Patients may be too embarrassed to discuss sexual concerns unless prompted [23], or they may think that if the issue is important, their provider will raise it. Moreover, treatments for sexual dysfunction are rarely reimbursed by health insurers.

Quantitative surveys that include questions about whether patients have been asked about sexual issues by their health care providers have been undertaken among patients with breast cancer [9], prostate cancer [4], colorectal and gynecologic cancers [13], and non-Hodgkin lymphoma [24]. Other work has involved semistructured interviews with health care professionals and patients [16,20,25]. This previous work explored patients’ needs and desires for information about sex, ascertained what information was provided and by whom, and described health care providers’ knowledge of patients’ sexual problems and concerns. Two of these studies focused exclusively on women with ovarian cancer [16,25]. To our knowledge, only a single small study has explored communication about sexual issues in both men and women across a variety of cancer types [20], and no studies have systematically examined how it is related to patients’ sexual function.

Therefore, we queried a large sample of male and female cancer patients and survivors across cancer types. We also explored how asking an oncology provider about sexual problems is related to important sexual outcomes. We conducted focus groups with men and women with cancer to characterize the nature, scope, and importance of sexuality and intimacy after a cancer diagnosis [6], and we used these data to develop survey items for the Patient-Reported Outcomes Measurement Information System (PROMIS®) Sexual Function measure. We then tested this measure in a large-scale survey of patients with cancer [26]. In this paper, we describe patients' experiences communicating with oncology professionals about sexual problems using our qualitative focus group and quantitative survey data, and we present the data stratified by cancer type, sex, and age. We also tested associations between asking an oncology professional about sexual problems and patients' sexual function. We expected that greater needs for communication would be associated with worse sexual function.

Methods

The PROMIS Network (<http://www.nihpromis.org/>) is a collaborative effort of research universities and the National Institutes of Health to advance the measurement of patient-reported outcomes using state-of-the-art psychometric and computer-adaptive techniques. As part of the development of the PROMIS Sexual Function measure, we collected qualitative data from focus groups and quantitative data from surveys.

Participant Recruitment

We recruited focus group and survey participants via mailed invitations to patients in the Duke tumor registry and in person with oncology outpatients at Duke University Medical Center (Durham, North Carolina). We recruited additional survey participants through the NexCura Internet panel, a self-selected group of patients who use NexCura's online suite of cancer-treatment decision tools. Eligible participants were 18 years or older, had been diagnosed with cancer, and were able to speak English. Our sampling strategy aimed for representation with regard to tumor site, treatment status (ie, newly diagnosed or undergoing treatment vs in posttreatment follow-up), sex, and race. The institutional review board of the Duke University Health System approved the study, and all participants provided informed consent.

Focus Groups

To demonstrate the content validity of the PROMIS Sexual Function measure [27], we organized 16 diagnosis- and sex-specific focus groups. Previous research has suggested that patients with cancer have different sexual concerns depending on their treatment status (eg, in treatment vs in survivorship phase) [28], so we stratified the focus groups based on whether the participants were in treatment or were in posttreatment follow-up. Eleven groups included participants who were newly diagnosed (ie, within 6 months) or were undergoing treatment for breast, prostate, lung, colorectal, gynecological, or other cancers. Another 5 focus groups included participants who were in posttreatment follow-up (ie, at least 12 months since diagnosis and not undergoing active treatment) for breast, prostate, gynecological, or other cancers. To facilitate discussion, we chose professional focus group moderators of the same sex as the participants. The discussion guide included open-ended questions about how cancer and its treatments affect intimacy and sexuality and the physical and psychosocial impacts of cancer on sex life. The focus groups were recorded and transcribed. A member of the study team observed all groups and produced summaries of the themes covered. An independent auditor compared a randomly selected 50% sample of the summaries with the transcripts to check for agreement on themes. The study team

reviewed these summaries regularly to ensure data saturation with regard to the primary aim of the larger study.

The study team developed a preliminary coding structure based on the discussion guide and previous research. Two trained assistants independently coded the field notes for major themes (interrater agreement, 91%), meeting regularly with a member of the study team to adjudicate disagreements and to inductively categorize themes that did not fit the preliminary coding structure. Thus, the preliminary coding scheme was revised iteratively based on participant contributions. The qualitative coding procedure has been described in detail previously [6]. “Communication with health care providers” emerged as a theme in 9 of the 16 focus groups, prompting the addition of survey items to address this issue. Therefore, we provide quotations collected from participants during the focus groups to illustrate the quantitative survey results. However, since there was no explicit question about communication in the focus group discussion guide, the qualitative results should be viewed as supplemental to the survey data.

Survey

The survey included questions about sociodemographic and clinical characteristics, 6 items developed in response to the qualitative data to address communication about sexual issues with oncology providers (see Table 1), and 92 items on sexual function, including the PROMIS Sexual Function measure, the Female Sexual Function Index (FSFI) [29], and the International Index of Erectile Function (IIEF) [30,31]. All items in the PROMIS Sexual Function measure were submitted to extensive cognitive pretesting with cancer patients and survivors to ensure understandability and appropriateness, as described elsewhere [32].

The surveys were primarily administered online; however, participants recruited through the Duke tumor registry or NexCura had the option of an interviewer-administered telephone survey. Preliminary results from the survey suggest that rates of missing data were not different between telephone-administered and online surveys.

We managed and analyzed the survey data using SAS version 9.2 (SAS Institute Inc, Cary, North Carolina). We present descriptive statistics by survey item and bivariate associations by cancer type, sex, and mean age. For analyses related to participant sex, we explicitly excluded sex-specific cancers, including breast and gynecological cancers for women and prostate and penile cancers for men to avoid skewing the results by sex toward patients with breast or prostate cancers. We used *t* tests to examine associations between asking an oncology professional about sexual problems and sexual function, measured using the FSFI, the IIEF, and the PROMIS Sexual Function measure.

Results

Table 1 shows the characteristics of the focus group participants. They were primarily middle-aged (44% between 51 and 64 years), non-Hispanic/Latino (99%), and white (71%). Both men and women were well-represented, as were many different cancer types. Table 2 shows the characteristics of the survey participants. They were primarily middle-aged (44% between 51 and 64 years), non-Hispanic/Latino (94%), white (84%), well-educated (54% with college degree), and in posttreatment follow-up for cancer (64%). There was roughly equal representation of men and women, and many cancer types were represented.

Importance of Discussing Sex Life

Seventy-eight percent of survey participants thought it was important to have discussions with health care professionals about sexual problems (Table 3). This result varied by cancer type, with 55% of participants with prostate cancer and 5% of participants with lung cancer

believing these discussions were very important. Men with non-sex-specific cancers and younger participants thought the discussions were more important than did women and older patients. A large majority of patients (64%) also thought it was helpful to include partners in discussions about sex life. Again, there were differences by cancer type and age.

Differences in participants' preferences for including partners in these discussions are illustrated by the following two quotations from focus group participants. A woman with colorectal cancer said, "If the doctor had talked to my husband, that may have helped. The doctor—being male—may have helped alleviate some of his fears." However, one man with prostate cancer said he would not be comfortable talking with his doctor about sex if his wife was with him, explaining, "I think a lot of men won't talk to their doctors about sexual response...because you've got a lot of men that will not talk in front of their wives about it."

Unmet Needs for Information

Despite its importance to most participants, less than half of the survey respondents (45%) reported receiving information from an oncology provider about how cancer or its treatments might affect their sex life. Receipt of information varied greatly by cancer type, and women were more likely than men to report that they had not received information. For those who had received information, more than half were quite a bit or very satisfied with the amount of information they received.

Focus group participants reported that not having information was problematic for people with cancer because it deprived them of the opportunity to prepare for sexual side effects. For example, participants described not knowing that prostatectomy would affect ejaculation, not knowing that radiation therapy for colon cancer would cause erectile dysfunction, and not knowing that chemotherapy for breast cancer would lead to dryness of the vaginal mucous membranes. As one woman shared, "There's a lot of insensitivity going on here. Nobody ever talked to me [about sexuality]—my oncologist, the nurses, my breast surgeons—nobody did. Nothing."

Asking About Sexual Problems

There were large differences in whether survey respondents had ever asked oncology professionals about problems with their sex lives. Overall, 29% of the respondents reported asking an oncology provider about problems with their sex lives; however, many more men with prostate cancer (60%) reported asking about sexual problems than did participants in other groups.

As we hypothesized, survey respondents who had asked for help had worse sexual function than those who had not asked (Table 4). Among women, these problems included increased vaginal discomfort or pain, decreased lubrication, decreased orgasm, and decreased satisfaction. Among men, those who asked for help reported increased interest in sexual activity, decreased erectile function, decreased orgasm, and decreased intercourse satisfaction. The differences between askers and non-askers were large, as high as half to three-quarters of a standard deviation for the subdomains describing function.

Focus group participants overwhelmingly thought it would be helpful for oncology professionals to initiate discussions about sexual problems. As one participant in posttreatment follow-up said, "A follow-up with the doctor or the nurse [would be helpful]. Because you come back for checkups, maybe they could make that part of the routine questions: 'How are you doing in this area? Do you have any questions?' I think it should come from the medical field versus the patient." Another focus group participant, who was also an oncology nurse, explained, "Especially being on the other side [as an oncology professional], I can say that I don't often ask [about sex] unless it comes up. Now that I've

been through [cancer], I think that I'll definitely ask that question. It's something that is definitely important as part of quality of life."

Discussion

Discussions with health care professionals about sexual issues are important to people who have been diagnosed with cancer, even among those whose cancer does not directly affect sex organs. However, nearly half of the survey participants in this study reported that they never had such a discussion. Participants in the focus groups described experiences in which they were unprepared for bodily changes affecting sexual function because they lacked sufficient information. These findings suggest that critical information about the side effects of cancer treatments is not well-communicated, leaving patients to cope with negative, unexpected side effects and potentially long-term changes in quality of life.

With the exception of patients with prostate cancer, most survey participants had not asked their providers about sexual problems. We expected that asking for help may indicate a clinically meaningful decrement in function, and the survey data showed that patients who had greater decrements in function were more likely to have asked oncology professionals about sexual problems. Nevertheless, because patients may not be aware of how their treatment might affect their sexuality, clinicians may need to take on greater responsibility for informing patients about all potential side effects of treatments, whether or not patients raise specific questions.

For patients with minor sexual problems, it may be that the structure of the clinic visit determines the salience of problems. One-fifth of the survey respondents reported that they did not ask about sexual problems because they thought their problems were not serious enough. Patients likely appreciate that the clinic visit is short by design and so should focus on the most significant problems. Efficient mechanisms for identifying patients' questions may be useful in clinical settings. For example, in an effort to highlight patients' concerns quickly, some clinics use electronic patient-reported data collection systems to conduct clinical reviews of patients before the clinic visit [33]. This approach demonstrated that more than 50% of an unselected population of patients with breast, lung, or gastrointestinal cancers reported experiencing sexual distress, which likely went unaddressed, as concerns remained at subsequent visits [34,35].

In previous qualitative work, physicians and nurses in general practice reported barriers to discussing sexual health with patients who were of the opposite sex, from racial and ethnic minority groups, middle-aged and older patients, and non-heterosexual patients [21]. However, few of the survey participants in our study reported that patient-provider differences were a reason for not asking about sexual problems. This finding suggests that patients may not perceive these types of differences as barriers, and oncology professionals should feel more confident initiating such discussions regardless of patients' demographic characteristics.

The main strengths of our study include the robust qualitative and quantitative data from a wide range of cancer patients and survivors, as well as information about whether patients had previously asked oncology professionals about sexual problems. We deliberately sampled across cancer types and the continuum of care, and we had a low rate of missing survey data (6% of those who agreed to participate did not complete the survey). Although the focus groups data helped clarify what kind of information patients felt they missed by not having discussions with oncology professionals, a main limitation of the study is that we do not know what kind of information survey participants received, limiting our ability to interpret the survey results.

Sexual health has yet to be fully integrated into oncology care, even for cancers involving sex organs. The results of this examination of patient's experiences discussing sexual function with oncology providers underscore both the importance of this topic for patients and survivors as well as the infrequency of discussions about sex with oncology professionals. Clinicians who are responsive to patients' needs in this area, by delivering medical information or by acknowledging patients' concerns, may help alleviate the burden of sexual side effects of cancer treatments. The next step for research in this area is to find better ways to make these discussions a routine part of patient-centered oncology care.

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Table 1

Characteristics of Focus Group Participants

Characteristic	Participants (N = 109)
Female, No. (%)	65 (60)
Age group, No. (%)	
< 40 y	12 (11)
41 to 50 y	23 (21)
51 to 64 y	48 (44)
65 to 79 y	23 (21)
80 y	3 (3)
Race, No. (%)	
Asian	1 (1)
Black or African American	29 (27)
White	79 (72)
Hispanic or Latino ethnicity, No. (%)	1 (1)
Treatment status in the past month, No. (%)	
None (ie, posttreatment follow-up)	32 (71)
Undergoing treatment	77 (29)
Cancer type, No. (%)	
Breast cancer	29 (27)
Colorectal cancer	7 (6)
Gynecologic cancer	16 (15)
Hematologic cancer	8 (7)
Lung cancer	11 (10)
Prostate	24 (22)
Unknown or other ^a	14 (13)

^aOther cancer types included bladder cancer, head or neck cancer, mesothelioma, renal cell carcinoma, thymoma, and thyroid cancer.

Table 2

Characteristics of Survey Respondents

Characteristic	Respondents (N = 819)
Female, No. (%)	429 (52)
Age, mean \pm SD, y	58.5 \pm 11.8
Age group, No. (%)	
40 years	59 (7)
41 to 50 years	127 (16)
51 to 64 years	377 (46)
65 to 79 years	232 (28)
80 years	21 (3)
Race, No. (%)	
Black or African American	80 (10)
American Indian/Alaska Native	10 (1)
Asian	12 (1)
Native Hawaiian/Other Pacific Islander	10 (1)
White	705 (87)
Multiple races or other	2 (< 1)
Hispanic or Latino ethnicity, No. (%)	21 (3)
Educational attainment, No. (%)	
Less than high school	21 (3)
High school graduate/GED	100 (12)
Some college	255(31)
College degree	229 (28)
Advanced degree (MA, PhD, MD)	211 (26)
Treatment status in past month, No. (%)	
None (ie, posttreatment follow-up)	526 (64)
Undergoing treatment	290 (36)
Radiation therapy	29 (10)
Hormonal therapy (eg, tamoxifen, anastrozole, leuprolide)	140 (48)
Chemotherapy (injection or oral)	116 (40)
Immunotherapy (eg, interferon)	9 (3)
Other	36 (12)
Recurrence of cancer, No. (%)	151 (18)
Cancer spread to lymph nodes, No. (%)	202 (25)
Cancer spread to another area, No. (%)	134 (16)
Primary cancer diagnosis, No. (%)	
Bone/muscle cancer	14 (2)
Brain cancer	4 (< 1)

Characteristic	Respondents (N = 819)
Breast cancer	252 (35)
Colorectal	98(13)
Esophageal or stomach cancer	17 (2)
Gynecologic cancer	29 (4)
Head/neck cancer	9 (< 1)
Hodgkin lymphoma	23 (3)
Leukemia	20 (3)
Liver cancer	3 (< 1)
Lung cancer	56 (8)
Melanoma	4 (< 1)
Multiple Myeloma	2 (< 1)
Non-Hodgkin lymphoma	12 (2)
Pancreatic cancer	5 (< 1)
Prostate cancer	146 (20)
Urologic cancer	23 (3)

Table 3
Communication With Oncology Providers and Satisfaction With Sex Life Overall and by Cancer Site, Sex, and Age

Item	No. (%)							Age, Mean ± SD, y
	Total (N = 819)	Breast (n = 252)	Prostate (n = 146)	Lung (n = 56)	Colorectal (n = 98)	Other (n = 174)	Men (n = 243) ^d	
Have you ever received information from an oncology doctor or nurse about how cancer or cancer treatments may affect your sex life?								
Yes	365 (45)	82 (33)	117 (80)	12 (21)	40 (41)	59 (34)	119 (49)	35 (23)
No	369 (45)	137 (54)	22 (15)	35 (63)	54 (55)	90 (52)	104 (43)	93 (62)
Don't remember	85 (11)	33 (13)	7 (5)	9 (16)	4 (4)	25 (14)	20 (8)	21 (14)
How satisfied were you with the amount of information you received?								
Not at all	8 (2)	2 (2)	2 (2)	1 (8)	1 (3)	1 (2)	3 (3)	0
A little bit	27 (7)	9 (11)	8 (7)	0 (0)	2 (5)	4 (7)	7 (6)	2 (6)
Somewhat	95 (26)	21 (26)	26 (22)	5 (42)	6 (15)	19 (32)	33 (28)	11 (31)
Quite a bit	110 (30)	17 (21)	39 (33)	3 (25)	17 (43)	19 (32)	38 (32)	12 (34)
Very	125 (34)	33 (40)	42 (36)	3 (25)	14 (35)	16 (27)	38 (32)	10 (29)
Have you ever asked an oncology doctor or nurse about problems with your sex life?								
Yes	237 (29)	58 (23)	87 (60)	6 (11)	26 (27)	29 (17)	68 (28)	17 (11)
No	569 (69)	192 (76)	58 (40)	48 (86)	71 (72)	139 (80)	169 (70)	129 (87)
Don't remember	13 (2)	2 (1)	1 (<1)	2 (4)	1 (1)	6 (3)	6 (2)	3 (2)
Why haven't you ever asked an oncology doctor of nurse about problems with your sex life? (Please select all that apply.)								
Haven't had any questions	333 (59)	115 (60)	28(48)	29 (60)	43 (61)	81 (58)	91 (54)	86 (67)
My problems with my sex life were not bad enough	121 (21)	37 (19)	11 (19)	12 (25)	18 (26)	29 (21)	40 (24)	28 (22)
My doctor or nurse seemed too busy	14 (2)	5 (3)	2 (3)	2 (4)	0	4 (3)	1 (<1)	5 (4)
I felt too shy or embarrassed	50 (9)	21 (11)	5 (9)	0	3 (4)	18 (13)	11 (7)	11 (9)
I felt uncomfortable because my doctor or nurse was a man	11 (2)	5 (3)	0	1 (2)	1 (1)	3 (2)	0	5 (4)
I felt uncomfortable because my doctor or nurse was a woman	5 (1)	1 (1)	0	1 (2)	1 (1)	1 (<1)	2 (1)	0
I felt uncomfortable because my doctor or nurse was too young or too old	1 (<1)	1 (1)	0	0	0	0	0	0

Item	No. (%)							Age, Mean \pm SD, y	
	Total (N = 819)	Breast (n = 252)	Prostate (n = 146)	Lung (n = 56)	Colorectal (n = 98)	Other (n = 174)	Men (n = 243) ^d		Women (n = 149) ^d
I felt uncomfortable because my doctor or nurse was too different from me	2 (<1)	0	0	0	0	2 (1)	1 (<1)	0	48.0 \pm 9.9
Some other reason	122 (21)	40 (21)	15 (26)	10 (21)	15 (21)	27 (19)	38 (23)	21 (16)	59.9 \pm 11.5
How important is it to you that your doctor or nurse discusses how your cancer or cancer treatments may affect your sex life?									
Not at all	177 (22)	62 (25)	8 (5)	13 (23)	26 (27)	46 (26)	41 (17)	60 (40)	63.7 \pm 12.2
A little bit	102 (12)	32 (13)	6 (4)	13 (23)	15 (15)	27 (16)	30 (12)	31 (21)	55.8 \pm 13.5
Somewhat	175 (21)	72 (29)	15 (10)	18 (32)	17 (17)	37 (20)	59 (24)	23 (15)	56.5 \pm 11.4
Quite a bit	144 (18)	37 (15)	37 (25)	9 (16)	15 (15)	35 (20)	45 (19)	15 (10)	56.3 \pm 11.1
Very	221 (27)	49 (19)	80 (55)	3 (5)	25 (26)	29 (17)	68 (28)	20 (13)	58.8 \pm 10.2
How much would it help if your doctor talked to your spouse or partner about how your health is affecting your sex life?									
No spouse or partner									
Not at all	90 (11)	33 (13)	7 (5)	9 (16)	9 (9)	19 (11)	19 (8)	27 (18)	61.7 \pm 14.0
A little bit	201 (25)	61 (24)	28 (19)	19 (34)	23 (23)	46 (26)	60 (25)	47 (31)	62.3 \pm 10.6
Somewhat	94 (11)	28 (11)	11 (8)	13 (23)	11 (11)	20 (11)	37 (15)	15 (10)	56.6 \pm 11.5
Quite a bit	178 (22)	55 (22)	31 (21)	9 (16)	28 (29)	38 (22)	56 (23)	27 (18)	56.9 \pm 11.8
Very	138 (17)	43 (17)	32 (22)	4 (7)	15 (15)	31 (18)	37 (15)	21 (14)	55.7 \pm 11.3
	118 (14)	32 (13)	37 (25)	2 (4)	12 (12)	20 (11)	34 (14)	12 (8)	57.0 \pm 11.0

^aExcluding sex-specific cancers such as breast, prostate, and gynecological cancers.

Table 4
Standard Effect Sizes Comparing Sexual Function of Women and Men Who Did and Did Not Ask For Help With Sexual Problems

Measure	Women		Men	
	Effect Size of Difference ^a	P Value ^b	Measure	Effect Size of Difference ^a P Value ^b
PROMIS Interest in Sexual Activity	0.18	.16	PROMIS Interest in Sexual Activity	0.22 .04
FSFI Desire	-0.05	.69	IIEF Desire	0.14 .20
FSFI Arousal	-0.13	.35		
PROMIS Lubrication	-0.75	<.001	PROMIS Erectile Function	-0.48 <.001
FSFI Lubrication	-0.67	<.001	IIEF Erectile Function	-0.22 .04
PROMIS Vaginal Discomfort	0.75	<.001		
FSFI Pain	-0.60	<.001		
PROMIS Orgasm	-0.40	.003	PROMIS Orgasm	-0.55 <.001
FSFI Orgasm	-0.11	.41	IIEF Orgasmic Function	-0.55 <.001
PROMIS Global Satisfaction with Sex Life	-0.26	.04	PROMIS Global Satisfaction with Sex Life	-0.15 .14
FSFI Satisfaction	0.08	.54	IIEF Overall Satisfaction	-0.16 .14
			IIEF Intercourse Satisfaction	-0.30 .03

Abbreviations: FSFI, Female Sexual Function Index; IIEF, International Index of Erectile Function.

^aDifference in the means between people who answered "yes" (n = 237) and "no" (n = 569) to the question, "Have you ever asked an oncology doctor or nurse about problems with your sex life?"

^bFrom *t* test.