



Published in final edited form as:

J Sex Med. 2020 August ; 17(8): 1529–1537. doi:10.1016/j.jsxm.2020.04.001.

Priorities and Preferences of Patients With Head and Neck Cancer for Discussing and Receiving Information About Sexuality and Perception of Self-Report Measures

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Abstract

Background: Head and neck cancer and its treatment can cause impairment in survivors' sexuality. Previous studies show a need for education and psychological support.

Aim: To examine patients' priorities and preferences for discussing and receiving information about sexuality and to examine patient perceptions of existing self-report measures used in research.

Methods: This descriptive, cross-sectional, Web-based study recruited adults with a current or previous diagnosis of head and neck cancer. Participants answered questions about their priority and preference for receiving information about sexuality and reviewed 4 self-report measures commonly used in the research of this population.

Results: More than 80% (n = 61) of participants reported that it was important to receive information about sexual issues. Participants chose "at the time of diagnosis" as the most frequent answer for preferred time to receive this information. Half of the participants (n = 35) indicated that they prefer discussing sexual issues with a health-care provider. The most frequent answer for the method of receiving information was through discussions. Participants endorsed 4 themes not addressed by self-report surveys: (i) elicitation of important information, (ii) symptom burden issues, (iii) psychological issues, and (iv) physical barriers.

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Conflict of Interest: The authors report no conflicts of interest.

Clinical Implications: Providers, regardless of specialty, must attempt or facilitate discussions around these issues at various times within the treatment and recovery phases.

Strengths & Limitations: Although limited by sample representation and cross-sectional design, this study addresses an important patient-centered issue that is a critical aspect of quality of life.

Conclusions: Patients prefer to discuss sexual issues in person with their health-care providers at the time of diagnosis. Participants reacted positively to the self-report measures, but they felt that important issues faced by patients with head and neck cancer were not fully addressed.

Keywords

Head and Neck Neoplasms; Sexuality; Sexual Health; Patient Preference; Patient-Centered Care; Self-Report; Surveys and Questionnaires

BACKGROUND

More than 65,000 individuals in the United States develop head and neck cancer (HNC) annually in addition to more than half a million new cases worldwide.^{1,2} Although incidence of disease related to traditional risk factors such as alcohol and tobacco use is decreasing, incidence of human papillomavirus (HPV) associated tumors, particularly in younger adults, is increasing.^{3,4} Individuals with HPV-associated tumors have higher response rates to treatment than those with HPV-negative tumors.^{5,6} As survival rates improve and patients continue to be diagnosed at a younger age, there is an increased need to holistically support the survivors of this disease. Both the disease and its treatment can cause significant disfigurement of the face and neck, as well as impairment of sight, speech, smell, taste, breathing, facial expressions, and neck movement. These abilities are often critical to an individual's expression of sexuality.⁷ Sexuality is an important aspect of quality of life for cancer survivors as it reflects individual expression and relational connection for many individuals, and it is viewed as integral to the human experience.^{8,9} Unsurprisingly, HNC survivors with impaired sexuality also report lower quality of life.⁷ Rhoten's⁷ review of the literature indicated a paucity of data on this topic with only 9 empirical studies published 2005–2014 examining sexuality in terms of intimacy, sexual satisfaction, or sexual function in patients with HNC. Incidence of individuals reporting a negative effect of HNC on sexuality varied from 24–100%.⁷ Findings from recent studies support that most patients treated for HNC have reduced satisfaction with sexual activity and sexual function and are in need of psychosocial support.^{10–12} HNC-specific challenges to sexuality included dry mouth, thick saliva, and restricted head/neck movement.¹³ Several other studies have examined sexuality as part of long-term quality of life and unmet supportive care needs in this population.^{14–17} Supportive care related to sexuality was identified as one of the top unmet needs in patients treated for HNC.^{16,17} Reduced sexual satisfaction and interest in sexual activity was a main persistent symptom after HNC treatment.¹⁴ Thus, there is strong evidence demonstrating that sexuality-related issues are important and problematic for survivors of HNC.

The timing and setting for discussing sensitive issues like sexuality with patients with HNC is important. There are no known studies of patients with HNC that examine patient priorities or preferences for discussing and receiving information about sexuality from health-care professionals, thus limiting the extent to which patient-centered care can be provided. In addition, global self-report measures of sexuality may not adequately capture the range and dimensions of HNC survivors' sexual experiences. Although HNC-specific quality of life questionnaires exist, they may not adequately address sexuality-related problems experienced by patients with HNC. Data are needed to (i) support the timing and manner of patient-centered discussions around sexuality, (ii) identify HNC-specific sexuality issues that are not reflected by currently used self-report measures, and (iii) provide information that may assist in informing the timing of interventions aimed at improving issues related to sexuality in survivors of HNC. Thus, the aims of this study were to (i) examine the patients' priorities and preferences for discussing and receiving information about sexuality from health-care professionals and (ii) examine patient perceptions of existing self-report measures used in research to assess sexuality in patients with HNC.

METHODS

Sample

The STROBE guidelines were used in the reporting of this descriptive, cross-sectional, Web-based study (see supporting information file).¹⁸ Adults with a current or previous diagnosis of HNC were recruited. No restrictions were placed on length of time because diagnosis or treatment received for inclusion in this study.

Procedure

This study was approved by the Vanderbilt University Institutional Review Board and the Vanderbilt-Ingram Cancer Center Scientific Review Committee. Participants were recruited from March to November of 2018 via (i) targeted emails to HNC survivors who had agreed to be contacted about research studies, (ii) informative advertisements placed on support/survivorship group Websites and other social media venues, (iii) flyers, (iv) brochures distributed by clinicians at Vanderbilt-Ingram Cancer Center, (v) [ResearchMatch.org](https://www.researchmatch.org), (vi) Vanderbilt University Medical Center listserv, and (vii) a research assistant in the medical oncology clinic at Vanderbilt-Ingram Cancer Center. Interested individuals accessed the study online via Research Electronic Data Capture (REDCap) and answered 3 screening questions.^{19,20} Eligible individuals who wanted to participate provided electronic informed consent and then completed the study surveys.

Measures

The Demographic Characteristics Form included age, gender, race, ethnicity, highest grade of education completed, current marital status, current employment status, zip code, current insurance coverage, and yearly household income.

The Clinical Characteristics Form included date diagnosed with HNC, primary location of tumor, disease stage at diagnosis, pathology of tumor, treatment received for HNC, tobacco use history, and alcohol use history.

The Priority and Preference for Receiving Sexuality Information Form was developed by the primary investigator (B.R.) and revised with feedback from the Vanderbilt University School of Nursing Oncology Research Interest Group and Faces of HNC Survivorship Community. It contained 4 multiple-choice questions regarding the importance of receiving information about sexuality, time preference for receiving information about sexuality, and from whom and in what manner is receiving information about sexuality preferred. There was also a place for any free text a respondent may have wanted to include.

2 HNC-specific quality of life measures were reviewed by participants: the Functional Assessment of Cancer Therapy – Head and Neck (FACT-H&N) and the European Organization for Research and Treatment of Cancer Quality of Life for Head and Neck Cancer Survey (EORTC QLQ-H&N35). The FACT-H&N is a 27-item instrument that assesses patient function in 4 domains: physical, social/family, emotional, and functional well-being, which is further supplemented by 12 site-specific items to assess for head and neck-related symptoms.²¹ The EORTC QLQ-H&N35 is a 35-item instrument designed to assess the quality of life of patients with HNC.²² It contains 1 item that addresses being bothered by appearance and 1 item that addresses sexual enjoyment.²²

2 general sexuality measures were also reviewed by participants: the Modified Sexual Adjustment Questionnaire (MSAQ) and the Derogatis Sexual Functioning Inventory – Sexual Satisfaction Scale (DSFI-SS). The MSAQ is a 7-item scale that quantifies the effects of cancer treatment on sexuality in the individual.²³ The DSFI-SS comprises 10 true-false items, each reflecting whether or not the respondent is satisfied with that specific aspect of his/her sexual functioning.²⁴

After reviewing each measure (FACT-H&N, EORTC QLQ-H&N35, MSAQ, and DSFI-SS), participants completed the Patient Perception of the Functional Assessment of Cancer Therapy – Head and Neck, Patient Perception of the European Organization for Research and Treatment of Cancer Quality of Life for Head and Neck Cancer Survey, Patient Perception of the Modified Sexual Adjustment Questionnaire, and the Patient Perception of the Derogatis Sexual Functioning Inventory – Sexual Satisfaction Scale, respectively. These forms were developed and revised by the primary investigator (B.R.) and revised with feedback from the Vanderbilt University School of Nursing Oncology Research Interest Group and Faces of HNC Survivorship Community. Participants indicated the applicability of each self-report measure for patients with HNC and perceived adequacy of the self-report measure for examining sexuality in patients with HNC. Participants also had the option to include free text responses to characterize any sexuality-related issues that may have not been adequately captured by the self-report measure and general comments.

Analysis

Participant characteristics and quantitative responses were extracted from REDCap and analyzed using SPSS (26.0). Descriptive statistics were used to summarize and inspect the distributions of demographic and study measure scores. Textual responses were exported from REDCap to Dedoose. Dedoose is a Web-based data analysis software that facilitates qualitative and mixed methods research with the functionality for multiple users.²⁵ Thematic analysis was performed to summarize free text responses. The first and second authors

independently read the free text responses and created lists of codes. They then compared preliminary code lists and reached consensus on a final list of codes and groups of codes comprising broader themes. They then used the final code list to analyze the free text responses and then met to reach consensus on the assigned codes and themes within the text.

RESULTS

Participants

172 individuals clicked on the study link and viewed the screening criteria, 94 provided informed consent and were enrolled in the study, and 81 individuals completed participated in the study. Participant demographic and clinical characteristics are summarized in Tables 1 and 2, respectively. Most participants in this study were Caucasian (n = 72), non-Hispanic (n = 70), married (n = 57), employed full time (n = 49), and lived in the southern region of the United States (n = 42). Only slightly more men than women participated. More than 40% indicated an annual household income of greater than \$60,000 USD, and the median education level of participants was at least 2 years of college study. Participants had a median time of 18 months since diagnosis of HNC. Pharyngeal carcinoma was the most common tumor location, and most participants were diagnosed with squamous cell carcinoma and stage III/IV disease. More than half of the participants reported having received surgery, radiation, and chemotherapy, and the majority had a history of alcohol and tobacco use.

Priorities and Preferences for Receiving Information About Sexuality

Participant responses to priority and preference questions are summarized in Table 3. More than 80% of participants reported that it was “very important” or “somewhat important” to receive information about sexual issues. Only 15.3% of participants indicated that it was “not important” to receive this information. In regards to the preferred timing of receiving information, participants’ most frequent first choice was “at the time of diagnosis with HNC.” Participants’ most frequent second and third choices were “at some point during treatment for HNC” and “toward the end of treatment for HNC,” respectively. In regards to the preferred person to talk with about sexual issues, half of the participants indicated a health-care provider (physician/nurse practitioner/physician assistant) as their first choice. The most frequent second choice was a nurse followed by psychologist or counselor as the most frequent third choice. Participants’ most frequent first choice in terms of preferred method of receiving information was through discussions with their health-care provider. Receiving printed material was the most frequent second choice, and accessing digital media was the most frequent third choice.

Perceptions of Existing Self-Report Tools to Assess Sexuality in Patients with HNC

Participants’ responses to perception of self-report measure questions are summarized in Table 4. Most participants felt the FACT-H&N, EORTC QLQ-H&N35, MSAQ, and DSFI-SS were applicable for patients with HNC and adequately examined sexuality in the population of patients with HNC. However, between 29.9 and 45.6% of participants indicated that there were issues related to sexuality not adequately captured within the self-report measures. 30 participants included free text responses to further describe these issues.

The 4 themes of comments characterizing issues not adequately addressed by the self-report questionnaires included the following: (i) information needing to be elicited from respondents, (ii) symptom burden issues that may affect sexuality, (iii) psychological issues that may affect sexuality, and (iv) physical barriers that may affect sexuality.

Theme 1: Information Needing to Be Elicited from Respondents

Many participants felt that current sexual behavior as compared with precancer or pretreatment sexual behavior and specific reasons for reduced sexual satisfaction should be queried. Other areas of interest for inclusion in self-report tools were indicating the point in the treatment continuum, specific questions to address types of HNC, types of sexual behavior patients are able to engage in, and questions that were more inclusive of diverse patient experiences (eg, not assuming everyone who is or wants to be sexuality active is also married or partnered).

“How has cancer treatment affected or changed sexual behavior?”

“Is there a difference before and after treatment?”

Theme 2: Symptom Burden Issues that May Affect Sexuality

It was important to participants for self-reporting tools to assess symptom burden issues frequently experienced that may affect sexuality including pain, fatigue, dry mouth, nausea, and medication side effects.

“The main issues for not participating in sex during and for some time after treatments of oral head and neck cancer are pain, fatigue, psychological issues concerning recurrence.”

Theme 3: Psychological Issues that May Affect Sexuality

Participants spoke of the need for self-report tools to assess if an individual finds themselves attractive or sexy, the desire for sexual activity, and the perception of a partner’s attraction.

“Partner’s attraction toward you after surgery”.

Theme 4: Physical Barriers that May Affect Sexuality

It was important to participants for self-reporting tools to assess whether head and neck-specific issues such as having problems with oral mobility and speech or having a feeding tube was affecting patients’ experience of sexuality.

“I’m single and can barely be understood because of my speech defect and the problems eating – it’s a little depressing. Getting sexually excited is kinda hard.”

CONCLUSIONS

This study demonstrates that patients with HNC over-whelmingly want to receive information about sexuality. Timing and preferred person are likely important in the success of information delivery. Most respondents prefer in-person education delivery, via discussions with their health-care provider at the time of diagnosis. These results are consistent with those of the study by Sporn et al ²⁶ wherein 58% of patients surveyed wanted

at least one provider (oncologist or primary care provider) to inquire about their sexual health.

Priority and Preference

Although this study focuses on the HNC population, the findings are consistent with other studies showing increased desire for patient-provider communication, regardless of cancer type. In a study of more than 4,100 patients with cancer, 54.7% attested that no conversations regarding sexuality had taken place with their providers during or after treatment.²⁷ Furthermore, discussions were less frequent among those with cancers outside of the sexual organs.²⁷ While 56.3% of men with prostate cancer and 39.6% of women with cervical cancer noted having discussions with their providers, only 4% of those inflicted with thyroid, 6.8% melanoma, 7.2% lung, 8.8% upper digestive tract, and 9.6% non-Hodgkin lymphoma noted any discussions taking place.²⁷ Another longitudinal study exploring sexual health and communication with health-care providers among patients with colon and rectal cancer reflected similar results.²⁸ Of the 466 subjects surveyed, only 16% had any discussions regarding sexual health with their providers.²⁸

Along with preferred person and mode of delivery, timing plays an important role in the efficacy of these discussions. Findings in this study reflect the time of diagnosis as the most preferred time to discuss sexuality concerns, which varies slightly from those of the study by Reese et al²⁹ that sexuality concerns take a lower priority immediately after diagnosis. Participants in our study were at a median of 18 months after diagnosis, and there may be some retrospective memory bias introduced as issues around sexuality likely became of increasing importance and in the forefront of survivors' minds. After the receipt of treatment, quality of life concerns begin to emerge, and thus, sexual function and activity then become more important for many patients. It may, thus, be appropriate to discuss sexuality at the time of diagnosis and then revisit it after a patient completes treatment. Consequently, appropriate timing can promote or deter discussions between patients and health-care providers.

Perception of Existing Self-Report Measures

Overall, respondents perceived the 4 self-report measurement tools positively, with the suggestion of a few adjustments to provide more information. Respondents noted symptom inclusion, specificity to cancer type, psychological concerns, and more availability for eliciting additional data as key areas of needed improvement with the specific tools.

According to the respondents who provided free text comments, the MSAQ was a "good starting point," but lacks details that address how HNC and sexuality concerns were related. With regard to the DSFI-SS inventory, the respondents again noted with free text comments that it was a "good start," but the relevancy of cancer to sexuality issues is not adequately addressed. Respondents felt that the inventory needed additional clarification and a more robust physical and psychological symptom discussion (eg, depression, dry mouth, fatigue, lack of energy, speech deficits). The FACT-H&N survey received better feedback, with several respondents labeling it the "best so far" in the free text comments section. Respondents felt the survey lacked inclusivity and questions were written with the

assumption that respondents were sexually active. Those currently single noted minimal applicability. Finally, the respondents felt the EORTC QLQ-H&N35 survey was useful, as the focus is on HNC and it can be deployed during and after cancer treatment. However, respondents noted that the survey could use a separate area specifically for those disfigured from cancer, as their quality of life may be different. The survey also lacked symptom discussion, much like those discussed with the DSFI-SS inventory.

Limitations

Limitations to the study include those inherent with cross-sectional design, sample representation, and bias introduced because of the context of the information secured via a Web-based study. Although a nationwide sample was desired and actively sought, most respondents were residents in the southern region of the United States. Furthermore, the majority of the sample was Caucasian, non-Hispanic, with a diagnosis of squamous cell carcinoma, and stage III/IV, thus limiting applicability to other populations. In addition, this study did not address the priorities and preferences of patients' partners. Future studies should aim to increase diversity in the sample to allow for greater generalizability of findings.

Clinical Implications

The main aims of the study were to examine the patients' priorities and preferences for discussing and receiving information about sexuality from health-care professionals and patient perceptions of existing self-report measures used to assess sexuality in patients with HNC. These aims were successfully achieved and in doing so have contributed to the present research on the topic. Patients with HNC have expressed their desire to receive information from their health-care providers regarding sexuality; therefore, the patient-provider relationship is at the crux of the issue. Providers, regardless of specialty, must attempt these discussions at various time points within the treatment and recovery phases. Furthermore, if unfamiliar with the content and unable to receive appropriate training on proper delivery, a referral to another provider should be completed.

Research Implications

Along with further research to increase generalizability of results, this study highlights the need for innovative research aimed at developing educational materials for this patient population. The overarching finding is that patients with HNC need more dialog and information regarding the possible and potential sexual side effects that may occur during or after treatment. Therefore, future research must include interventions aimed at the provider-patient communication models for this population. Finally, as some respondents in the study noted the desire for other models of delivery, future research should be completed aimed at efficacy with differing modes of delivery – digital vs print vs verbal.

ACKNOWLEDGMENTS

We thank Dr Barbara Murphy for her assistance with participant recruitment.

Funding: This study is funded by the American Cancer Society Institutional Research Grant # 15-169-56 and CTSA award No. UL1 TR002243 from the National Center for Advancing Translational Sciences.

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Table 1.

Participant demographic characteristics (N = 81)

Characteristic	N	Median [IQR]
Age	79	52.0 [38.0–62.0] years
Education	80	14.0 [12.3–16.0] years
		N (%)
Gender	81	
Female		38 (46.9)
Male		42 (51.9)
Prefer not to respond		1 (1.2)
Race	81	
White		72 (88.9)
Black or African American		3 (3.7)
Native Hawaiian or Other Pacific Islander		1 (1.2)
Asian		1 (1.2)
American Indian/Alaskan Native		3 (3.7)
Multiple races		1 (1.2)
Ethnicity	79	
Not Hispanic		70 (88.6)
Hispanic		9 (11.4)
Geographic region within the United States	65	
South		42 (65.0)
West		10 (15.0)
Midwest		10 (15.0)
Northeast		3 (5.0)
Current marital status	80	
Single		12 (15.0)
Single, living with partner		8 (10.0)
Married		57 (71.3)
Widowed		2 (2.5)
Other		1 (1.3)
Current employment status	80	
Employed full time		49 (61.3)
Employed part time		4 (5.0)
Homemaker		6 (7.5)
Retired		16 (20.0)
Unemployed		3 (3.8)
Other		2 (2.5)
Insurance	79	
Private		39 (48.1)
Government		19 (23.5)
Multiple types		15 (18.5)

Characteristic	N	Median [IQR]
None	3	(3.7)
Other	3	(3.7)
Annual household income	81	
\$10,000 or less	3	(3.7)
\$10,001 to \$20,000	2	(2.5)
\$20,001 to \$30,000	6	(7.4)
\$30,001 to \$40,000	9	(11.1)
\$40,001 to \$50,000	19	(23.5)
\$50,001 to \$60,000	6	(7.4)
Over \$60,000	33	(40.7)
Prefer not to respond	3	(3.7)

IQR = interquartile range.

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Table 2.

Participant clinical characteristics

Participant clinical characteristics	N	Median [IQR]
Months since diagnosis	66	18.0 [5.9–65.6]
Tumor location	77	N (%)
Pharynx	25	(32.5)
Oral cavity	21	(27.4)
Paranasal sinuses and nasal cavity	9	(11.7)
Larynx	9	(11.7)
Salivary gland	7	(9.1)
Unknown/I do not know	6	(7.8)
Stage	76	
I	6	(7.9)
II	5	(6.6)
III	16	(21.1)
IVa	29	(38.2)
IVb	2	(2.6)
IVc	2	(2.6)
I do not know	16	(21.1)
Tumor pathology	73	
Squamous cell carcinoma	43	(58.9)
Adenoid cystic carcinoma	8	(11.0)
Adenocarcinoma	6	(8.2)
Mucoepidermoid carcinoma	4	(5.5)
I do not know	12	(16.4)
Treatment	77	
Surgery	51	(66.2)
Radiation	61	(79.2)
Chemotherapy	47	(61.0)
Ever used or smoked tobacco	79	
No	33	(41.8)
Yes	46	(58.2)
Used or smoked tobacco in last month	46	
No	33	(71.7)
Yes	13	(28.3)
Ever drunk alcohol	79	
No	14	(17.7)
Yes	65	(82.3)
Drunk alcohol in last month	64	
No	36	(56.3)
Yes	28	(43.8)

IQR = interquartile range.

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Table 3.

Priority and preference for receiving sexuality information

Number answered	N	N (%)
Importance of receiving information about sexual issues from a health-care provider	72	
Not important		11 (15.3)
Somewhat important		22 (30.6)
Very important		39 (54.2)
Preferred timing of receiving information about sexual issues		
First choice	68	
At time of diagnosis with HNC		23 (33.8)
At some point during treatment for HNC		13 (19.1)
Immediately after end of treatment for HNC		9 (13.2)
3 months after end of treatment for HNC		7 (10.3)
Prefer not to receive information about sexual issues		7 (10.3)
Toward end of treatment for HNC		5 (7.4)
More than 3 months after end of treatment for HNC		3 (4.4)
Other		1 (1.5)
Second choice	66	
At some point during treatment for HNC		19 (28.8)
Immediately after end of treatment for HNC		14 (21.2)
Toward end of treatment for HNC		12 (18.2)
At time of diagnosis with HNC		8 (12.1)
3 months after end of treatment for HNC		7 (10.6)
More than 3 months after end of treatment for HNC		5 (7.6)
Prefer not to receive information about sexual issues		1 (1.5)
Third choice	66	
Toward end of treatment for HNC		24 (36.4)
More than 3 months after end of treatment for HNC		12 (18.2)
3 months after end of treatment for HNC		11 (16.7)
Immediately after end of treatment for HNC		9 (13.6)
At time of diagnosis with HNC		5 (7.6)
Prefer not to receive information about sexual issues		3 (4.5)
At some point during treatment for HNC		2 (3.0)
Preferred person to talk to about sexual issues		
First choice	69	
Physician/nurse practitioner/physician assistant		35 (50.7)
Psychologist/counselor		20 (29.0)
Prefer not to speak with a health-care provider		7 (10.1)
Physical therapist		5 (7.2)
Nurse		2 (2.9)
Second choice	65	
Nurse		32 (49.2)

Number answered	N	N (%)
Physician/nurse practitioner/physician assistant	13	(20.0)
Psychologist/counselor	12	(18.5)
Physical therapist	6	(9.2)
Prefer not to speak with a health-care provider	2	(3.1)
Third choice	64	
Psychologist/counselor	24	(37.5)
Nurse	20	(31.3)
Prefer not to speak with a health-care provider	8	(12.5)
Physician/nurse practitioner/physician assistant	7	(10.9)
Physical therapist	4	(6.3)
Other	1	(1.6)
Preferred method for receiving information about sexual issues		
First choice	68	
Discussions with health-care provider	24	(35.3)
Printed material	23	(33.8)
Prefer not to receive information	9	(13.2)
Digital media	6	(8.8)
Website	6	(8.8)
Second choice	64	
Printed material	22	(34.4)
Website	15	(23.4)
Discussions with health-care provider	14	(21.9)
Digital media	13	(20.3)
Third choice	68	
Digital media	20	(29.4)
Website	20	(29.4)
Discussions with health-care provider	14	(20.6)
Prefer not to receive information	8	(11.8)
Printed material	6	(8.8)

HNC = head and neck cancer.

Table 4.

Participant perception of self-report measures

	N (%)		
	N	No	Yes
Participant perception of self-report measures			
Functional Assessment of Cancer Therapy – Head and Neck			
1. In your opinion, is the Functional Assessment of Cancer Therapy – Head and Neck survey applicable for patients with head and neck cancer?	66	5 (7.6)	53 (80.3)
2. In your opinion, does the Functional Assessment of Cancer Therapy – Head and Neck survey adequately examine sexuality (sexual function and sexual wellbeing) for patients with head and neck cancer?	64	11 (17.2)	41 (64.1)
3. In your opinion, are there issues related to sexuality (sexual function and sexual wellbeing) that are not adequately captured in the Functional Assessment of Cancer Therapy – Head and Neck survey?	64	24 (37.5)	19 (29.7)
European Organization for Research and Treatment of Cancer Quality of Life for Head and Neck Cancer			
1. In your opinion, is the European Organization for Research and Treatment of Cancer Quality of Life for Head and Neck Cancer survey applicable for patients with head and neck cancer?	64	5 (7.8)	47 (73.4)
2. In your opinion, does the European Organization for Research and Treatment of Cancer Quality of Life for HNC survey adequately examine sexuality (sexual function and sexual wellbeing) for patients with head and neck cancer?	62	13 (21.0)	34 (54.8)
3. In your opinion, are there issues related to sexuality (sexual function and sexual wellbeing) that are not adequately captured in the European Organization for Research and Treatment of Cancer Quality of Life for HNC survey?	63	26 (41.3)	14 (22.2)
Modified Sexual Adjustment Questionnaire			
1. In your opinion, is the Modified Sexual Adjustment Questionnaire applicable for patients with head and neck cancer?	69	1 (1.4)	53 (76.8)
2. In your opinion, does the Modified Sexual Adjustment Questionnaire adequately examine sexuality (sexual function and sexual wellbeing) for patients with head and neck cancer?	69	14 (20.3)	32 (46.4)
3. In your opinion, are there issues related to sexuality (sexual function and sexual wellbeing) that are not adequately captured in the Modified Sexual Adjustment Questionnaire?	67	20 (29.9)	16 (23.9)
Derogatis Sexual Functioning Inventory			
1. In your opinion, is the Derogatis Sexual Functioning Inventory – Sexual Satisfaction Scale applicable for patients with head and neck cancer?	68	11 (16.2)	44 (64.7)
2. In your opinion, does the Derogatis Sexual Functioning Inventory – Sexual Satisfaction Scale adequately examine sexuality (sexual function and sexual wellbeing) for patients with head and neck cancer?	68	14 (20.6)	36 (52.9)
3. In your opinion, are there issues related to sexuality (sexual function and sexual wellbeing) that are not adequately captured in the Derogatis Sexual Functioning Inventory – Sexual Satisfaction Scale?	68	31 (45.6)	18 (26.5)

The greatest number of respondents are given in bold.

HNC = head and neck cancer.