

Translation, cultural adaptation, pilot testing, and psychometric validation of Nepali version of EORTC Sexual Health Questionnaire (SHQ) in Nepali Cancer patients

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Abstract

Introduction

Sexual health significantly impacts the quality of life in cancer patients, yet no validated Nepali version of the EORTC Sexual Health Questionnaire (SHQ) exists. This study aimed to translate, culturally adapt, and validate the EORTC SHQ for use in Nepal.

Materials and Methods

Following EORTC guidelines, the SHQ underwent forward and backward translation, expert review, and pilot testing. Ethical approval was obtained from the Institutional Review Committee of Nepal Cancer Hospital (IRC-NCHRC 008/2078), and informed consent was secured. A pilot sample of 50 Nepali cancer patients assessed feasibility and comprehensibility. Reliability and validity were analyzed statistically.

Results

The translated SHQ was well understood, with no major issues reported. It demonstrated strong internal consistency, test-retest reliability, and construct validity, correlating significantly with quality of life and psychological distress measures.

Conclusion

The validated Nepali SHQ is a reliable tool for assessing sexual health in Nepali cancer patients. Its availability will enhance understanding of cancer's impact on sexual functioning and support targeted interventions.

Keywords

Sexual health, EORTC, SHQ, Sexual Health Questionnaire, translation, cultural adaptation, psychometric validation, cancer, Nepali version

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INTRODUCTION

Cancer is a significant global health issue, contributing substantially to mortality and morbidity. In 2018, approximately 18.1 million new cases were reported globally, resulting in 9.6 million deaths, making cancer the fifth leading cause of death worldwide.¹ In Nepal, the age-standardized incidence of cancer was estimated at 103.7 per 100,000 people, with a mortality rate of 77.8 per 100,000.² Sexual health, as defined by the World Health Organization, encompasses physical, emotional, mental, and social well-being in relation to sexuality.³ In the context of cancer, sexual health is a critical yet often overlooked aspect of a patient's quality of life. Research shows that women experi-

ence a higher cancer burden, likely due to earlier disease onset, with gynecological cancers such as cervical, uterine, and breast cancers being most common in women aged 40 to 60.¹ The growing number of cancer survivors, thanks to advances in treatments, faces ongoing health challenges, including the lasting impact of cancer and its treatment on sexual function and body image.^{4,5,6}

Sexual dysfunction, defined as impairment in any phase of the sexual response cycle or pain during intercourse, is frequently reported among cancer patients. This can stem from physical, psychological, interpersonal, and behavioral factors.⁷ Common issues include hypoactive sexual desire in both sexes, erectile dysfunction in men, and dyspareunia in women.⁸ These problems can persist even after the disease-free period, often worsening over time.⁹ As cancer survivorship increases, addressing these issues becomes crucial. Validated patient-reported outcome (PRO) measures allow for comprehensive assessments of sexual health, helping clinicians develop individualized care strategies to

enhance quality of life.⁶ However, there is a lack of standardized tools in the Nepali language to assess sexual functioning in cancer patients. This study aims to translate and validate the EORTC Sexual Health Questionnaire (EORTC SHQ-22) for use with Nepali cancer patients and survivors, filling this gap in care.¹⁰

METHODOLOGY

The study involved multiple phases, starting with the translation of the original questionnaire, followed by cultural adaptation, pilot testing, validation, and finalization of the translated version. It was conducted among female cancer patients at Nepal Cancer Hospital, Lalitpur.

ETHICAL APPROVAL

Ethical approval for this study was obtained from the Institutional Review Committee of Nepal Cancer Hospital and Research Center, Harisiddhi, Lalitpur, Nepal (IRC-NCHRC 008/2078). The study was conducted in accordance with the ethical guidelines, and approval was also secured from the respective Department of Medical Oncology for data collection within the hospital setting.

Prior to data collection, written informed consent was obtained from all participants after they were provided with a detailed explanation of the study's purpose and objectives. The collected data were used exclusively for research purposes. Ethical principles, including respect for human rights, autonomy, and justice, were rigorously upheld to ensure that all participants were treated with dignity and integrity throughout the study.

PATIENT SELECTION

Participants were required to have a histologically confirmed diagnosis of a malignant tumor, irrespective of location, stage, or treatment status. Eligible patients were aged between 18 and 60, provided informed written consent, and had no other disabling medical condition that could impair cognition or reading ability.

MEASUREMENT TOOLS

Two instruments were employed in this study: a socio-demographic questionnaire and the EORTC SHQ-22. The socio-demographic tool was used to gather relevant patient data. The EORTC SHQ-22, Phase IV version, is a 22-item questionnaire that assesses psychosocial and socio-behavioral aspects, with 13 items focused on these domains. It is designed for use across various cancer types and stages. The Phase IV study aimed to internationally validate the questionnaire for cancer patients.

DEMOGRAPHIC QUESTIONNAIRE

The demographic questionnaire was divided into several key sections. The first section captured personal details such as the participant's name, age, gender, working status, marital status, and number of children, education level, religion, and the state of their sexual relationship. The second section, for official use, captured data relevant for administrative or research purposes.

To ensure accuracy, the diagnosis, date of diagnosis, and treatment details were cross-referenced with the hospital's Medical Records Department (MRD) files, ensuring the reliability of the provided information for research purposes.

SEXUAL HEALTH QUESTIONNAIRE

The EORTC SHQ (European Organization for Research and Treatment of Cancer Sexual Health Questionnaire) comprises two multi-item scales assessing sexual satisfaction and sexual pain, along with 11 single items evaluating sexual activity, including treatment-related and partner-related factors. It also includes general sexual health questions addressing concerns such as sexual pain, incontinence, fatigue, and vaginal dryness, as well as four gender-specific questions (two for men and two for women).

All items are scored on a 4-point Likert scale: "not at all," "a little," "quite a bit," and "very much." Scores range from 0 to 100, with higher scores reflecting greater sexual satisfaction or health. The functional scale and single-item measures cover aspects like sexual satisfaction, libido, treatment-related symptoms, communication with healthcare providers, insecurity in relationships, and confidence in erection, masculinity, and femininity, contributing to an assessment of overall sexual well-being.

Descriptive statistics summarized demographic and clinical variables, including age, gender, marital status, children, religion, education, occupation, diagnosis, time since diagnosis, and treatment modality, using sums, percentages, means, and standard deviations. Data were collected during follow-up visits and recorded in standardized case report forms via Microsoft Excel.

After completing consent, demographic, and questionnaire forms, participants provided feedback via a debriefing form regarding the need for assistance and any issues with understanding or emotional distress. Instances of confusion or communication barriers were documented.

TRANSLATION PROJECT

The EORTC item bank was searched for existing translated Nepali SHQ questionnaires. None was found hence obtained permission from EORTC to translate and use. The translation process determined by the EORTC in the translation manual was followed.¹¹ Figure 1 shows the flowchart of the translation and validation procedure of EORTC SHQ22 into the Nepalese version.

PREPARATION

A formal request to start the translation process in Nepali language was sent to the EORTC translation unit (TU). After confirming that no such questionnaire already exists or is under development, the TU sent a translation package, which contained a questionnaire, templates, pre-translated files, and a scoring manual.

FORWARD TRANSLATION

Two independent bilinguals (Nepali and English) native speakers of the Nepali language, with sound knowledge of clinical terminologies, local terms (slang), and cultural expressions used in scientific English literature as well as laymen Nepalese language translated the document. Two forward translations (FT1 and FT2) of the English version of the questionnaire into the target language (Nepali) were done separately.

RECONCILIATION

The two translated versions were reconciled into a unified preliminary Nepali version (FT3) by the third independent bilingual translator who was a practicing clinical psychiatrist. The primary investigator (PI) and the EORTC translation team further explored the reconciled version for discrepancies. A written report documented was issued concerning the translation and reconciliation process.

BACK TRANSLATION

The reconciled version was translated back to the English language by different translators (BT1 and BT2). BT1 and BT2 were bilingual Nepalese practicing clinical Psychiatrists. Both the translators had not seen the original English version.

Back Translation Review

The two obtained back translations were compared with the original English version of the SHQ22 questionnaire by

the EORTC translation team. All differences were addressed by the PI and sent to EORTC for approval (BT3).

PROOFREADING

To ensure quality, the questionnaire was proofread by an external professional proofreader for review. The preliminary translation and the original questionnaire were compared and a report explaining the suggestions and changes was submitted by the proofreader. All differences were addressed and an agreement was reached between the proofreader, PI and the EORTC translation unit.

Pilot testing and cross-cultural adaptation

After acceptance from EORTC, the preliminary Nepali version of SHQ22 was administered to participants who met the inclusion criteria at Nepal Cancer Hospital and Research center, Harisiddhi, Lalitpur. The pilot testing was performed using semi structured interview with 10 patients. This sample size was specified by EORTC translation protocol for pilot testing of translated questionnaire.

FINALIZATION

After the pilot testing, the suggestions from the participants were carefully considered and a consensus was reached between the PI and the EORTC translation unit. The final translation was approved and the project was closed.

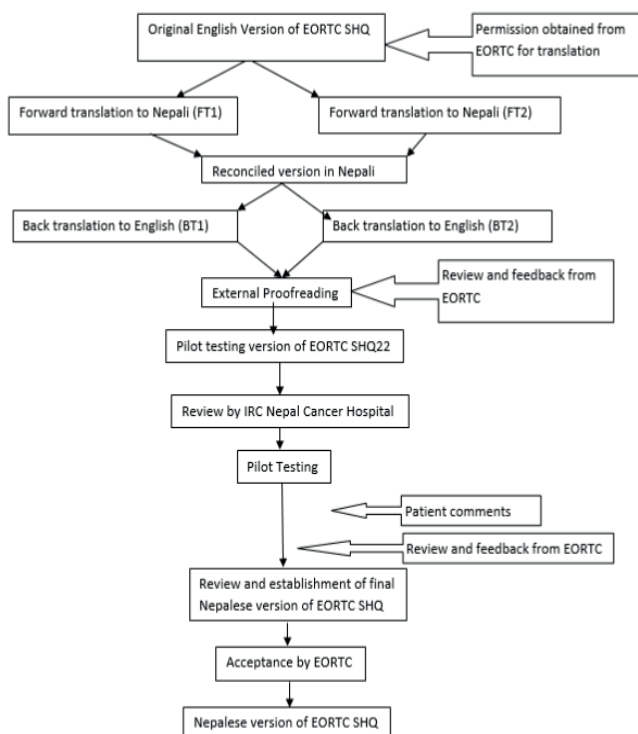


Figure 1: Translation and validation process of EORTC SHQ-22 into Nepalese Language

PROCESS

The translation project was started after obtaining approval from the EORTC QoL Translation Unit. The translation followed the standard EORTC 8 step procedure, including translation preparation, forward translation, reconciled translation, back translations, back translation report, proofreading, pilot testing and finalization. During the translation process, several rounds of report submissions and discussions occurred between the translator coordinator, translators, translation unit, and proofreader until a final consensus was reached. The preliminary Nepali version was then used for pilot testing.

Pilot Testing

Pilot testing was conducted at NCHRC after obtaining approval from the Institutional Research Committee (IRC). The EORTC SHQ-22 questionnaire was tested on 10 cancer patients. Demographic data were collected from participants, while clinical information was retrieved from the Hospital MRD file. The MRD file was pre-screened to ensure participants met inclusion criteria and were clinically stable. Participants were introduced to the project by the co-author, who explained the study's nature and aims. Written consent was obtained after providing detailed information about the research.

Participants who agreed to participate were provided with the demographic form and questionnaire to complete independently, marking any questions they found difficult or problematic. After completing the SHQ-22, participants were interviewed by the co-author to evaluate the comprehensibility of the translated questionnaire. Feedback was documented on a form provided by the EORTC translation unit. Variables assessed included difficulty, confusion, and upsetting or offensive content. If participants faced issues, they were asked how they might reword the questions. Additional feedback was sought on general thoughts about the questionnaire and any challenges encountered, helping identify underlying reasons for comments. This process validated the translation, ensured cultural adaptation, and minimized response errors.

Cross-cultural validity, a type of construct validity, refers to "the degree to which the performance of items on a translated or culturally adapted instrument reflects that of the original version".¹² Cross-cultural validity was ensured through a five-step translation and back-translation process, followed by pilot testing, in accordance with EORTC guidelines.¹³

RESULT

Descriptive statistics including sum total, percentages, means and standard deviations are reported for age and gender, marital status, number of children, religion, education occupation, and diagnosis, duration from diagnosis and treatment modality. Quantitative data stemming from patient interviews was documented in Microsoft excel sheet by the PI. The IBM Statistical Package for the Social Sciences (SPSS) Version 23.0 was used.

Patient Characteristics

A total of 10 patients with various cancer sites (Four patients had ovarian cancer, two had endometrial cancer, one with cervical cancer, one with buccal mucosal cancer, one with laryngeal cancer and one did not disclose diagnosis) were enrolled (table 2). The sample included more women (8) than men (2). The participant's age ranged from 48 to 60. All participants were married with children. About 50% of participants completed middle school, 30 % college or university, and 20% were uneducated. 9 out of 10 participants were Hindu and 1 was Buddhist. 40% of the participants reported being retired, 30% were employed and 30% were not. 90% of participants reported being sexually active. The majority of patients were treated with curative intent. 33.33% surgery, 33.33 percentile Radiotherapy and surgery, and 22.22% Radiotherapy and Chemotherapy, while one chose not to answer. The patient's clinical and demographic data are presented in Table 1 and Table 2.

Quantitative results

Cronbach's alpha was used to evaluate the internal consistency of two components: the sexual satisfaction scale and the sexual pain scale. The sexual satisfaction scale included 8 items.^{3,4,10,12,17,18,19,21} The initial Cronbach's alpha was 0.571, indicating moderate internal consistency. After excluding three conditional variables,^{18,19,21} Cronbach's alpha improved to 0.876, reflecting a higher level of internal consistency.

The sexual pain scale comprised 3 items.^{8,11,20} Its initial Cronbach's alpha was 0.394, indicating low internal consistency. Removing one conditional variable raised the coefficient to 0.579, showing a slight improvement.

In summary, the sexual satisfaction scale achieved enhanced internal consistency following item removal, whereas the sexual pain scale showed only minor improvement, suggesting further refinement is needed to improve its reliability.

Table 1: Socio-demographic and sexual health-related patient characteristics

| Characteristics | | Frequency | Percentage |
|--------------------|----------------------|-----------------------|------------|
| Age in years | Mean ± SD (Min, Max) | 52.90 ± 4.23 (48, 60) | |
| Sex | Female | 8 | 80.0 |
| | Male | 2 | 20.0 |
| Address | Dang | 1 | 10.0 |
| | Helambu | 1 | 10.0 |
| | Kathmandu | 8 | 80.0 |
| Number of children | 1 | 2 | 20.0 |
| | 2 | 3 | 30.0 |
| | 3 | 4 | 40.0 |
| | 4 | 1 | 10.0 |
| Education | College/university | 3 | 30.0 |
| | Middle school | 5 | 50.0 |
| | Uneducated | 2 | 20.0 |
| Religion | Hindu | 9 | 90.0 |
| | Buddhist | 1 | 10.0 |
| Employment | Unemployed | 3 | 30.0 |
| | Employed | 3 | 30.0 |
| | Retired | 4 | 40.0 |
| Sexually active | No | 1 | 10.0 |
| | Yes | 9 | 90.0 |

Table 2: Clinical characteristics of the patient

| Characteristics | | Frequency | Percentage |
|-------------------|-----------------------------|-----------|------------|
| Diagnosis (n = 9) | CA buccal mucosa | 1 | 11.1 |
| | CA cervix | 1 | 11.1 |
| | Ca Endometrium | 2 | 22.2 |
| | Ca larynx | 1 | 11.1 |
| | CA ovary | 4 | 44.4 |
| | Total | 9 | 100.0 |
| Treatment (n = 9) | Not answered | 1 | 11.11 |
| | Radiotherapy + Chemotherapy | 2 | 22.22 |
| | Radiotherapy + Surgery | 3 | 33.33 |
| | Surgery | 3 | 33.33 |
| Total | 9 | 100.0 | |

Table 3: Sexual health questionnaire item responses by the participants (n = 10)

| Questions | Responses n | | | | Total response | Missing | Total Mean ± SD (Min, Max) |
|--|----------------|--------------|-----------------|---------------|----------------|---------|----------------------------|
| | Not at all (1) | A little (2) | Quite a bit (3) | Very much (4) | | | |
| 1 How important to you is an active sex life? | 1 (10) | 4 (40) | 1 (10) | 4 (40) | 10 (100) | 0 | 2.8±1.1(1,4) |
| 2 Have you had decreased libido? | 2 (22.2) | 2 (22.2) | 2 (22.2) | 3 (33.3) | 9 (100) | 1 | 2.7±1.2(1,4) |
| 3 Have you been satisfied with your level of sexual desire? | 1 (11.1) | 2 (22.2) | 1 (11.1) | 5 (55.7) | 9 (100) | 1 | 3.1±1.2(1,4) |
| 4 Have you been satisfied with your sex life? | 3 (37.5) | 0 (0) | 1 (12.5) | 4 (50) | 8 (100) | 2 | 2.8±1.5(1,4) |
| 5 Have you been worried about being incontinent (urine/stool)? | 10 (100) | 0 (0) | 0 (0) | 0 (0) | 10 (100) | 0 | 1±0(1,1) |
| 6 Has fatigue or a lack of energy affected your sex life? | 5 (50) | 4 (40) | 0 (0) | 1 (10) | 10 (100) | 0 | 1.7±0.6(1,4) |
| 7 Has the treatment affected your sexual activity? | 2 (22.2) | 1 (11.1) | 1 (11.1) | 5 (55.6) | 9 (100) | 1 | 3±1.3(1,4) |
| 8 Have you been worried that sex would be painful? | 5 (50) | 1 (10) | 2 (20) | 2 (20) | 10 (100) | 0 | 2.1±1.3(1,4) |
| 9 Have you had communication with health professionals about sexual issues? | 9 (90) | 1 (10) | 0 (0) | 0 (0) | 10 (100) | 0 | 1.1±0.3(1,2) |
| 10 Have you been satisfied with the communication about sexual issues between yourself and your partner? | 3 (37.5) | 0 (0) | 2 (25) | 3 (37.5) | 8 (100) | 2 | 2.6±1.4(1,4) |
| 11 Have you been worried that your partner may cause you pain during sexual contact? | 4 (40) | 2 (20) | 2 (20) | 2 (20) | 10 (100) | 0 | 2.2±1.2(1,4) |
| 12 Have you been satisfied with your level of intimacy? | 1 (14.3) | 0 (0) | 1 (14.2) | 5 (71.4) | 7 (100) | 3 | 3.4±1.1(1,4) |
| 13 Have you felt insecure regarding your ability to satisfy your partner? | 4 (40) | 1 (10) | 2 (20) | 3 (30) | 10 (100) | 0 | 2.4±1.4(1,4) |
| 14 Were you confident about obtaining and maintaining an erection when you had sex? (n = 2) | 0 (0) | 0 (0) | 0 (0) | 2 (100) | 2 (100) | 0 | 4±0(4,4) |
| 15 Have you felt less masculine as a result of your disease or treatment? (n = 2) | 2 (100) | 0 (0) | 0 (0) | 0 (0) | 2 (100) | 0 | 1±0(1,1) |
| 16 Have you felt less feminine as a result of your disease or treatment? (n = 8) | 3 (37.5) | 4 (50) | 1 (12.5) | 0 (0) | 8 (100) | 0 | 1.75±0.7(1,3) |
| 17 Have you been sexually active? | 4 (40) | 3 (30) | 0 (0) | 3 (30) | 10 (100) | 0 | 2.2±1.3(1,4) |
| 18 Has sexual activity been enjoyable for you? | 0 (0) | 1 (16.7) | 2 (33.3) | 3 (50) | 6 (100) | 4 | 3.3±0.8(2,4) |
| 19 Have you been satisfied with your ability to reach an orgasm? | 0 (0) | 1 (20) | 1 (20) | 3 (60) | 5 (100) | 5 | 3.4±0.9(2,4) |
| 20 Have you felt pain during/after sexual activity? | 5 (83.3) | 1 (16.7) | 0 (0) | 0 (0) | 6 (100) | 4 | 1.2±0.4(1,2) |
| 21 To what extent did you feel sexual enjoyment? | 0 (0) | 3 (50) | 1 (16.7) | 2 (33.3) | 6 (100) | 4 | 2.8±0.9(2,4) |
| 22 Have you experienced a dry vagina during sexual activity? (n = 8) | 0 (0) | 2 (25) | 1 (12.5) | 2 (25) | 8 (100) | 0 | 3±1(2,4) |

Table 4... Changes in the scale items after pre-testing

| Items | Original | Comments from patients | Final Results |
|-------|---|--|--|
| | तपाईंको यौन इच्छामा कमी आयो ? | तपाईंको यौनइच्छामा कमी आएको थियो? | तपाईंको यौनइच्छामा कमी आएको थियो ? |
| | तपाईं आफू र आफ्नो पार्टनर बीच भएको यौनसम्बन्धी कुराकानीप्रति सन्तुष्ट हुनुभयो? | confusing : according to patient, answer for word हुनुहुन्थ्यो would be would be थिएन . The question has हुनुभयो so answer option should be भएन (language) | तपाईं आफू र आफ्नो पार्टनर बीच भएको यौनसम्बन्धी कुराकानीप्रति सन्तुष्ट हुनुहुन्थ्यो ? |
| | तपाईं यौन सम्पर्क गर्दा तपाईंको पार्टनरले दुखाउने हुन् कि भन्ने चिन्तित हुनुभयो ? | confusing : according to patient, answer for word हुनुहुन्थ्यो would be would be थिएन . The question has हुनुभयो so answer option should be भएन (language) | तपाईं यौन सम्पर्क गर्दा तपाईंको पार्टनरले दुखाउने हुन् कि भन्ने चिन्तित हुनुहुन्थ्यो ? |
| | तपाईंलाई आफूले आफ्नो पार्टनरलाई यौन सुख दिन सकिदैन कि भनेर चिन्ता लाग्यो ? | confusing : according to patient, answer for word हुनुहुन्थ्यो would be would be थिएन . The question has हुनुभयो so answer option should be भएन (language) | तपाईंलाई आफूले आफ्नो पार्टनरलाई यौन सुख दिन सकिदैन कि भनेर चिन्तित हुनुहुन्थ्यो ? |

Table 5: Sexual health questionnaire scale linear scores

| S/N | Scales | female (Mean ± SD) | male (Mean ± SD) | Total Mean ± SD (Min, Max) |
|-----|---------------------|--------------------|------------------|----------------------------|
| | Sexual satisfaction | 53.9 ± 29.5 | 0 ± 0 | 43.12 ± 34.54 (0, 100) |
| 1 | Sexual pain | 36.81 ± 33.72 | 16.67 ± 23.57 | 32.78 ± 31.91 (0, 100) |
| 2 | Sexual Activity | 41.67 ± 38.83 | 33.33 ± 47.14 | 40 ± 37.84 (0, 100) |
| 3 | Decreased libido | 52.38 ± 42.41 | 66.67 ± 47.14 | 55.56 ± 40.82 (0, 100) |
| 4 | Incontinence | 0 ± 0 | 0 ± 0 | 0 ± 0 (0, 0) |
| 5 | Fatigue | 20.83 ± 35.36 | 33.33 ± 0 | 23.33 ± 31.62 (0, 100) |
| 6 | Treatment | 61.9 ± 48.8 | 83.33 ± 23.57 | 66.67 ± 44.1 (0, 100) |
| 7 | Communication | 95.83 ± 11.79 | 100 ± 0 | 96.67 ± 10.54 (67, 100) |
| 8 | with professionals | 50 ± 47.14 | 33.33 ± 47.14 | 46.67 ± 45 (0, 100) |
| | Partnership | - | 0 ± 0 | 0 ± 0 (0, 0) |
| 9 | Confidence erection | - | 0 ± 0 | 0 ± 0 (0, 0) |
| 10 | (males) | 25 ± 23.57 | - | 25 ± 23.57 (0, 67) |
| | Body image (males) | 66.67 ± 33.33 | - | 66.67 ± 33.33 (33, 100) |
| 11 | Body image (female) | | | |
| 12 | Vaginal dryness | | | |
| 13 | (female) | | | |

Multiple item scales

DISCUSSION

This study presented the findings from the translation of the EORTC-SHQ 22 from English to Nepali and its psychometric properties in a cross-cultural sample of cancer patients and survivors. The Sexual Health Questionnaire (EORTC-SHQ) was translated and validated for use in the Nepali population. It includes a sexual satisfaction scale and a sexual pain scale, both showing acceptable internal consistency (Cronbach’s alpha > 0.80). The validation of the Nepali scale aligns with existing literature.

Five partner-related items are conditionally dependent on the presence of a partner. To mitigate scoring inconsistencies and enhance validity, participants without a sexual partner or who were sexually inactive were excluded. This ensured the results captured the experiences of sexually active individuals, reducing confounding factors. Consequently, 100% of the participants had a partner. Three of these items belong to the sexual satisfaction scale, one to the sexual pain scale, and one is a single-item scale.

The SHQ-22’s validity should further be tested in underrepresented groups, such as more male participants and those with pelvic region cancers. Despite this limitation, the SHQ-22 Nepali version demonstrated good psychometric properties and clinical applicability for assessing the sexual health of cancer patients in Nepal. The EORTC-SHQ 22 tool has potential for use in both clinical and research settings, particularly during treatment and survivorship phases. Its ability to assess and monitor sexual well-being makes it valuable for tailoring interventions. The tool’s versatility emphasizes its role in enhancing patient care and supporting evidence-based decisions.¹⁴

The translated scale showed good internal consistency (Cronbach’s alpha = 0.394 for the sexual satisfaction scale and 0.579 for the sexual pain scale), making it suitable for future studies. The results suggest the Nepali EORTC-SHQ 22 is a valid and reliable tool for assessing sexual health in Nepal. It can help physicians, oncologists, and gynecologists understand the impact of sexual health issues on patients, reduce stigma, and improve communication. As per ASCO Clinical Practice Guidelines and Cancer Care Ontario recommendations, sexual problems in cancer patients should be identified and managed actively throughout treatment and survivorship.¹⁵

The rigorous translation and back-translation process specified by EORTC is a key strength of this study. However, the sample overrepresents female participants and lacks representation from male pelvic region cancer patients. Multicenter and population-based studies are recommended to assess the tool’s utility across the cancer trajectory in Nepal.

CONCLUSION

In conclusion, the standardized translation procedure and thorough pilot testing have successfully resulted in the creation of an EORTC-approved Nepalese version of the EORTC-SHQ-22 questionnaire for cancer patients. This tool significantly enhances the ability to assess health-related quality of life in Nepal, particularly in clinical research and potentially in practice settings.

Further studies with larger sample sizes are essential to fully examine the psychometric properties of the Nepalese SHQ-22. These studies should also evaluate its performance in diverse clinical scenarios to gather comprehensive data on its reliability, validity, and effectiveness. Such investigations will enhance its utility in cancer research and clinical care in Nepal.

To summarize, the development of the Nepalese EORTC-SHQ-22 enables effective evaluation of health-related quality of life among cancer patients in Nepal. Future research with expanded samples is necessary to refine its psychometric properties and assess its application in both research and clinical practice.

CONFLICT OF INTEREST

None to declare.

SUPPLEMENT

The questionnaire is copyrighted, with the copyright notice indicated at the bottom of the document, but is available for use in academic research at no cost. Provided that the study is conducted solely for academic purposes and does not involve financial gain for any party (with the exception of educational grants from pharmaceutical companies), no fees apply. The questionnaire can be freely accessed and downloaded from the [EORTC website](https://www.eortc.org).



EORTC QOL-SH22

बिरामीहरू कहिलेकाहीँ आफ्नो यौन स्वास्थ्यमा परिवर्तन आएको कुरा बताउनुहुन्छ । कृपया तल दिइएका प्रश्नको जवाफमा आफूलाई उपयुक्त हुने अङ्कमा गोली लगाउनुहोस्। कुनै जवाफ ठीक वा बेठीक भन्ने हुँदैन । तपाईंले उपलब्ध गराउनुभएको जानकारी पूर्णतया गोप्य राखिने छ ।

कृपया सकेसम्म धेरै प्रश्नहरूको जवाफ दिनुहोस्।

| वितेका चार हप्तामा: | पटकै थिएन | थोरै | अलि धेरै | धेरै | तागू हुँदैन |
|--|-----------|------|----------|------|-------------|
| 1. तपाईंका लागि सक्रिय यौन जीवन कतिको महत्वपूर्ण थियो ? | 1 | 2 | 3 | 4 | |
| 2. तपाईंको यौनसूत्रमा कमी आएको थियो ? | 1 | 2 | 3 | 4 | |
| 3. तपाईं आफ्नो यौन इच्छाको स्तरप्रति सन्तुष्ट हुनु हुन्थ्यो ? | 1 | 2 | 3 | 4 | |
| 4. तपाईं आफ्नो यौन जीवनप्रति सन्तुष्ट हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 | |
| 5. तपाईं दिसा पिसाब बुझ्ने समस्याको कारणले चिन्तित हुनुभयो ? | 1 | 2 | 3 | 4 | |
| 6. थकान वा शक्तिको कमीले तपाईंको यौन जीवनमा असर गर्‍यो ? | 1 | 2 | 3 | 4 | |
| 7. उपचारले तपाईंको यौन क्रियाकलापमा असर गर्‍यो ? | 1 | 2 | 3 | 4 | तागू हुँदैन |
| 8. तपाईं यौन सम्पर्क पीछादापी हुन्छ कि भनेर चिन्तित हुनुभयो ? | 1 | 2 | 3 | 4 | |
| 9. तपाईंले यौनसम्बन्धी विषयलाई लिएर स्वास्थ्यकर्मीसँग सम्पर्क गर्नुभयो ? | 1 | 2 | 3 | 4 | |
| 10. तपाईं आफू र आफ्नो पार्टनर बीच भएको यौनसम्बन्धी कुराकानीप्रति सन्तुष्ट हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 | तागू हुँदैन |
| 11. तपाईं यौन सम्पर्क गर्दा तपाईंको पार्टनरले दुखाउने हुन् कि भन्ने चिन्तित हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 | तागू हुँदैन |
| 12. तपाईं आफू र आफ्नो पार्टनर बीचको आत्मीयताको स्तरसँग सन्तुष्ट हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 | तागू हुँदैन |
| 13. तपाईंलाई आफूले आफ्नो पार्टनरलाई यौन सुख दिन सकिदैन कि भनेर चिन्तित हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 | तागू हुँदैन |

कृपया अर्को पृष्ठमा जानुहोस्

| पुरुषहरूका लागि मात्र वितेका चार हप्तामा: | पटकै भएन | थोरै | अलि धेरै | धेरै |
|---|----------|------|----------|------|
| 14. तपाईं आफ्नो तिङ्ग उत्तेजित पार्ने र यौन सम्पर्कभरि सो उत्तेजना कायम राखिरहने क्षमता प्रति विश्वस्त हुनुहुन्थ्यो ? | 1 | 2 | 3 | 4 |
| 15. तपाईंलाई रोग वा उपचारका कारण पुरुषत्वमा कमी आएको महसूस भयो ? | 1 | 2 | 3 | 4 |

| महिलाहरूका लागि मात्र वितेका चार हप्तामा: | पटकै भएन | थोरै | अलि धेरै | धेरै |
|---|----------|------|----------|------|
| 16. के तपाईंलाई रोगवा उपचारका कारण नारी अस्तित्वमा कमी आएको महसूस भयो ? | 1 | 2 | 3 | 4 |

| वितेका चार हप्तामा: | पटकै थिएन | थोरै | अलि धेरै | धेरै |
|--|-----------|------|----------|------|
| 17. तपाईंको यौन जीवन/शारीरिक सम्बन्ध सक्रिय थियो ? | 1 | 2 | 3 | 4 |

सिगत 4 हप्तामा तपाईं यौन क्रियामा सक्रिय रूपमा संलग्न हुनुभयो भने निम्न प्रश्नको उत्तर दिनुहोस्:

| वितेका चार हप्तामा: | पटकै थिएन | थोरै | अलि धेरै | धेरै |
|---|-----------|------|----------|------|
| 18. तपाईंलाई यौनजन्य क्रियाकलाप आनन्दमय लाग्यो ? | 1 | 2 | 3 | 4 |
| 19. तपाईं यौन संभोगमा चरमसुख प्राप्त गर्ने आफ्नो क्षमतासँग सन्तुष्ट हुनु हुन्थ्यो ? | 1 | 2 | 3 | 4 |
| 20. यौन क्रियाकलाप गर्दा वा गरिसकेपछि तपाईंलाई पिडा भयो ? | 1 | 2 | 3 | 4 |
| 21. तपाईंले कुन हदसम्म यौन आनन्द महसूस गर्नुभयो ? | 1 | 2 | 3 | 4 |

| महिलाहरूका लागि मात्र वितेका चार हप्तामा: | पटकै भएन | थोरै | अलि धेरै | धेरै |
|--|----------|------|----------|------|
| 22. तपाईंले यौन कार्य गर्दा योनी सुख्खा भएको अनुभव गर्नु भयो ? | 1 | 2 | 3 | 4 |

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