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Awareness, Attitudes, and Acceptability of the Female Sexual Function Index (FSFI) Among Women in Sri Lanka: A Cross-sectional Study

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Original Article

Abstract

Introduction: The Female Sexual Function Index (FSFI) is used to assess female sexual function, but limited data exists on patient perceptions of, and potential stigma associated with completing the questionnaire.

Objectives: To evaluate patient awareness, attitudes, and perceived stigma related to completing the Sinhala version of the FSFI among patients admitted to the Professorial Gynaecology wards of the Teaching Hospital, Peradeniya.

Methods: A descriptive cross-sectional study was conducted among 139 sexually active women, irrespective of ethnicity, who were literate in Sinhala and provided informed written consent. Participants completed the FSFI, which was developed using standard forward–backward translation, with content and cultural validation by an expert panel comprising an obstetrician, a psychiatrist, and a community physician, and a separate anonymous questionnaire assessing sexual education, awareness, comfort level, and perceptions toward the FSFI. Data were analysed using SPSS Version 23.

Results: The mean age of the cohort was 34.5 years (SD: 5.86). Most participants (79.9%) believed that discussing female sexual function is necessary, and 82.0% viewed a healthy sexual relationship as essential for overall well-being. 66.2% rated the questionnaire as very useful. Most respondents (63.3%) felt that using such a questionnaire is appropriate in Sri Lanka. A total of 74.8% did not feel uneasy when completing the FSFI. Healthcare workers were identified as the preferred method for assessing female sexual concerns. Overall, 25.05% of all response cells were left blank.

Conclusion: It was concluded that the participants' perception of FSFI was generally positive. The majority identified it as a useful, culturally appropriate tool to discuss female sexual function. However, findings also highlight the need for improved sexual education among Sri Lankans.

Key Words: Female Sexual Function Index (FSFI), Sexual health attitudes, Stigma and acceptability, Cross-sectional study, Sri Lankan women

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Introduction

Globally, few studies have explored stigma associated with the use of the Female Sexual Function Index (FSFI). As this tool is newly introduced to the Sri Lankan context, no local data exists on this aspect. Social and cultural barriers may discourage open discussions about sexual function, potentially hindering both the assessment and management of female sexual function disorders.

The objective of this study was to explore patient perspectives on stigma, awareness, acceptability, and perceived usefulness of the Sinhala version of the FSFI, and to assess perceived needs for sexual health education among women admitted to the Professorial Gynaecology wards at Teaching Hospital, Peradeniya.

According to a study conducted in 1999 in the USA, the prevalence of female sexual function disorders (43%) exceeds that of males (31%) [1]. Despite this high prevalence, these disorders are often underdiagnosed, highlighting the need for further research.

The Female Sexual Function Index (FSFI) was developed in 2000 by Rosen *et al*. as a brief, self-administered instrument to evaluate female sexual function in clinical and epidemiological studies [2]. It assesses female sexual function through 19 questions covering six domains: (a) desire, (b) arousal, (c) lubrication, (d) orgasm, (e) satisfaction, and (f) pain [2]. Since the tool was developed in English, the Sinhala version of the FSFI used in this study was previously cross-culturally adapted and validated among adult women attending a tertiary care gynaecological unit in Sri Lanka. This process demonstrated satisfactory psychometric properties, and followed standard forward–backward translation procedures with content and cultural validation conducted by an expert panel comprising an obstetrician, a psychiatrist, and a community physician [3].

Methodology

Study design and Setting

The study was conducted as a descriptive cross-sectional study among patients of reproductive age (18-49 years) admitted to the Professorial Gynaecology wards at the teaching hospital in Peradeniya. A self-administered questionnaire was used in data collection. Inclusion criteria were patients who gave informed written consent and had been sexually active for the last 6 months. Patients who didn't consent, had not been sexually active over the previous 6 months, were already diagnosed with sexual dysfunction, and were not fluent in the Sinhala language were excluded from this study. The FSFI questionnaire is designed for women who are currently sexually active; therefore, sexual activity within the past six months was required to ensure accurate completion of the tool. Since the questionnaire assessing perceptions toward completing the FSFI was administered together with the FSFI itself, the same group of eligible women was recruited for both components of the study. Data collection was carried out from November 2023 to March 2024.

Sampling Method

A consecutive sampling method was used. All eligible women admitted to the Professorial Gynaecology Ward during the data collection period were invited to participate. Those who met the inclusion criteria and gave informed consent were recruited until the required sample size was achieved.

Sample Size Calculation

The sample size was determined to estimate the prevalence of perceived stigma related to completion of the Sinhala version of the FSFI. Since no prior data were available on the expected prevalence of stigma, a population proportion of 50% was assumed to obtain the maximum required sample size.

The calculation was carried out using a 95% confidence interval and a 5% margin of error (d=0.05). Based on these assumptions, the minimum required sample size was calculated using the standard formula for a single population proportion:

$$n=(Z^2 \times p \times (1-p)) / d^2$$

Substituting the values (Z=1.96, p=0.5, d=0.05),

$$n=(1.96^2 \times 0.5 \times (1-0.5)) / 0.05^2=384$$

However, given the exploratory nature of this single-centre study and the sensitive subject matter, recruitment feasibility was expected to be limited. Although approximately 40-60 women were admitted weekly to the Professorial Gynaecology wards, only an estimated 10-15 women per week met the eligibility criteria. Exclusions were made for women who were not sexually active in the preceding six months, had language limitations, had prior diagnoses of sexual dysfunction, or declined participation due to the sensitive nature of the study. Therefore, during protocol development, a wider margin of error of 8% was predefined as acceptable for assessing feasibility.

Using a 95% confidence level and an 8% margin of error (d=0.08), the revised minimum sample size was calculated as:

$$n = (1.96^2 \times 0.5 \times (1-0.5)) / 0.08^2=139$$

Therefore, a total of 139 participants were included in the final analysis.

Data Collection Tool and Procedure

Both the FSFI questionnaire and the patient perspectives and stigma evaluation tool were printed and placed in separate envelopes. Patients who provided consent were asked to select an envelope and anonymously complete both questionnaires, after which they placed them in a designated collection box. This procedure ensured that investigators had no access to participants' personally identifiable information at any stage of the study. The patient perspectives and stigma evaluation tool included questions on sexual education level, sources of sexual education, and patients' perceptions of the FSFI questionnaire.

Ethical Approval

Ethical approval was granted by the Ethics Review Committee of the Teaching Hospital Peradeniya (ERC Number: THP/PLANNING/ERC/19/2023). The project was conducted in compliance with the Declaration of Helsinki.

Statistical Analysis

Data were coded and entered into a statistical software package for analysis. Descriptive statistics including frequencies, percentages, and means were used to summarize the findings.

Patient and Public Involvement Statement

As the study aimed to evaluate awareness, attitudes, and perceptions using a recognised and previously validated instrument (the FSFI), patients were not involved in developing the research question, study design, or outcome

measures. Additionally, patients were not involved in study recruitment or execution; instead, eligible participants were approached sequentially while in the hospital. No patient advisory group was used. Since data were collected anonymously, results will not be shared individually with participants. However, the findings will be published in academic journals and may be shared with clinical teams to guide future patient care.

Results

A total of 139 participants completed the questionnaire, with a mean age of 34.5 years (SD: 5.86). All responses were coded numerically. Blank responses were treated as system-missing values and excluded from relevant analyses, with no imputation undertaken. Descriptive statistics were generated using SPSS Version 23.

Awareness and Knowledge-Related Findings

Perceptions on the Need to Discuss FSFI

A large majority (79.9%, n=111) believed that discussions about FSFI are necessary. Contrarily, 12.2%, n=17, felt this was not necessary, while 2.2%, n=3, considered such discussions to be against culture. 5.8% (n=8) did not answer the question.

Understanding the Importance of Sexual Relationships for Health

The majority of participants, 82.0% (n=114), agreed with the statement that a healthy sexual relationship contributes to a woman's physical and mental health. Only 10.1% (n=14) believed that this was not necessary, while 3.6% (n=5) responded "I don't know." The remaining 4.3% (n=6) did not respond.

Attitudes Toward the Questionnaire and Sexual Education

Difficulty Experienced While Answering the FSFI

The majority of participants, 63.3% (n=88) reported that the questionnaire was easy to answer. However, 28.8% (n=40) indicated that they sometimes struggled with the questions, while 2.9% (n=4), found them consistently difficult. A further 5.0% (n=7) did not provide a response.

Rating of Participants' Sex Education

Among participants, nearly half (49.6%, n = 69) reported being "somewhat informed," while 46.0% (n=64) felt well informed. Only 1.4% (n=2) considered themselves inadequately informed, and 2.9% (n=4) did not respond to this item.

Need for Formal Sex Education in Sri Lankan Schools

An overwhelming majority of participants, 91.4% (n=127), agreed that sexual education in Sri Lankan schools needs improvement. A small proportion believed current education is sufficient, 0.7% (n=1), while 5.0% (n=7) felt no improvement was needed. A further 2.9% (n=4) did not respond.

Effectiveness of Sexual Education in Understanding Sexual Function

Most respondents (79.9%, n=111) believed that sexual education helps explain sexual function. Another 15.1% (n=21) felt it was only sometimes helpful, while 1.4% (n=2) believed it does not help. A further 3.6% (n=5) left this item blank.

Awareness of Multiple Stages in Female Sexual Activity

Awareness levels were mixed: 44.6% (n=62) of participants knew that there were

multiple stages in female sexual activity. 36.7% (n=51) were unaware, 2.9% (n=4) preferred not to know and 15.8% (n=22) did not respond. These findings highlight significant knowledge gaps in female sexual physiology.

Perceptions of the Questionnaire

Usefulness of the Questionnaire

Two-thirds of respondents (66.2%, n=92) reported that the questionnaire was very useful. A further 19.4% (n=27) found it somewhat useful, and 14.4% (n=20) found it not useful.

Appropriateness of Using the Questionnaire in Sri Lanka

A majority of respondents, 63.3% (n=88), considered this type of questionnaire very appropriate in the Sri Lankan context, while 18.7% (n=26) considered it somewhat appropriate. Only 0.7% (n=1) viewed it as inappropriate and 17.3% (n=24) did not respond.

Best Method of Assessing Female Sexual Problems

The most commonly preferred source of information was health workers, 51.8% (n=72). Other responses included printed documents, 7.9%, n=11; family/friends, 4.3%, n=6; the internet, 5.8%, n=8; and "other", 0.7%, n=1. In particular, 29.5% of participants did not answer this item (n=41).

Level of Discomfort When Completing the Questionnaire

Most participants, 74.8% (n=104), did not feel uneasy. Whereas 7.9% (n=11) reported discomfort, and 0.7% (n=1) considered the questions unethical. 16.5% (n=23) did not respond.

Patterns of Missing Data

The overall percentage of blank cells averaged across all participants was 25.05%. This suggests moderate missingness and differential engagement by the respondents.

Table 1. Participant Responses to FSFI-Related Questions

Question	Results (n=139)
Do you believe it is required to talk about FSFI?	Yes: 79.9% (111) No: 12.2% (17) Against culture: 2.2% (3) Blank: 5.8% (8)
Do you believe that a good sexual relationship is important for a woman's physical and mental health?	Essential: 82.0% (114) Not essential: 10.1% (14) I don't know: 3.6% (5) Blank: 4.3% (6)
Did you find it hard to answer the FSFI at any point?	No: 63.3% (88) Sometimes: 28.8% (40) All the time: 2.9% (4) Blank: 5.0% (7)
How would you rate the sex education you have received?	Somewhat: 49.6% (69) Well informed: 46.0% (64) Not informed: 1.4% (2) Blank: 2.9% (4)

Do you believe that there should be formal sex education in Sri Lankan schools?	Needs improvement: 91.4% (127) Sufficient: 0.7% (1) No improvement: 5.0% (7) Blank: 2.9% (4)
Do you believe that sexual education helps you understand your sexual function?	Yes: 79.9% (111) Sometimes: 15.1% (21) No: 1.4% (2) Blank: 3.6% (5)
Are you aware that there are multiple steps in a female's sexual activity?	Yes: 44.6% (62) No: 36.7% (51) Don't want to know: 2.9% (4) Blank: 15.8% (22)
How would you rate the use of this questionnaire in addressing and identifying female sexual problems?	Very useful: 66.2% (92) Somewhat: 19.4% (27) Not useful: 14.4% (20)
Do you believe that the use of this type of questionnaire to assess sexual function is appropriate in Sri Lanka?	Very appropriate: 63.3% (88) Somewhat: 18.7% (26) Not appropriate: 0.7% (1) Blank: 17.3% (24)
In your opinion, what is the best method of assessing female sexual problems?	Healthcare workers: 51.8% (72) Printed: 7.9% (11) Internet: 5.8% (8) Family/friends: 4.3% (6) Other: 0.7% (1) Blank: 29.5% (41)
Did using this questionnaire make you uneasy?	Not uneasy: 74.8% (104) Uneasy: 7.9% (11) Unethical: 0.7% (1) Blank: 16.5% (23)

Discussion

Overall, the results indicate that the acceptability of the FSFI in a clinical setting was generally favourable. Most participants had not previously heard of FSFI, yet they reported feeling fairly comfortable discussing sexual health within a health-care context. A study by Rosen *et al*. suggests that this finding aligns with global trends, where the tool is primarily used in specialized clinics [2]. Similar gaps in knowledge in low and middle-income countries are often attributed to limited sexual education, cultural taboos, and underdiagnosis of female sexual dysfunction [4]. These findings suggest that low awareness may be due less to stigma and more to limited exposure.

Despite this lack of knowledge, most people held positive attitudes toward female sexual health. Nearly 80% of respondents believed that discussing sexual issues is important. The majority felt that sexual function is vital for both physical and mental health. These findings match recent cross-cultural validations of the FSFI, which indicate that women are willing to engage in safe, structured discussions about sexual health [5]. This also hints at a gradual

cultural shift, with women feeling more comfortable talking about their sexual health, especially in medical environments.

One major conclusion of the study was the widespread acceptance of the FSFI. Most participants found the questionnaire suitable for the Sri Lankan context, with two-thirds rating it as "very useful." This matches global experiences with translated FSFI versions, showing that, when properly adapted, the tool remains acceptable in various cultural contexts [4,6]. Importantly, 74.8% of respondents felt at ease answering the questions. This suggests that discomfort and stigma decreased due to the clinical environment and the anonymous administration method. Research from other collectivistic cultures also shows that stigma significantly drops in structured clinical settings [7].

Healthcare professionals were the most preferred source for discussing female sexual health issues. This is expected, particularly in South Asian contexts, where patients value professionalism and discretion in sensitive matters. Studies indicate that clinicians play a key role in normalizing discussions about sexual health, and their involvement can significantly reduce stigma [8]. These findings highlight the importance of healthcare providers actively starting these conversations.

As a secondary finding, the study also uncovered significant gaps in sexual education. A large majority of participants (91.4%) believed that school sexual education should be improved. This aligns with international research indicating that better sexual health education boosts comfort, corrects misinformation, and reduces stigma associated with sexual function evaluations [9]. Improving formal sexual education in Sri Lanka could raise awareness of resources like the FSFI and promote overall sexual well-being.

A notable finding was that 25% of response cells were left blank, indicating missing data. This level of missingness can be considered moderate and is not unexpected in studies addressing sensitive topics. Possible reasons for these omissions include discomfort, or embarrassment, uncertainty about how to answer specific questions, or survey fatigue. Higher non-response rates due to sociocultural factors have also been noted in similar studies on sexual health [10]. The missing data suggest that more patient education and reassurance are needed when using such tools regularly.

This study has several limitations. The sample size was relatively small, and data were collected from a single site. As responses were self-reported, social desirability bias may have influenced participants' answers. Additionally, including only Sinhala-literate participants limits the generalizability of the findings to all Sri Lankan ethnic groups. Missing data may also have impacted the strength of the descriptive findings. Despite these limitations, the study provides a foundation for future research and adds valuable local evidence to a relatively neglected field.

To gauge the FSFI's acceptability among various groups of women, including those from community-based populations, future research should involve larger multi-centre studies. Qualitative interviews could also yield deeper insights into cultural perceptions and any underlying stigma. Furthermore, it will be essential to enhance

sexual education programmes and train healthcare professionals in how to initiate conversations about sexual health in a culturally sensitive way. By pursuing these strategies, the FSFI can become a reliable, culturally appropriate tool for assessing the sexual health of women in Sri Lanka.

Conclusion

This cross-sectional study among sexually active, Sinhala-literate women in a Sri Lankan tertiary gynaecology setting indicates that the Sinhala FSFI is generally acceptable and perceived

Ethical Approval

Ethical approval was granted by the Ethics Review Committee of the Teaching Hospital Peradeniya (ERC Number: THP/PLANNING/ERC/19/2023). The project was conducted in compliance with the Declaration of Helsinki

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Conflicts of Interest

The authors declare there are no conflicts of interest.

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Data Availability Statement

The datasets generated during and/or analysed during the current study are available from the corresponding author upon reasonable request.

Statement on the use of Artificial Intelligence

The authors used ChatGPT (GPT-5.1) AI-based tools only for minor language editing. All scientific content, data interpretation, and conclusions are the work of the authors.

Author Contribution Statement

Gnanarathne S conceived and designed the study. Subasinghe H collected the data. Gnanarathne S and Subasinghe H performed data analysis and interpretation. Subasinghe H drafted the manuscript, and Gnanarathne S critically revised it for intellectual content. All authors approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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