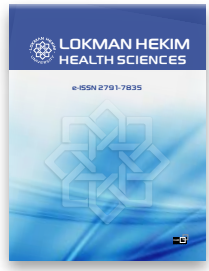
LOKMAN HEKIM HEALTH SCIENCES

DOI: 10.14744/lhhs.2026.88707
Lokman Hekim Health Sci 2026;6(4):641–648



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ORIGINAL ARTICLE

The Relationship between Sexual Function and Sexual Health Literacy in Women

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Abstract

Introduction: This study aimed to examine the relationship between sexual function and sexual health literacy in women.

Methods: A descriptive and cross-sectional study was conducted with 286 women. Data were collected using the Female Sexual Function Index (FSFI) and the sexual health literacy scale (SHLS). Statistical analyses included t-test, analysis of variance, and Pearson correlation.

Results: Significant differences were observed in the sexual desire and satisfaction sub-dimensions based on age ($p=0.045$ and $p=0.043$). Married women had lower sexual desire scores compared to single women ($p<0.001$). A significant association was found between educational level and sexual health literacy; university graduates had higher SHLS scores ($p<0.001$). Similarly, women with higher income had better sexual health literacy ($p=0.010$). Working women had significantly higher scores in the sexual knowledge and attitude sub-dimensions than non-working women ($p=0.004$ and $p=0.005$). Smokers showed lower levels of sexual desire ($p=0.013$). A weak but significant negative correlation was found between sexual desire and the total SHLS score ($r=-0.129$, $p<0.05$), and between satisfaction and sexual behavior ($r=-0.149$, $p<0.05$). However, no correlation was found between the total FSFI and SHLS scores ($r=-0.056$, $p>0.05$).

Discussion and Conclusion: The study reveals a relationship between women's sexual function, sexual health literacy, and certain sociodemographic characteristics. Although the correlations are weak, specific sub-dimensions of sexual health literacy are significantly associated with sexual function. Further research is recommended to explore these relationships in more depth.

Keywords: Female sexual functioning; Sexual health literacy; Sexuality

Although sexuality is influenced by physiological, social, and sexual experiences, it remains a significant concept throughout all stages of a woman's life.[1] Sexuality encompasses experiences in attitudes, thoughts, roles, fantasies, emotions, desires, behaviors, beliefs, values, practices, and relationships.[2] Sexual function is directly related to women's sexual health and marital satisfaction.[3] Female sexual function is a biopsychosocial phenomenon that includes psychological, sociocultural, biological, and interpersonal factors.[4] Sexual problems and their negative effects on sexual health are among the primary health concerns for women of reproductive age.[5] Misinformation and misconceptions can adversely affect individuals' sexual lives regardless of gender, leading to feelings of

Cite this article as: *Erdem İ, Akın B. The Relationship between Sexual Function and Sexual Health Literacy in Women. Lokman Hekim Health Sci 2026;6(4):641–648.*

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E-mail: iremerdem1903@gmail.com **Submitted:** 07.10.2025 **Revised:** 22.02.2026 **Accepted:** 06.03.2026 **Available Online:** 14.09.2026

guilt and inadequacy.[6] Sexual dysfunction may result from biological problems, psychological or interpersonal issues, or a combination of both. In Türkiye, many sexual problems stem from a lack of sexual education, indicating the crucial need for awareness and proper guidance.[7,8] Health literacy is a key factor in enhancing sexual health.[9] The World Health Organization defines sexual health literacy as the ability of individuals to understand information related to sexual health, apply it in their daily lives, protect themselves against sexually transmitted infections, and gain various benefits that go beyond just health.[10] For this reason, increasing the level of health literacy is of great importance for the improvement of sexual health.[9,11]

In a study, following the implementation of a sexual health education program, women in the intervention group showed significant improvement in the female sexual function index (FSFI) scores – specifically in arousal, desire, satisfaction, orgasm, pain, and total scores – compared to the control group. However, no significant difference was found between the intervention and control groups in post-test scores related to sexual attitudes. Nonetheless, a significant change in sexual attitudes was observed when comparing the pre-test and post-test mean scores within the intervention group.[12]

Another study found that despite an adequate level of sexual health literacy among participating women, there were deficiencies in their sexual function. Therefore, tailored educational programs should be developed and implemented to support sexual function in this population.[13]

In another study, it was observed that more than half of the participants had low health literacy, and a significant relationship existed between health literacy and sexual function. Although numerous studies have demonstrated a link between sexual function and health literacy, there is a limited number of investigations that thoroughly examine the impact of health literacy on women's sexual function in the literature.[14] Within this context, the present study aims to emphasize the importance of health literacy, contribute to the improvement of women's sexual function, and address this gap in the literature.

Materials and Methods

This study was conducted as a descriptive study to examine the relationship between women's sexual function and sexual health literacy. The sample of the study was selected using a convenient sampling method. Data were collected through an online survey, which was shared via social media platforms. The study included married and single women who met the inclusion criteria and voluntarily agreed to participate. Before starting the questionnaire, participants were asked to read and approve an informed consent form. The inclusion criteria for the study consisted of women aged between 18 and 45 years who were literate, Turkish-speaking, not currently pregnant, and with no current or previous diagnosis of a gynecological disease. Participants were also required to be active social media users, own a smartphone, and have no psychological disorders that could interfere with their ability to participate. The exclusion criteria included a history of gynecological surgery (past or present) and a history of psychological illness.

The population of the study consisted of women aged 18–45 during this period. The sample was formed from individuals who met the predetermined inclusion criteria. The sample size was calculated using the GPower 3.0.10 software. An effect size of 0.31 was used based on previous studies with similar variables and study designs. With a significance level of 0.05 and a power of 80%, the required minimum sample size was calculated as 260 participants.[15] In addition, considering a potential 10% data loss, a total of 286 women were included in the study.

No artificial intelligence (AI)-based technologies were used in the analysis or writing of this study.

Data Collection Tools

The data were collected using the "Personal Information Form," the "Female Sexual Function Index (FSFI)," and the "Sexual Health Literacy Scale (SHLS)." The data collection was conducted through an online questionnaire created by the researchers using Google Forms.

Personal Information Form

The form consists of 16 items developed by the researchers based on a literature review. It includes questions regarding participants' sociodemographic characteristics (such as age, educational level, employment status, spouse's educational level, etc.), harmful habits, and women's obstetric and gynecological characteristics.[16]

FSFI

The FSFI was developed by Rosen et al.[17] in 2000 to evaluate women's sexual function within a multidimensional framework. This scale consists of 19 items and measures sexual function experienced by participants over the past 4 weeks. It assesses six different domains: Desire, arousal, lubrication, orgasm, sexual satisfaction, and pain. The Turkish adaptation was carried out by Aygin and Eti Aslan[18] in 2005. According to validity and reliability studies, the FSFI

is a valid and reliable tool for use among Turkish women. A total score of 26.55 or below indicates the presence of female sexual dysfunction. The Cronbach's alpha values for the subdomains ranged between 0.89 and 0.98, while the overall scale reliability was reported as 0.98.

SHLS

The SHLS was developed by Üstgörül to measure individuals' levels of sexual health literacy. The scale consists of 17 items and is administered using a five-point Likert-type rating system. It includes two subdimensions: "Sexual knowledge" and "sexual attitude." Items 13 through 17 are reverse scored. The total score ranges from 17 to 85, with higher scores indicating a higher level of sexual health literacy. In the development phase, reliability analysis showed a Cronbach's alpha coefficient of 0.88 for the overall scale.[19]

Data Collection

The research data were collected through an online questionnaire created by the researchers using Google Forms. The questionnaire was distributed to participants via social media platforms. Before starting the data collection process, informed consent was obtained online from women who voluntarily agreed to participate in the study. All data collection procedures were carried out by the researcher in an online environment.

Statistical Analysis

Data analysis was performed using the Statistical Package for the Social Sciences version 25.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics were presented as frequencies (n) and percentages (%). The normality of data distribution was assessed using appropriate statistical tests. Parametric tests, including the independent samples t-test and one-way analysis of variance, were applied to data demonstrating normal distribution. For data that deviated from normality, non-parametric methods such as the Mann–Whitney U test and Kruskal–Wallis test were employed. Correlation analysis was conducted to examine the relationships between variables.

Ethical Considerations

Ethical approval for this study was obtained from the Selçuk University Ethics Committee (Approval No:2024/1322, Date: December 25, 2024). Participant consent was obtained by informing women that participation was voluntary and by including a checkbox stating "I agree to participate in the study." Permission to use the scales employed in the study was obtained from their developers via e-mail. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Results

This study examined the relationship between women's sexual function and sexual health literacy. Significant differences were found in sexual desire ($p=0.045$) and satisfaction ($p=0.043$) subscales across age groups, with women aged 18–23 showing lower desire scores and those aged 30–35 having higher total FSFI scores ($p=0.005$). SHLS scores also varied by age, highest in the 24–29 group ($p=0.002$) (Appendix 1, Table 1).

Married women scored lower in sexual desire than single women ($p<0.001$). Education level was significantly associated with SHLS scores; university graduates had higher literacy ($p<0.001$), while women with only primary education reported higher satisfaction ($p=0.030$). Women with university-educated spouses and higher income levels had significantly higher SHLS scores ($p=0.001$ and $p=0.010$, respectively). Employed women had higher FSFI total scores, though not statistically significant ($p=0.078$), but showed significantly higher scores in sexual knowledge and attitude subdomains ($p=0.004$ and $p=0.005$) (Appendix 1). The mean total FSFI and SHLS scores of the participants were 68.12±15.51 and 54.91±11.38, respectively (Table 2).

Smoking one or more packs per day was linked to lower sexual desire scores ($p=0.013$). A weak negative correlation existed between overall sexual function and sexual health literacy, particularly between sexual desire and total SHLS ($r=-0.129$, $p<0.05$). However, the overall correlation between total FSFI and SHLS scores was not significant ($r=-0.056$, $p>0.05$) (Table 3).

The findings suggest that sexual health literacy influences some aspects of sexual function but not the overall function. Education, income, and marital status also significantly affect sexual health literacy.

Discussion

This study provides important insights into women's sexual function and sexual health literacy. The participants were found to have adequate levels in both areas. Although the overall levels were sufficient, the findings indicate that variations exist across specific subdimensions. A weak and negative relationship was observed between sexual function and sexual health literacy. This unexpected direction of association may be related to increased awareness leading to more critical self-evaluation of sexual experiences. However, Dehghankar et al.[13] reported a positive association between

Table 1. Comparison of women's sociodemographic characteristics with SHLS mean scores

Variables	n	%	Sexual knowledge subdimension mean±SD median (Q1–Q3)	Sexual attitude subdimension mean±SD median (Q1–Q3)	SHLS total score mean±SD median (Q1–Q3)
Age groups*					
18–23	19	6.6	32.26±8.14 32.00 (26.00–37.00)	14.84±6.13 15.00 (11.00–21.00)	47.10±10.07 48.00 (37.00–54.00)
24–29	110	38.5	39.68±10.02 40.00 (32.00–46.25)	17.63±4.75 18.00 (15.00–20.00)	57.31±11.07 56.50 (50.00–65.00)
30–35	71	24.8	38.78±8.37 40.00 (33.00–44.00)	16.71±4.90 17.00 (13.00–20.00)	55.50±10.75 57.00 (47.00–63.00)
36–41	47	16.4	37.72±9.87 38.00 (29.00–48.00)	16.23±5.01 16.00 (12.00–20.00)	53.95±12.13 55.00 (44.00–61)
42 years and older	39	23.6	35.20±9.67 33.00 (28.00–44.00)	16.82±4.79 18.00 (14.00–20.00)	52.02±11.08 51.00 (43.00–61.00)
p			**0.007**	0.250	**0.002**
Marital status**					
Married	279	97.6	38.11±9.57 38.00 (31.00–45.00)	16.94±4.95 18.00 (14.00–20.00)	55.05±11.43 55.00 (47.00–64.00)
Single	7	2.4	34.85±11.68 31.00 (29.00–36.00)	14.42±4.82 15.00 (13.00–16.00)	49.28±7.36 46.00 (45.00–51.00)
p			0.183	0.160	0.129
Educational background					
Primary education	24	8.4	33.54±7.71 30.50 (27.25–39.75)	12.79±5.49 12.00 (8.25–18.00)	46.33±10.22 44.50 (37.00–55.00)
Secondary education	86	30.1	35.94±9.49 36.00 (29.75–43.25)	15.84±5.06 16.00 (12.00–20.00)	51.79±10.31 52.00 (44.00–57.25)
University education and above	176	61.5	39.67±9.56 40.50 (32.25–47.00)	17.94±4.44 18.00 (15.00–20.00)	57.61±11.10 58.00 (50.00–68.75)
p			**0.001**	**<0.001**	**<0.001**
Your spouse's educational background					
Primary education	23	8.0	36.52±9.79 33.00 (28.00–46.00)	12.13±5.56 11.00 (7.00–18.00)	48.65±12.10 46.00 (37.00–60.00)
Secondary education	98	34.3	36.59±9.60 37.00 (30.75–44.00)	16.34±5.17 17.00 (13.00–20.00)	52.93±10.99 53.00 (44.75–58.25)
University education and above	165	57.7	39.10±9.53 36.00 (29.75–43.25)	17.86±4.30 16.00 (12.00–20.00)	56.96±11.04 52.00 (44.00–57.25)
p			0.136	**<0.001**	**0.001**
Your income status					
Income less than expenses	67	23.4	36.55±10.56 36.00 (29.00–46.00)	15.97±5.15 17.00 (12.00–20.00)	52.52±11.88 51.00 (44.00–63.00)
Income equal to expenses	169	59.1	38.02±8.87 37.00 (31.50–44.00)	16.67±4.88 17.00 (14.00–20.00)	54.70±10.95 54.00 (47.00–62.00)
Income greater than expenses	50	17.5	40.04±10.53 42.00 (31.00–48.00)	18.80±4.53 20.00 (15.00–22.25)	58.84±11.33 59.50 (49.75–66.00)
p			0.122	**0.005**	**0.010**
Your employment status					
Yes	136	47.6	39.86±9.98 41.00 (32.00–47.00)	17.80±4.44 18.00 (15.00–20.00)	57.66±11.63 58.00 (49.00–65.00)
No	150	52.4	36.38±9.00 36.50 (30.00–43.25)	16.04±5.26 17.00 (12.00–20.00)	52.42±10.58 52.50 (45.00–59.25)
p			**0.004**	**0.005**	**<0.001**

Table 1 (cont.). Comparison of women's sociodemographic characteristics with SHLS mean scores

Variables	n	%	Sexual knowledge subdimension mean±SD median (Q1–Q3)	Sexual attitude subdimension mean±SD median (Q1–Q3)	SHLS total score mean±SD median (Q1–Q3)
Your spouse's employment status					
Yes	274	95.8	38.02±9.67 37.50 (31.00–45.00)	17.00±4.87 18.00 (14.00–20.00)	55.02±11.27 55.00 (46.00–64.00)
No	12	4.2	38.33±8.79 39.00 (29.50–45.25)	14.16±6.36 16.50 (6.50–20.00)	52.50±13.97 55.00 (36.50–61.75)
p			0.939	0.202	0.625
Your chronic disease status					
Yes	37	12.9	39.94±8.43 38.00 (33.50–46.50)	16.13±4.88 17.00 (12.50–19.50)	56.08±11.04 53.00 (46.50–65.00)
No	249	87.1	37.75±9.77 37.00 (30.00–45.00)	16.99±4.97 18.00 (15.00–20.00)	54.74±11.44 55.00 (46.00–63.50)
p			0.179	0.247	0.536
Your gynecological conditions or medical history					
Yes	24	8.4	34.83±9.95 33.50 (29.25–40.50)	18.16±4.28 18.00 (15.25–21.00)	53.00±11.37 52.00 (45.25–59.75)
No	262	91.6	38.32±9.55 38.00 (31.00–45.00)	16.76±5.01 17.00 (14.00–20.00)	55.09±11.38 55.00 (46.75–64.00)
p			0.097	0.207	0.331
Your smoking status					
Never	211	73.8	37.53±9.78 37.00 (30.00–45.00)	16.93±4.59 18.00 (15.00–20.00)	54.46±11.54 53.00 (45.00–64.00)
Half a pack per day	62	21.7	38.51±9.06 38.00 (32.75–44.00)	16.56±6.07 17.50 (11.75–21.00)	55.08±11.02 54.50 (49.00–61.50)
One pack or more per day	13	4.5	43.92±7.98 43.00 (39.50–50.00)	17.53±5.15 18.00 (15.00–20.00)	61.46±8.66 61.00 (57.00–69.50)
p			0.068	0.814	0.064
Your menstrual frequency					
Once a month	267	93.4	38.19±9.46 38.00 (31.00–45.00)	16.86±4.93 18.00 (14.00–20.00)	55.06±11.30 55.00 (47.00–64.00)
Once every 2–3 months	11	3.8	34.81±11.37 35.00 (24.00–46.00)	16.45±5.39 17.00 (12.00–20.00)	51.27±12.78 47.00 (41.00–65.00)
Never	7	2.4	36.00±13.39 42.00 (22.00–45.00)	19.42±4.35 18.00 (17.00–25.00)	55.42±13.68 60.00 (42.00–62.00)
p			0.711	0.281	0.720

SD: Standard deviation; FSFI: Female sexual function index; SHLS: Sexual health literacy scale.

these two variables. Similarly, another study indicated that increased awareness and education in the field of sexual health had a positive impact on sexual function and contributed to an improved quality of life among couples.[19]

During pregnancy, it has also been shown that as sexual health literacy increases, pregnant women's attitudes toward sexuality become more positive.[15] Although the current study did not include pregnant women, these findings support the broader role of sexual health literacy in shaping sexual attitudes across different life stages. In the current study, a relationship was observed between women's socio-demographic characteristics and their levels of sexual function and sexual health literacy. Consistent with previous studies, factors such as duration of marriage, education level, employment status, frequency of sexual intercourse within the last week, and hormonal changes have been found to significantly affect women's sexual function.[13,14,20–23] These results emphasize that sexual function is influenced by a complex interaction of biological, psychological, and social factors.

Table 2. Women's mean FSFI and SHLS scores

Sexual desire subdimension mean±SD	Sexual arousal subdimension mean±SD	Lubrication subdimension mean±SD	Orgasm subdimension mean±SD	Satisfaction subdimension mean±SD	Pain discomfort subdimension mean±SD	FSFI total score mean±SD	Sexual knowledge subdimension mean±SD	Sexual attitude subdimension mean±SD	SHLS total score mean±SD
6.08±1.85	13.66±4.36	15.32±4.14	11.03±2.93	8.74±3.31	13.26±4.02	68.12±15.51	38.03±9.62	16.88±4.96	54.91±11.38

SD: Standard deviation; FSFI: Female sexual function index; SHLS: Sexual health literacy scale.

Table 3. Correlation between women's total FSFI scores and total SHLS scores

Scales	Sexual knowledge subdimension (r-value)	Sexual attitude subdimension (r-value)	SHLS total score (r-value)
Sexual desire subdimension (r-value)	-0.097	-0.101	-0.129*
Sexual arousal subdimension (r-value)	-0.104	-0.091	-0.113
Lubrication subdimension (r-value)	-0.055	-0.015	-0.044
Orgasm subdimension (r-value)	0.028	-0.037	0.020
Satisfaction subdimension (r-value)	0.058	-0.149*	-0.100
Pain discomfort subdimension (r-value)	0.026	0.154*	0.100
FSFI total score (r-value)	-0.066	-0.031	-0.056

*: $p<0.05$. SD: Standard deviation; FSFI: Female sexual function index; SHLS: Sexual health literacy scale.

This study found a weak association between sexual health literacy and women's sexual function. Although the strength of the association was limited, the presence of a statistically significant relationship suggests that sexual health literacy may influence specific aspects of sexual function rather than overall functioning. Factors such as education, income, and marital status were observed to influence health literacy levels.[24] The findings suggest that programs aimed at improving sexual health literacy may positively impact women's sexual function and quality of life. However, further comprehensive studies using diverse methods are needed to better understand this relationship.[25]

A study conducted among young Muslim women aged 18–25 in western Türkiye explored the relationship between the frequency and duration of masturbation and sexual health literacy. According to Karaahmet and Bilgiç,[26] increased masturbation habits were linked to higher levels of sexual health knowledge and sexual function among women. These findings highlight the potential role of personal sexual experiences in shaping both sexual knowledge and functional outcomes. In addition, research by Bahrampour et al.[20] revealed an inverse relationship between sexual health literacy and pregnancy, while factors such as parity, women's occupations, and their spouses' occupations showed significant associations with sexual health literacy levels. In a study conducted in Türkiye to assess sexual health literacy among women aged 18–49, literacy levels were found to be relatively low. Factors influencing sexual health literacy included marital status, education level, age, employment status, family type, age at marriage, income, and parents' educational background.[27]

A study revealed that women's levels of sexual health literacy were significantly associated with their access to sexual health information sources, their perception of the adequacy of this information, and their ability to communicate about sexual matters within the family.[28] This finding supports the importance of accessible, accurate, and culturally appropriate sexual health information in improving literacy levels. When these studies are evaluated collectively, it becomes evident that the factors affecting women's sexual function and sexual health literacy are multilayered and influenced by cultural, individual, and environmental dynamics. Therefore, interventions aimed at improving sexual health literacy should adopt a holistic and context-sensitive approach.

Strengths and Limitations

This study is significant as one of the few investigations examining the relationship between sexual function and sexual health literacy among women using an online survey method. While the online data collection allowed access to a broad participant pool, limiting participation to individuals with internet access may restrict the representativeness of the sample. In addition, including only female participants limits the generalizability of the findings to other demographic groups.

Conclusion

The study revealed a relationship between women's sexual function, sexual health literacy, and certain sociodemographic characteristics. Although the correlations were weak, significant associations were found between specific sub-dimensions of sexual health literacy and sexual function, suggesting the need for further in-depth research.

Ethics Committee Approval: The Selçuk University Ethics Committee granted approval for this study (date: 25.12.2024, number: 2024/1322).

Informed Consent: Before starting the questionnaire, participants were asked to read and approve an informed consent form.

Conflict of Interest: None declared.

Financial Disclosure: The author declared that this study has received no financial support.

Use of AI for Writing Assistance: Not declared.

Authorship Contributions: Concept: İE, BA; Design: İE, BA; Supervision: İE, BA; Data Collection or Processing: İE, BA; Analysis or Interpretation: İE, BA; Literature Search: İE; Writing: İE; Critical Review: İE, BA.

Peer-review: Double blind peer-reviewed.

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Appendix 1. Comparison of women's sociodemographic characteristics with FSFI mean scores

Variables	n	%	Sexual desire subdimension mean±SD median (Q1–Q3)	Sexual arousal subdimension mean±SD median (Q1–Q3)	Lubrication subdimension mean±SD median (Q1–Q3)	Orgasm subdimension mean±SD median (Q1–Q3)	Satisfaction subdimension mean±SD median (Q1–Q3)	Pain discomfort subdimension mean±SD median (Q1–Q3)	FSFI total score mean±SD median (Q1–Q3)
Age groups*									
18–23	19	6.6	6.21±1.90 6.00 (4.00–7.00)	13.73±4.96 13.00 (12–17)	14.78±4.96 16.00 (13–16)	9.73±4.05 10.00 (7.00–12.00)	8.94±4.51 9.00 (6.00–12.00)	11.21±4.74 12.00 (9.00–14.00)	64.63±20.43 67.00 (58.00–72.00)
24–29	110	38.5	5.70±1.77 6.00 (4.00–7.00)	13.07±4.05 13.00 (11.00–15.00)	15.01±4.16 16.00 (13.00–18.00)	10.82±2.93 11.00 (10.00–13.00)	8.10±2.91 8.00 (6.00–9.00)	12.77±4.34 14.00 (10.00–16.00)	65.50±14.67 67.00 (61.00–74.25)
30–35	71	24.8	6.40±1.61 6.00 (6.00–7.00)	14.46±4.15 14.00 (12.00–17.00)	16.22±3.28 16.00 (15.00–18.00)	11.63±2.51 12.00 (10.00–13.00)	9.53±3.30 9.00 (7.00–12.00)	14.14±3.60 14.00 (12–18)	72.40±13.13 73.00 (66.00–77.00)
36–41	47	16.4	6.04±1.92 6.00 (5.00–7.00)	14.02±4.40 13.00 (11.00–17.00)	15.40±3.94 16.00 (14.00–17.00)	11.34±2.84 11.00 (10.00–13.00)	9.12±3.52 9.00 (6.00–11.00)	13.78±4.08 14.00 (12.00–18.00)	69.72±15.23 70.00 (62.00–80.00)
42 years and older	39	23.6	6.53±2.22 6.00 (5.00–8.00)	13.38±5.13 13.00 (11.00–17.00)	14.74±5.10 16.00 (12.00–17.00)	10.82±3.00 11.00 (10.00–13.00)	8.56±3.25 8.00 (7.00–10.00)	13.43±4.62 14.00 (12.00–18.00)	67.48±18.08 69.00 (63.00–77.00)
p			**0.045**	0.217	0.508	0.224	**0.043**	0.059	**0.005**
Marital status**									
Married	279	97.6	6.00±1.80 6.00 (5.00–7.00)	13.65±4.18 13.00 (11.00–16.00)	15.35±3.92 16.00 (14.00–17.00)	11.05±2.78 11.00 (10.00–13.00)	8.72±3.18 9.00 (6.00–10.00)	13.33±4.13 14.00 (12.00–17.00)	68.13±14.52 69.00 (63.00–76.00)
Single	7	2.4	9.00±1.41 10.00 (7.00–10.00)	14.00±9.64 17.00 (4.00–24.00)	14.14±10.00 15.00 (4.00–24.00)	10.28±7.11 12.00 (3.00–18.00)	9.85±7. 08 9.00 (3.00–18.00)	10.42±7.23 12.00 (3.00–18.00)	67.71±40.64 72.00 (27.00–112.00)
p			**<0.001**	0.693	0.918	0.817	0.410	0.881	0.812
Educational background									
Primary education	24	8.4	5.58±2.14 5.50 (4.00–7.00)	13.62±4.95 13.00 (10.50–16.75)	15.00±4.65 16.00 (13.00–17.00)	10.45±3.37 11.00 (9.25–12.00)	9.12±3.15 9.00 (7.25–11.00)	11.91±4.13 12 (9.25–15.00)	65.70±17.66 67.50 (58.00–77.50)
Secondary education	86	30.1	6.30±1.80 6.00 (5.00–7.00)	13.80±4.50 14.00 (11.00–17.00)	15.41±4.54 16.00 (12.75–18.00)	11.06±3.20 11.00 (10.00–13.00)	9.18±3.62 9.00 (7.00–12.00)	12.79±4.15 13.50 (11.75–15.00)	68.56±17.16 69.00 (62.75–76.25)
University education and above	176	61.5	6.03±1.83 6.00 (5.00–7.00)	13.59±4.23 13.00 (11.00–16.00)	15.32±3.87 16.00 (14.00–17.00)	11.10±2.74 11.00 (10.00–13.00)	8.48±3.16 8.00 (6.00–9.00)	13.68±4.26 14.00 (12.00–18.00)	68.23±14.38 69.00 (63.00–76.00)
p			0.245	0.715	0.948	0.748	0.081	**0.030**	0.653
Your spouse's educational background									
Primary education	23	8.0	6.08±2.06 6.00 (4.00–7.00)	13.17±4.74 13.00 (12.00–16.00)	14.78±5.08 16.00 (12.00–19.00)	10.78±3.67 12.00 (10.00–14.00)	8.60±2.91 9.00 (7.00–11.00)	12.47±4.77 13.00 (12.00–15.00)	65.91±19.23 74.00 (58.00–79.00)
Secondary education	98	34.3	6.22±1.73 6.00 (5.00–7.00)	14.28±4.29 14.00 (12.00–17.00)	15.82±3.91 16.00 (14.00–18.25)	11.23±2.80 11.00 (10.00–13.00)	9.26±3.49 9.00 (7.00–12.00)	12.76±3.83 13.00 (11.00–15.00)	69.60±14.31 69.00 (63.75–76.25)
University education and above	165	57.7	5.99±1.90 6.00 (5.00–7.00)	13.35±4.33 14.00 (11.00–17.00)	15.10±4.12 16.00 (12.75–18.00)	10.95±2.91 11.00 (10.00–13.00)	8.46±3.23 9.00 (7.00–12.00)	13.67±4.37 13.50 (11.75–15.00)	67.55±15.65 69.00 (62.75–76.25)
p			0.659	0.125	0.546	0.749	0.126	**0.037**	0.705

Appendix 1 (cont.). Comparison of women's sociodemographic characteristics with FSFI mean scores

Variables	n	%	Sexual desire subdimension mean±SD median (Q1–Q3)	Sexual arousal subdimension mean±SD median (Q1–Q3)	Lubrication subdimension mean±SD median (Q1–Q3)	Orgasm subdimension mean±SD median (Q1–Q3)	Satisfaction subdimension mean±SD median (Q1–Q3)	Pain discomfort subdimension mean±SD median (Q1–Q3)	FSFI total score mean±SD median (Q1–Q3)
Your income status									
Income less than expenses	67	23.4	6.10±1.83 6.00 (5.00–7.00)	13.89±4.43 14.00 (11.00–17.00)	16.07±4.57 16.00 (14.00–19.00)	11.07±3.29 12.00 (10.00–13.00)	9.20±3.91 9.00 (7.00–12.00)	12.79±4.17 13.00 (11.00–16.00)	69.14±18.07 71.00 (63.00–77.00)
Income equal to expenses	169	59.1	6.07±1.86 6.00 (5.00–7.00)	13.71±4.27 13.00 (11.00–16.50)	15.06±3.97 16.00 (13.00–17.00)	11.07±2.82 11.00 (10.00–13.00)	8.66±3.05 9.00 (6.00–10.00)	13.27±4.11 14.00 (12.00–17.00)	67.86±14.71 68.00 (62.00–75.50)
Income greater than expenses	50	17.5	6.06±1.89 6.00 (4.00–7.00)	13.18±4.60 13.00 (10.00–16.25)	15.22±4.02 16.00 (14.00–18.00)	10.86±2.87 11.50 (10.00–13.00)	8.42±3.27 8.00 (6.00–10.00)	13.86±4.74 15.00 (10.75–18.00)	67.60±14.67 69.50 (62.00–77.25)
p			0.934	0.478	0.119	0.925	0.592	0.144	0.639
Your employment status									
Yes	136	47.6	6.25±1.80 6.00 (5.00–7.00)	14.11±4.33 14.00 (11.00–17.00)	15.52±3.80 16.00 (14.00–18.00)	11.47±2.82 12.00 (10.00–13.00)	8.75±3.33 8.50 (6.00–10.00)	13.59±4.09 14.00 (12.00–17.75)	69.72±14.71 71.00 (62.25–78.00)
No	150	52.4	5.92±1.89 6.00 (4.75–7.00)	13.24±4.36 13.00 (11.00–15.25)	15.14±4.43 16.00 (13.00–17.00)	10.64±2.99 11.00 (10.00–12.00)	8.74±3.29 9.00 (6.00–10.25)	12.96±4.36 13.50 (11.75–17.00)	66.67±16.11 68.00 (62.00–75.00)
p			0.100	0.123	0.645	**0.014**	0.655	0.192	0.078
Your spouse's employment status									
Yes	274	95.8	6.09±1.81 6.00 (5.00–7.00)	13.66±4.34 14.00 (11.00–17.00)	15.30±4.12 16.00 (13.00–18.00)	11.05±2.90 11.00 (10.00–13.00)	8.74±3.30 9.00 (6.00–10.00)	13.23±4.22 14.00 (12.00–17.00)	68.09±15.33 69.00 (62.75–76.00)
No	12	4.2	5.83±2.72 5.00 (4.00–9.00)	13.66±4.92 12.00 (11.25–16.00)	15.83±4.64 16.00 (16.00–17.75)	10.75±3.86 11.00 (7.75–13.00)	8.83±3.71 8.50 (7.00–9.00)	13.91±4.69 14.50 (12.00–18.00)	68.83±19.97 67.50 (58.00–79.25)
p			0.325	0.889	0.509	0.722	0.993	0.508	0.829
Your chronic disease status									
Yes	37	12.9	6.18±2.03 6.00 (5.00–7.00)	13.27±5.07 13.00 (11.00–16.00)	14.64±4.88 15.00 (13.00–17.50)	11.16±3.08 11.00 (10.00–13.00)	8.94±3.53 9.00 (6.50–10.00)	12.78±4.35 13.00 (11.00–16.00)	67.00±17.96 69.00 (59.50–76.50)
No	249	87.1	6.06±1.83 6.00 (5.00–7.00)	13.71±4.25 14.00 (11.00–17.00)	15.42±4.01 16.00 (14.00–18.00)	11.02±2.92 11.00 (10.00–13.00)	8.71±3.28 9.00 (6.00–10.00)	13.33±4.22 14.00 (12.00–17.00)	68.28±15.14 69.00 (63.00–76.00)
p			0.910	0.477	0.350	0.780	0.654	0.439	0.648
Your gynecological conditions or medical history									
Yes	24	8.4	5.95±1.70 6.00 (4.00–7.00)	12.91±4.31 13.50 (11.25–15.75)	14.37±4.44 15.50 (14.00–17.00)	10.62±3.22 11.00 (10.25–12.75)	8.41±3.14 9.00 (6.25–10.75)	12.95±4.57 13.00 (12.00–17.50)	65.25±16.91 69.00 (63.00–76.00)
No	262	91.6	6.09±1.87 6.00 (5.00–7.00)	13.72±4.37 13.50 (11.00–17.00)	15.41±4.10 16.00 (13.00–18.00)	11.07±2.91 11.00 (10.00–13.00)	8.77±3.33 9.00 (6.00–10.00)	13.29±4.21 14.00 (12.00–17.00)	68.38±15.38 69.00 (62.00–76.00)
p			0.644	0.647	0.375	0.832	0.919	0.740	0.724

Appendix 1 (cont.). Comparison of women's sociodemographic characteristics with FSFI mean scores

Variables	n	%	Sexual desire subdimension mean±SD median (Q1–Q3)	Sexual arousal subdimension mean±SD median (Q1–Q3)	Lubrication subdimension mean±SD median (Q1–Q3)	Orgasm subdimension mean±SD median (Q1–Q3)	Satisfaction subdimension mean±SD median (Q1–Q3)	Pain discomfort subdimension mean±SD median (Q1–Q3)	FSFI total score mean±SD median (Q1–Q3)
Your smoking status									
Never	211	73.8	6.09±1.73 6.00 (5.00–7.00)	13.90±4.22 14.00 (11.00–17.00)	15.44±3.95 16.00 (14.00–18.00)	11.15±2.77 12.00 (10.00–13.00)	8.71±3.14 9.00 (6.00–10.00)	13.36±4.07 14.00 (12.00–17.00)	68.67±14.46 70.00 (63.00–76.00)
Half a pack per day	62	21.7	6.30±2.10 6.50 (4.75–8.00)	13.01±4.90 12.50 (10.75–16.00)	14.96±4.83 16.00 (13.00–18.00)	10.59±3.48 11.00 (10.00–12.00)	8.91±3.88 9.00 (6.00–11.00)	12.69±4.77 13.00 (10.75–18.00)	66.50±18.63 66.00 (59.75–76.00)
One pack or more per day	13	4.5	4.69±2.05 4.00 (3.00–6.00)	12.76±3.70 12.00 (11.00–13.00)	15.23±3.65 16.00 (13.00–17.00)	11.30±2.75 11.00 (10.00–12.50)	8.46±3.15 8.00 (6.00–9.00)	14.38±4.13 15.00 (12.00–18.00)	66.84±16.32 66.00 (60.00–69.50)
p			**0.013**	0.099	0.624	0.170	0.796	0.400	0.151
Your menstrual frequency									
Once a month	267	93.4	6.03±1.81 6.00 (5.00–7.00)	13.55±4.26 13.00 (11.00–16.00)	15.24±4.06 16.00 (13.00–17.00)	10.99±2.89 11.00 (10.00–13.00)	8.67±3.26 9.00 (6.00–10.00)	13.28±4.20 14.00 (12.00–17.00)	67.78±15.19 69.00 (62.00–76.00)
Once every 2–3 months	11	3.8	6.90±1.70 7.00 (6.00–8.00)	15.54±4.56 16.00 (14.00–17.00)	16.72±4.40 18.00 (16.00–19.00)	11.45±3.44 12.00 (11.00–14.00)	9.18±2.89 9.00 (8.00–12.00)	13.18±4.95 13.00 (11.00–18.00)	73.00±16.74 76.73 (73.00–85.00)
Never	7	2.4	7.00±3.00 6.00 (4.00–10.00)	14.57±7.48 12.00 (10.00–24.00)	16.57±6.52 16.00 (16.00–23.00)	12.00±4.32 13.00 (11.00–15.00)	11.00±5.22 10.00 (8.00–17.00)	12.85±5.52 15.00 (8.00–18.00)	74.00±25.09 74.00 (67.00–97.00)
p			0.219	0.258	0.080	0.250	0.354	0.924	0.076

*: Kruskal–Wallis Test; **: Mann–Whitney U Test; SD: Standard deviation; FSFI: Female sexual function index.