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Effect of pregnancy symptoms on the sexual quality of life

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SUMMARY

OBJECTIVE: This descriptive cross-sectional study aimed to determine the effect of pregnancy symptoms on the sexual quality of life.

METHODS: This study included 150 pregnant women who visited the obstetrics and gynecology outpatient clinic of the hospital between October 1, 2019, and April 1, 2020, and met the inclusion criteria. Data were collected using the Personal and Obstetric Information form, Sexual Quality of Life-Female scale, and Pregnancy Symptom Inventory.

RESULTS: The mean age of the participants was 27.7±5.2 years. As per the collected data, 39.3% of the participants had university- or higher-level education and 21.3% had an income-generating job. A weak negative correlation was found between the scores of Sexual Quality of Life-Female and frequency of pregnancy symptoms and limitation in daily activities (p=0.016 and p=0.020, respectively), whereas a strong positive correlation was found between frequency of pregnancy symptoms and limitation in daily activities. Regression analysis showed that as Sexual Quality of Life-Female scores decreased, frequency of pregnancy symptoms and limitation in daily activities scores increased (p<0.001).

CONCLUSION: Our study showed that, as the frequency of symptoms experienced during pregnancy and their impact on daily life increase, the sexual quality of life decreases. We recommend providing education and counseling services to women and their partners about pregnancy symptoms and its impact on sexual life during pregnancy and implementing effective measures to eliminate the negative effects of these symptoms on the sexual quality of life.

KEYWORDS: Pregnancy. Symptoms. Sexual health.

INTRODUCTION

Sexuality is a very important part of life that is necessary for the continuation of a species. Sexuality in humans is not only associated with genital organs but also includes the whole body and mind, and is shaped according to the perspective of the society[1]. According to the World Health Organization, sexual health is the state of physical, emotional, mental, and social well-being in relation to sexuality[2]. Many people view sexuality as a factor of great importance for their quality of life. For this reason, many people worry that pregnancy and childbirth will have negative and irreversible effects on their sexual life[3].

Although pregnancy is a natural event, it can have significant physiological, metabolic, and psychological effects on the mother's body. Symptoms such as nausea, vomiting, frequent urination, heartburn, fatigue, back pain, constipation, weakness, cramps, breast tenderness, diarrhea, shortness of breath, varicose veins, vaginal discharge, headache, and sleep problems can be observed during pregnancy[4,5]. These symptoms can affect the sexual life of pregnant women and thus their sexual quality of life. Sexuality is interrupted during pregnancy due to the problems experienced during pregnancy, health concerns, and lack of adequate counseling[6]. The aim should be to preserve or improve the sexual quality of life in pregnant women through interventions and education that will reduce the severity of symptoms and counseling services.

The aim of this study was to determine the effect of pregnancy symptoms on the sexual quality of life. The data obtained from the study can be used as a guide for training and consultancy services to be provided for improving the sexual quality of life of pregnant women and helping them go through this delicate period as best as possible.

METHODS

This was a descriptive cross-sectional study that aimed to determine the effects of pregnancy symptoms on the sexual quality

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of life. This study was conducted at the obstetrics and gynecology clinic of the Yozgat City Hospital between October 2019 and April 2020.

The study population included pregnant women who visited the obstetrics and gynecology outpatient clinic of the hospital and met the inclusion criteria. Sample selection was not performed, and all pregnant women were included in the initial sample. The total number of participants was 150. Voluntary consent forms were provided to all participants, and written consent was obtained from all participants. All data were collected during face-to-face interviews.

The inclusion criteria were as follows: consenting to participate in the study; aged ≥18 years; having a single pregnancy; not having a chronic disease; not having any risk factors such as placental anomaly, infection, bleeding, premature rupture of membranes, and threat of premature birth, during pregnancy; not having any psychiatric disorders; not having a communication problem; and no prescribed restriction on sexual life. The exclusion criteria included being illiterate and having treatment-induced pregnancy, such as through *in vitro* fertilization or intrauterine insemination.

After the study was completed, G power analysis determined that the sample size of the study was sufficient [calculation based on the mean scale score, partial eta squared=0.039 power=0.688 for FoPS, partial eta squared=0.038, and power=0.671 for limitation in daily activities (LiDA)].

Data collection tools

Research data were collected using the Personal and Obstetric Information form, the Pregnancy Symptom Inventory (PSI), and the Sexual Quality of Life-Female (SQOL-F) scale.

Personal and obstetric information form

This form was prepared by the researchers according to the relevant literature[7,8]. This form included 20 questions on the sociodemographic (i.e., age, educational status, family type, etc.), obstetric, and sexual life characteristics.

Pregnancy Symptom Inventory

PSI was developed by Foxcroft et al. in 2013. The Turkish validity and reliability of the scale were determined by Can Gürkan and Ekşi Güloğlu in 2018. PSI includes 42 items evaluating the frequency of symptoms experienced during pregnancy and the limitation of daily activities by Frequency of Pregnancy Symptoms (FoPS), the first subdimension of PSI uses a four-point Likert-type scale, and the total score that can be obtained from this subdimension ranges between 0 and 126. Higher scores are interpreted as an increase in the frequency of experienced symptoms. LiDA is the second subdimension of PSI. The total score that can be obtained on LiDA ranges between 42 and 126. Higher scores indicate more LiDA due to symptoms[9,10].

Sexual Quality of Life-Female Scale

The SQOL-F scale is a valid and reliable tool developed in 2005 by Symonds et al. The Turkish validity and reliability of SQOL-F were determined by Tuğut and Gölbaşı in 2010. The SQOL-F scale is a six-point Likert-type scale and includes 18 items based on the participants' sexual life in the last 4 weeks. The scores that can be obtained are in the range of 18–108. A high score indicates a good sexual quality of life[11,12].

Evaluation of data

IBM SPSS Statistics Standard Concurrent User V 25 (IBM Corp., Armonk, New York, USA) was used for statistical analysis of the data.

Shapiro-Wilk test and QQ charts were used to check whether the data were normally distributed. Comparisons of FoPS and LiDA scores according to the patient characteristics were made with an independent two-sample t-test for variables with two categories, and a one-way analysis of variance was used for variables with three or more categories. The effect of FoPS and LiDA scores on SQOL-F scores was evaluated by linear regression analysis. A p-value of <0.05 was accepted as statistically significant in all analyses.

Ethical considerations

Ethics approval was obtained from the Yozgat Bozok University Non-Interventional Clinical Research Ethics Committee (2017-KAEK-189_2019.10.16_04). Written permission was obtained from the hospital's chief physician to conduct the study. Written and verbal consents were obtained from the pregnant women included in the study.

RESULTS

This study was conducted to determine the effect of pregnancy symptoms on the sexual quality of life. Accordingly, the mean age of the pregnant women was 27.7±5.2 years. It was determined that 72.7% of the pregnant women had planned pregnancy, and 48.7% of the participants stated that the problems experienced during pregnancy did not affect their sexual life (Table 1).

The mean FoPS subdimension score of PSI was 45.31±18.01. The LiDA subdimension score of PSI was 68.18±12.92. Finally, the mean SQOL-F score was 75.49±19.71 (Table 2).

Table 1. Descriptive, obstetric, and sexual life characteristics of the pregnant women (n=150).

Characteristics	n (%)
Age groups (Mean: 27.7±5.2) (years)	
≤20	6 (4.0)
21–25	52 (34.7)
26–30	50 (33.0)
31–35	28 (18.7)
≥36	14 (9.3)
Educational status	
Literate/primary school graduate	20 (13.4)
Secondary school graduate	26 (17.3)
High school graduate	45 (30.0)
University graduate and above	59 (39.3)
Having an income-generating job	
Yes	32 (21.3)
No	118 (78.7)
Family type	
Nuclear	119 (79.3)
Extended	31 (20.7)
Parity	
One	57 (38.0)
Two	50 (33.4)
Three	20 (13.3)
Four or more	23 (15.3)
Gestational week	
M (Q_1–Q_3)	34.0 (29.0–37.0)
Min–max	10.0–41.0
Planned pregnancy status	
Planned	109 (72.7)
Unplanned	41 (27.3)
Knowledge about sexual intercourse during pregnancy	
Yes	113 (75.3)
No	37 (24.7)
Do the problems you experience during pregnancy affect your sex life?	
Yes	77 (51.3)
No	73 (48.7)

M: Median; Q_1–Q_3: interquartile range.

As shown in Table 3, a weak negative correlation was found between the SQOL-F and FoPS and LiDA scores (p=0.016 and p=0.020, respectively). The SQOL-F score decreases as the FoPS and LiDA scores increase. A strong positive correlation was found between the FoPS and LiDA scores.

DISCUSSION

Although sexual health is ignored by many people, sexuality cannot be ignored when dealing with the overall health of an individual. Sexuality continues during pregnancy. However, the changes or symptoms experienced during this period can affect the sexual health of pregnant women. Pregnant women may avoid sexual intercourse or experience sexual problems due to various symptoms they experience. The findings obtained in this study conducted to determine the effect of pregnancy symptoms on the sexual quality of life were discussed in line with the relevant literature.

Considering the score range of FoPS (0–126), the mean score obtained in this study (45.31) was below the mid-level. Considering the score range of LiDA (42–126), which represents the level of daily activities of pregnant women due to various symptoms they experience, the mean score obtained in this study (68.18) was also below the mid-level (Table 3). Similarly, Woo also found a mean FoPS score of 36.23. In the study of Ağapınar Şahin, the mean frequencies of pregnancy symptoms (FoPS) and LiDA scores were found to be 53.88 and 41.09, respectively. These results are consistent with our findings[13,14].

The mean SQOL-F (75.49) score of the participants was above the mid-level of the score range (10–100) (Table 3). Similarly, in another study conducted by Kırıkkaleli (2015) with 171 pregnant women, the mean SQOL-F score of pregnant women was found to be 81.59. Furthermore, Bakır et al. reported mean SQOL-F scores which are consistent with our findings. Maasoumi et al. conducted a study on women who were not pregnant or in the menopausal period and found that the mean SQOL-F score was 86.4. Again, in another study conducted by Küt, the mean SQOL-F score

Table 2. Distribution of Sexual Quality of Life-Female scale and Pregnancy Symptom Inventory scores of participants (n=150).

	Cr α	X±ss	Min–Max
Pregnancy Symptoms Inventory-FoPS	0.866	45.31±18.01	0–97
Pregnancy Symptoms Inventory-LiDA	0.876	68.18±12.92	42–108
Sexual Quality of Life-Female Scale	0.891	75.49±19.71	10–100

FoPS: frequency of pregnancy symptoms; LiDA: limitation in daily activities; Cr α: Cronbach's alpha internal consistency coefficient.

Table 3. Relationship between Sexual Quality of Life-Female scale and Pregnancy Symptom Inventory scores.

PSI	SQOL-F	LiDA
Frequency of pregnancy symptoms	rho=−0.196; p=0.016	r=0.873; p<0.001
Limitation in daily activities	rho=−0.189; p=0.020	-

SQOL-F: Sexual Quality of Life-Female; PSI: Pregnancy Symptom Inventory; r: Pearson correlation coefficient; rho: Spearman's correlation coefficient.

was found to be 81.8. Based on our findings and the results of other studies, it can be said that pregnancy reduces the sexual quality of life[8,15,16].

In this study, a weak negative correlation was found between the sexual quality of life and the FoPS and limitation in daily activities. Accordingly, it was found that the sexual quality of life decreased as the FoPS and limitation in daily activities increased. Pregnancy is a period of physiological, psychological, social, and sexual changes for women[17]. Some studies have reported that urinary incontinence, stomach complaints, respiratory problems, leg pain, cramps, nausea, and fatigue complaints cause sexual dysfunction[4,18]. In their study, Cassis et al. reported that the symptoms experienced during pregnancy increase the most in the last trimester and 86.1% of the pregnant women in the last trimester have adverse effects on their sexual functions[19].

Gümüşay found that the positive body image of pregnant women had a positive effect on the sexual function of couples[7]. In another study, it was determined that positive body image during pregnancy was associated with lower sexual dysfunction[20]. As a result, physical or mental changes affect the sexual life during pregnancy.

CONCLUSION AND RECOMMENDATIONS

Our results showed that the symptoms experienced during pregnancy affect the sexual quality of life of pregnant women. Accordingly, we recommend as follows:

Symptoms experienced during pregnancy should be regularly reviewed by healthcare professionals, and appropriate interventions should be performed.

Education and counseling services about sexual life during pregnancy should be provided to all couples.

Sexual quality of life should not be neglected during pregnancy, and effective interventions should be performed to eliminate the negative effects of pregnancy symptoms and other factors on the sexual quality of life.

Further quantitative studies evaluating pregnant women and their spouses together and more comprehensive qualitative studies with detailed interviews should be conducted.

Limitations of the study

The data obtained from the study were based on the self-reports of the participants. The results represent only the pregnant women who participated in the study and cannot be generalized to other health institutions and pregnant women.

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AUTHORS' CONTRIBUTIONS

ENÇM: Conceptualization, Data curation, Methodology, Resources, Writing – original draft. FTG: Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

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