Original Article

Pregnant Women's Attitudes and Beliefs Toward Sexuality During Pregnancy in Turkiye: A Multi Center Study

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Abstract

Background: Women's thoughts about pregnancy and sexuality vary depending on culture, myths, false beliefs and taboos.

Objective: This study aimed to identify pregnant women's attitudes and beliefs toward sexuality during pregnancy in all seven geographical regions of Turkiye and the associated factors.

Methodology: A total of 2770 healthy pregnant women from Turkiye were included in this multi-central and cross-sectional study. The research data were collected with the "The Pregnant Woman Information Form" and "The Attitudes and Beliefs Scale about Sexuality during Pregnancy". Data were evaluated using descriptive statistics, independent sample t-test, one-way analysis of variance, tukey test and linear regression analysis.

Results: It was found that the pregnant women had moderately negative attitudes and beliefs toward sexuality during pregnancy and were moderately concerned about their pregnancy, baby, and attractiveness. The fact that pregnant women experience problems in sexual intercourse during pregnancy, and have knowledge about sex life in pregnancy increased their sexual myths about pregnancy ($p<0.05$). The fact that the pregnant women having a planned pregnancy, being satisfied with pre-pregnancy sexuality, having sexual intercourse and being satisfied with sexuality during pregnancy decreased their sexual myths about pregnancy ($p<0.05$).

Conclusions: It is highly important to consider the factors associated with pregnant women's negative sexual attitudes, beliefs, and knowledge, and develop intervention strategies to alleviate the effects of these cultural sexual myths in the prenatal period by the health professionals.

Keywords: Pregnancy, Pregnant Women, Sexuality, Sexual Behavior, Sexual Belief

Introduction

According to the World Health Organization [WHO], healthy sexuality is "not only to be without a disease, dysfunction, or disability but also to have sexuality-related emotional, mental, and social well-being". Sexuality is experienced and expressed through thoughts, beliefs, attitudes, values, behaviors, and practices. Thus, it is affected by biological, psychological, socio-cultural, economic, historical, religious, and spiritual factors (WHO, 2021). It was put forward that the sex life was negatively affected during the pregnancy process which included these factors and multifaceted changes (Demirci, 2016; Gałązka et al., 2015; Wallwiener et al., 2017).

Human beings' thoughts about pregnancy and sexuality changed throughout history based on culture, myths, false beliefs, and taboos. Sexual myths are false, distorted, unscientific, and incomplete knowledge, thoughts, and beliefs (Cantarino et al., 2016; Karabulutlu, 2018; Kiemtorè et al., 2016). In certain societies, there are concerns that sex in pregnancy will lead to abortus or preterm labor, fetal anomaly and death, infection and bleeding, the birth of the fetus blind or disabled, and will inflict damage on the female fetus's virginal membrane (Bahloul et al., 2018; Kiemtorè et al., 2016; Shayan et al., 2020). It is considered that a pregnant woman cannot be both a good mother and a sexual partner. On the other hand, in certain societies, having sexual intercourse during pregnancy is encouraged for the enhancement of the development of the fetus and the facilitation of the birth process (Karabulutlu, 2018; Kiemtorè et al., 2016). Besides sexual myths, pregnant woman's anxiety about pregnancy, baby, and parenthood, the decrease in pregnant woman's self-esteem in association with physical changes, pregnant woman's thinking that she is no longer attractive to her spouse, the failure of the couple to adapt to pregnancy, pregnant woman's medical and emotional problems, and pregnant woman's previous negative pregnancy and sexuality experiences induce the pregnant woman to keep distance to sexual activity (Aksoy et al., 2019; Rahimian, 2019). In Turkish society, certain myths, such as the acceptance of motherhood as divine and the belief that having sexual intercourse during pregnancy is immoral and harmful, can negatively affect sexuality during pregnancy (Aksoy et al., 2019; Karabulutlu, 2018). Sexuality-related negative attitudes, beliefs, and sexual self can result in a decrease in sexual desire, sexual intercourse frequency, and sexual satisfaction, and in association with this decrease, can lead to sexual dysfunction and a negative pregnancy experience.

Sexuality during pregnancy continues to be a topic about which couples cannot ask questions even to the health professionals most of the time, which cannot even be discussed with health professionals due to health professionals' biases, lack of knowledge, false beliefs, and wrong attitudes, and as a consequence, on which there is a shortage of knowledge (Kiemtorè et al., 2016; Lund et al., 2019). On the other hand, the right to information and the right to education are basic human rights to ensure that human beings continue to have sexual health (WHO, 2021). The consultancy to be provided by health professionals is needed for assuring a high-quality sex life during an ongoing healthy pregnancy besides following up on the circumstances in which sexuality can pose risks during pregnancy (Topatan & Koc, 2020). The continuation of sex life during pregnancy develops the emotional tie and positive relations with the spouse and reduces stress during pregnancy. In this context, it is recommended that individuals' sexuality-related knowledge, attitudes, beliefs, sexual problems, and the causes of their sexual problems be evaluated in a multifaceted manner by protecting their privacy (Aksoy et al., 2019; Demirci, 2016; Shayan et al., 2020).

It was discerned that, in the relevant literature, there was a limited number of studies that evaluated sexuality-related attitudes and beliefs during pregnancy, and also, these studies used no measurement tool to examine the topic and did not analyze the associated factors. There is a need to evaluate the lack of knowledge and pregnancy-specific myths about sexuality that is still accepted as a taboo due to the socio-cultural construct of Turkiye and to ensure that awareness about the importance of the topic is raised and solutions are sought. Thus, this research aims to identify pregnant women's attitudes and beliefs toward sexuality during pregnancy in all seven geographical regions of Turkiye and the associated factors.

Materials and methods

Study design: This research is a cross-sectional and multi-centric study.

Participants: It is conducted in Turkiye from 1 September 2021 to 15 March 2022. The research population was comprised of pregnant women who resided in certain city centers in all seven geographical regions of Turkiye and applied to the obstetrics polyclinics in public hospitals, training and research hospitals, and university hospitals affiliated with the General Secretariat of the Public Hospitals Association under the Ministry of Health of Turkiye. The research sample was composed of pregnant women who satisfied the criteria designated for being included in the research. The inclusion criteria were (1) to voluntarily agree to participate in the research, (2) to be aged 18 years or above, (3) to be literate in Turkish, (4) to be healthy and have a healthy baby, and (5) to be married and live together with the spouse. The exclusion criteria were (1) to have a communication barrier or mental disability or be diagnosed with a psychiatric disease, (2) to have a risky pregnancy, and (3) to have a restriction imposed by a doctor on the sex life.

The minimum sample size was calculated by using the below two-stage statistical formulas for the identification of sample size, and in this effort, attention was paid also to the inclusion of a balanced number of pregnant women from each geographical region in the research.

$$n_o = \frac{z^2 p(1-p)}{d^2} \quad , \quad n = \frac{n_o}{1+\frac{n_o}{N}}$$

n= the sample size, z= the critical value obtained on the basis of the margin of error (the table value for a 5% margin of error is 1.96), p= estimated proportion of the population that presents the characteristic (0.63, based on the previous study by Aygin et al., (2017) in Turkiye, the acceptance rate of sexual myths was found as 63%), d= the intended deviation as per the incidence (0.02), N= the population size (according to the data obtained from the Turkish Statistical Institute (2021), the total number of births is 1.112.859).

The sample size for the research was calculated as a minimum of 2234 pregnant women (n=2234). Considering the likely data losses and outliers, a total of 2873 pregnant women were initially recruited to the sample with simple random sampling. However, during the research process, 103 pregnant women withdrew from the study, 58 pregnant women did not fill in the survey form fully, and 62 pregnant women were excluded from the study. Thus, the study was finalized with a total of 2770 pregnant women (n=2770), and these women were from Samsun city (n=416) in the Black Sea Region, Elazıg city (n=381) in the East Anatolia Region, Istanbul city (n=581) in Marmara Region, Nigde city (n=384) in the Central Anatolia Region, Diyarbakir city (n=283) in the South-East Anatolia Region, Izmir city (n=350) in the Aegean Region, and Antakya city (n=375) in the Mediterranean Region of Turkiye.

Data collection: The pregnant woman information form: The form was prepared by researchers in light of the relevant literature (Bilen & Aksu, 2016; Gałazka et al., 2015; Salcan & Surucu, 2020). The form has a total of 28 questions designed to identify pregnant women's socio-demographic characteristics, and certain obstetric and sexuality-related characteristics, and the status of having knowledge about sex life in pregnancy.

The attitudes and beliefs scale about sexuality during pregnancy (ABSSP): The ABSSP developed by Salcan and Surucu (2020) evaluates distorted/negative attitudes, beliefs, and knowledge about sexual intercourse during pregnancy. Designed as a five-point Likert-type scale, the ABSSP is composed of 25 items. Besides, the ABSSP has four sub-scales, namely, Pregnancy and Sexuality, Concerns about the Baby, Sexuality/Attraction, and Concerns about Pregnancy. Minimum and maximum scores to be obtained by a respondent from the ABSSP are successively 25 and 125 points. Higher scores indicate increased sexual myths in pregnancy. Cronbach's alpha coefficient for the ABSSP was calculated as 0.91 in the study by Salcan and Surucu (2020) and as 0.94 in the current study. Firstly, the pregnant women were informed about the research, and then, those volunteering to participate in the study were asked to state that they consented to participate in the research. The research data were collected by researchers via face-to-face interviews with pregnant women, and accordingly, the data were based on women's self-reports. Filling in the survey form after having care and follow-up services took each pregnant woman 10 minutes on average. While the pregnant women were filling in the survey form, it was ensured that the privacy and the confidentiality of their personal data were protected.

Statistical analysis: The research data were analyzed with the Statistical Package for Social Science (SPSS) 23.0. First of all, the conformity of the data to the normal distribution was evaluated with the Kolomogorov-Smirnov test and it was found that it showed normal distribution with $p>0.05$. In the statistical evaluation, descriptive statistics (number, percentage, mean, standard deviation, and minimum and maximum values) were used, and also, the independent samples t-test and the one-way analysis of variance (ANOVA) were utilized in the between-group comparison of quantitative data if the data were normally distributed, and in the comparison of more than two groups, the Tukey's HSD test was conducted as a post hoc analysis to identify which group(s) had a statistically significant difference from other groups. Linear regression analysis used to determine the effect of independent variables on dependent variable. In the research, the statistical significance was identified if the p-value was below 0.05 ($p<0.05$).

Ethics: Before the research was launched, the ethical approval was granted for the research by the Non-Invasive Research Ethics Committee of Firat University of Turkiye (Date: 22 April 2021, No: 2021/06-22), and conducted in accordance with the ethical standards laid down by the Declaration of Helsinki (1964) and all subsequent revisions. Pregnant women were informed about the research. They were required to consent to participate in the research in written format with the Informed Consent Form, and the confidentiality of their personal data was protected.

Results

Sociodemographic, obstetric and sexuality-related characteristics

The mean age of the pregnant women was 29.39±5.27 years, the mean age of their spouses was 33.18±5.78 years, and their mean marriage duration was 6.76±5.61 years. Pregnant women's mean gravidity was 2.48±1.76, the mean number of their living children was 1.27±1.44, and their mean gestational age was 29.18±8.14 weeks.

The ABSSP and its sub-scales mean scores

Table 1 indicated the breakdown of mean scores obtained by pregnant women from the ABSSP and its sub-scales. Mean scores obtained by pregnant women from the ABSSP and its Pregnancy and Sexuality Sub-Scale, Concerns About the Baby Sub-Scale, Sexuality/Attraction Sub-Scale, and Concerns About Pregnancy Sub-Scale were successively 66.28±20.12, 15.75±4.59, 16.75±7.10, 12.73±5.38, and 21.02±6.82 points. In this respect, pregnant women had moderately negative attitudes and beliefs toward sexuality during pregnancy and were moderately concerned about their pregnancy, baby, and attractiveness.

The comparison of mean scores obtained by pregnant women from the ABSSP and its sub-scales was exhibited in Table 2 as per pregnant women's socio-demographic characteristics. Pregnant women who were literate but had no formal education, were not working, resided in the village/town, were members of an extended family, had spouses who were literate but had no formal education, had a spouse not working, had an income below expenses, did not want the current marriage, and were not satisfied with the current marital relationship had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women ($p=0.000$). In addition, the mean ABSSP total scores of pregnant women showed significant differences according to the seven geographical regions of Turkiye ($F=80.812$; $p=0.000$). The reason for the difference is that the participants from the East Anatolian Region of Elazig city and the Southeast Anatolian Region of Diyarbakir city had higher total mean scores of ABSSP (successively, 74.59±29.57 and 80.17±16.51 points) compared to the participants from the other regions (Black Sea Region/Samsun city - 63.01±13.77 points; Marmara Region/Istanbul city – 61.41±17.46 points, Central Anatolia Region/Nigde city - 58.48±15.35, Aegean Region/Izmir city - 58.23±15.55, Mediterranean Region/Antakya city - 64,00±17,49) ($p<0.05$). Similar differences between these regions/cities were also found in the sub-dimensions of

"Pregnancy and Sexuality", "Concerns about the Baby", "Sexuality/Attraction", "Concerns about Pregnancy" ($p<0.05$). Moreover, it was discerned that pregnant women's negative attitudes and beliefs toward sexuality during pregnancy increased along with the increase in their age ($r=0.080$; $p=0.000$), spouse's age ($r=0.103$; $p=0.000$), marriage age ($r=0.111$; $p=0.000$), and marriage duration ($r=0.150$; $p=0.000$).

The comparison of mean scores obtained by pregnant women from the ABSSP and its sub-scales was displayed in Table 3 as per pregnant women's obstetric and sexuality-related characteristics. Pregnant women who had an unplanned pregnancy, got pregnant involuntarily, did not get pregnant with assisted reproductive techniques, were not satisfied with their sex lives before pregnancy, were not satisfied with their sex lives during the current pregnancy, did not have sexual intercourse during pregnancy, experienced a problem during sexual intercourse in the pregnancy period, did not have a change or had a decrease in sexual desire during pregnancy, and had knowledge about sex life during pregnancy had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women ($p<0.01$). Furthermore, it was found that pregnant women's negative attitudes and beliefs toward sexuality during pregnancy increased along with the increase in the gravidity ($r=0.241$; $p=0.000$), the number of living children ($r=0.224$; $p=0.000$), and the gestational age ($r=0.040$; $p=0.037$).

Linear regression analysis outcomes

According to the linear regression analysis, the fact that pregnant women live in a smaller place, have a large family, have problems in sexual intercourse during pregnancy and not receive information about sexual intercourse during pregnancy increases the total score of ABSSP, that is, increases their sexual myths about pregnancy ($p<0.05$). Working, being married voluntarily, having a planned pregnancy, being pregnant with assisted reproductive techniques, being satisfied with pre-pregnancy sexuality, having sexual intercourse during pregnancy and being satisfied with sexuality, working of their spouses and having a high level of education decreases the total score of ABSSP, that is, decreases their sexual myths about pregnancy ($p<0.05$).

Table 1. The breakdown of mean scores obtained by pregnant women from the ABSSP and its sub-scales (n=2770)

Scale and sub-scales	X±SD	Min.	Max.
ABSSP	66.28±20.12	25	121
Pregnancy And Sexuality	15.75±4.59	5	25
Concerns About The Baby	16.75±7.10	7	35
Sexuality/Attraction	12.73±5.38	5	25
Concerns About Pregnancy	21.02±6.82	8	40

X ± SD: Mean ± Standard Deviation; Min.: Minimum; Max.: Maximum

Table 2. As per pregnant women's socio-demographic characteristics, the comparison of mean scores obtained by pregnant women from the ABSSP and its sub-scales (n=2770)

Characteristics		n	ABSSP X±SD	Pregnancy and Sexuality X±SD	Concerns About the Baby X±SD	Sexuality/ Attraction X±SD	Concerns About Pregnancy X±SD
Education level	Literate (no formal education)	74	76.64±23.94a	15.54±5.63ab	20.06±7.61a	16.02±5.41a	25.01±7.53a
	Elementary or middle school	914	68.60±18.74b	16.47±4.66a	17.50±6.69b	13.33±4.81b	21.28±6.31b
	High school	989	68.00±18.93b	15.95±4.05a	17.29±6.81b	13.24±5.51b	21.50±6.50b

	Bachelor's degree or above	793	60.48±21.37c	14.70±4.85b	14.92±7.48c	11.11±5.44c	19.74±7.43c
F; p			36.298;**0.000**	22.451;**0.000**	29.189;**0.000**	41.695;**0.000**	20.269;**0.000**
Employment status t; p	Working	777	59.77±20.43	13.74±4.92	14.83±6.89	11.69±5.68	19.50±6.41
	Not working	1993	68.81±19.42	16.54±4.20	17.51±7.04	13.14±5.21	21.61±6.88
			-10.61;**0.000**	-14.009;**0.000**	-9.038;**0.000**	-6.196;**0.000**	-7.379;**0.000**
Place of residence	Province center	2012	65.44±20.51a	15,30±4,61a	16,57±7,11a	12,70±5,55a	20,87±6,85a
	District	597	66.81±18.50a	16.79±4.35b	16.76±7.10a	12.42±4.79a	20.83±6.63a
	Village/Town	161	74.71±19.02b	17.64±4.13b	19.06±6.54b	14.37±5.10b	23.63±6.54b
F; p			16.250;**0.000**	39.793;**0.000**	9.198;**0.000**	8.545; **0.000**	12.606; **0.000**
Family type	Nuclear family	2250	64.47±19.12	15,.4±4.36	16.31±6.91	12.31±5.21	20.60±6.60
	Extended family	520	74.07±22.38	17.99±4.89	18.67±7.57	14.55±5.74	22.85±7.43
t; p			-9.045;**0.000**	-11.768;**0.000**	-6.483;**0.000**	-8.158;**0.000**	-6.366; **0.000**
Spouse's education level	Literate (no formal education)	28	71.57±10.60a	18.75±5.03a	15.75±3.25ac	16.10±3.96a	20.96±3.41a
	Elementary or middle school	890	68.33±17.90a	16.97±3.87a	17.14±6.65a	12.56±4.31b	21.64±6.76a
	High school	982	70.63±20.01a	15.90±4.51b	18.50±7.31b	14.15±5.78a	22.06±6.59a
	Bachelor's degree or above	870	59.10±20.71b	14.24±4.89c	14.42±6.75c	11.20±5.48c	19.21±6.87b
F; p			59.476;**0.000**	60.349;**0.000**	55.015;**0.000**	52.931;**0.000**	31.330;**0.000**
Spouse's employment status t; p	Working	2585	65.55±19.75	15.57±4.53	16.61±7.09	12.57±5.31	20.79±6.70
	Not working	185	76.37±22.43	18.37±4.67	18.72±7.01	15.03±5.84	24.24±7.62
			-7.126;**0.000**	-8.101;**0.000**	-3.903;**0.000**	-6.035;**0.000**	-5.998;**0.000**
Perceived income level of the household	Income below expenses	819	70.00±22.20a	16.52±5.07a	18.07±7.79a	13.42±5.85a	21.99±7.70a
	Income equal to expenses	1572	65.47±18.53b	15.64±4.16b	16.38±6.64b	12.53±5.11b	20.90±6.26b
	Income above expenses	379	61.56±20.42c	14.57±4.92c	15.46±6.97b	12.11±5.27b	19.41±6.69c
F; p			26.165;**0.000**	21.775;**0.000**	22.735;**0.000**	10.391;**0.000**	19.270;**0.000**
Having a wanted marriage t; p	Yes	2542	64.79±19.42	15.42±4.44	16.36±6.95	12.27±5.18	20.73±6.72
	No	228	82.80±20.42	19.46±4.58	21.20±7.25	17.87±4.88	24.25±7.10
			-12.804;**0.000**	-12.791;**0.000**	-9.689;**0.000**	-16.475;**0.000**	-7.547;**0.000**
Being satisfied with marital relationship	I am not satisfied at all.	164	81.11±27.16a	17.21±6.22a	21.52±8.68a	17.00±6.92a	25.36±7.78a
	I am not satisfied.	201	80.89±18.59a	17.24±3.63a	21.29±7.38a	17.39±5.08a	24.97±6.88a
	I am satisfied.	1335	64.60±17.06b	15.44±4.24b	16.22±6.19b	12.23±4.62b	20.69±6.07b
	I am fully satisfied.	1070	63.34±20.55b	15.65±4.79b	15.84±7.24b	11.82±5.31b	20.02±7.02b
F; p			62.078;**0.000**	11.361;**0.000**	48.561;**0.000**	83.085;**0.000**	42.372;**0.000**

X ± SD: Mean ± Standard Deviation; F: One-way analysis of variance; t: Independent samples t-test
a,b,c: Letters indicating statistically significant between-group differences as per the Tukey's HSD test – there is no statistically significant difference between groups that are denoted with the same letter

Table 3. As per pregnant women's obstetric and sexuality-related characteristics, the comparison of mean scores obtained by pregnant women from the ABSSP and its sub-scales (n=2770)

Characteristics			ABSSP	Pregnancy and Sexuality	Concerns About the Baby	Sexuality/ Attraction	Concerns About Pregnancy
		n	X±SD	X±SD	X±SD	X±SD	X±SD
Having a planned pregnancy	Yes	1552	61.07±18.90	15.14±4.60	14.92±6.68	11.16±4.77	19.84±6.80
	No	1218	72.91±19.68	16.54±4.46	19.10±6.93	14.74±5.45	22.52±6.55

t; p			-15.978;**0.000**	-8.068;**0.000**	-15.997;**0.000**	-18.086;**0.000**	-10.431;**0.000**
Voluntarily getting pregnant	Yes	1997	63.07±19.03	15.22±4.50	15.75±6.79	11.68±4.95	20.40±6.65
	No	773	74.55±20.52	17.12±4.54	19.34±7.24	15.46±5.50	22.61±7.00
t; p			-13.463;**0.000**	-9.916;**0.000**	-11.906;**0.000**	-16.641;**0.000**	-7.554;**0.000**
Getting pregnant with assisted reproductive techniques	Yes	204	61.05±27.20	13.69±5.84	16.00±8.75	11.84±7.36	19.50±7.81
	No	2566	66.69±19.40	15.92±4.44	16.81±6.95	12.80±5.19	21.14±6.72
t; p			-2.905;**0.004**	-5.320;**0.000**	-1.290;0.199	-1.828;0.069	-2.922;**0.004**
Being satisfied with the sex life before pregnancy	I am not satisfied at all.	139	92.84±22.41a	19.23±4.80a	25.12±7.06a	20.00±5.42a	28.47±7.21a
	I am not satisfied.	277	71.28±22.73b	15.93±5.58b	18.74±7.90b	14.74±5.30b	21.85±7.41b
	I am satisfied.	1458	65.22±15.06 c	15.84±3.69b	16.03±5.63c	12.45±4.42c	20.89±5.70b
	I am fully satisfied.	896	62.33±22.63d	15.02±5.24c	16.03±8.00c	11.45±5.77d	19.81±7.46c
F; p			111.056;**0.000**	35.772;**0.000**	87.009;**0.000**	131.851;**0.000**	71.213;**0.000**
Having sexual intercourse during pregnancy	Yes	1912	63.70±19.49	15.35±4,.8	15.79±6.90	12.44±5.18	20.10±6.41
	No	858	72.02±20.33	16.65±4.25	18.91±7.07	13.38±5.75	23.06±7.26
t; p			-10.077;**0.000**	-7.161;**0.000**	-10.940;**0.000**	-4.081;**0.000**	-10.275;**0.000**
Being satisfied with the sex life in the current pregnancy	I am not satisfied at all.	472	82.18±21.26a	17.02±5.17a	21.91±7.38	17.70±5.82a	25.54±6.61a
	I am not satisfied.	688	68.57±17.08b	16.49±4.02a	17.63±6.42	13.44±4.94b	21.00±5.94b
	I am satisfied.	1270	60.76±16.36c	15.34±4.19b	14.64±5.78	11.22±4.12c	19.54±6.04b
	I am fully satisfied.	340	60.15±23.92c	14.05±5.46c	15.72±8.44	10.08±5.06c	20.29±8.59b
F; p			169.771;**0.000**	38.390;**0.000**	145.977;**0.000**	252.632;**0.000**	99.772;**0.000**
Experiencing a problem during sexual intercourse in pregnancy	Yes	1172	72.64±20.48	16.45±4.28	19.01±7.30	14.74±5.95	22.42±6.78
	No	1598	61.61±18.52	15.24±4.74	15.10±6.46	11.26±4.38	19.99±6.67
t; p			14.569;**0.000**	7.033;**0.000**	14.610;**0.000**	16.883;**0.000**	9.395;**0.000**
Having a change in sexual desire during pregnancy	None	1111	67.80±19.04a	16.27±4.25a	17.37±6.97a	13.05±5.15a	21.09±6.29a
	Decreased	1302	66.68±19.27a	15.82±4.27b	16.90±7.09a	12.59±5.18ab	21.36±6.85a
	Increased	357	60.06±24.80b	13.89±6.05c	14.31±7.05b	12.27±6.62b	19.58±8.02b
F; p			20.778;**0.000**	37.389;**0.000**	26.174;**0.000**	3.753; **0.024**	9.672;**0.000**
Having knowledge about sex life in pregnancy	Yes	1707	67.50±21.90	15.51±4.99	17.37±7.67	13.28±5.72	21.32±7.30
	No	1063	64.32±16.71	16.14±3.83	15.77±5.95	11.86±4.66	20.54±5.93
t; p			4.306;**0.000**	-3.702;**0.000**	6.148;**0.000**	7.102;**0.000**	3.092;**0.002**

X±SD: Mean ± Standard Deviation; F: One-way analysis of variance; t: Independent samples t-test

a,b,c,d: Letters indicating statistically significant between-group differences as per the Tukey's HSD test – there is no statistically significant difference between groups that are denoted with the same letter.

Discussion

Sexuality is affected by several sexual myths, physical and psychosocial changes during pregnancy, is a topic that is private and hard to share in most societies (Karabulutlu, 2018; Uctu et al., 2018). In the current study, it was found that pregnant women had moderately negative attitudes and beliefs toward sexuality during pregnancy and were moderately concerned about their pregnancy, baby, and attractiveness. In studies carried out in different countries, it was discerned that women had positive attitudes toward sexual intercourse during pregnancy (Adegboyega, 2019; Bahloul et al., 2018). On the other hand,

in certain studies, nearly 30% of the pregnant women stated that sex was a taboo and endangered pregnancy and fetus (Kiemtorè et al., 2016; Chebabe et al., 2019). It is considered that all these differences in results may have been linked to socio-cultural differences between individuals.

The marriage life and the sexual partner's myths are significant elements that affect sexuality. In the current study, it was identified that, as the age, marriage age, and the marriage duration of the pregnant women and their spouses increased, pregnant women had more negative attitudes and beliefs toward sexuality during pregnancy. According to the regression analysis, these variables do not affect sexual myths during pregnancy. Adegboyega (2019) found that pregnant women of advanced age had more negative attitudes toward sexual intercourse. Also, in the study by Shayan et al., (2020), it was discerned that age and marriage duration of the pregnant women had a statistically significant relationship with the sexual function during pregnancy. It is considered that the increase in age and marriage duration may have created an inclination toward the embracement of traditional perspectives and taboos. On the contrary, in certain studies, it was identified that pregnant women's sexual behaviors did not differ as per age and marriage year (Adegboyega, 2019; Sossah, 2014). Moreover, it was put forward that there was a relationship between the intimacy of couples in marriage and their sexual attitudes (Hee Eun & Jung Hee, 2017). In this parallel, in our study, pregnant women who did not want the current marriage and pregnant women who were not satisfied with the current marital relationship had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women. In the regression analysis, it is seen that satisfaction with the marital relationship does not affect the sexual myths about pregnancy.

It is known that, as the socio-economic development level of the place of residence decreases, sexual desire and satisfaction decrease (Uctu et al., 2018). In the current study, it was found that pregnant women who resided in the Eastern Anatolia and Southeastern Anatolia regions of Turkiye had more negative attitudes and beliefs toward sexuality during pregnancy than those residing in other geographical regions of Turkiye. These two regions are the most socio-culturally and economically disadvantaged regions of Turkiye. Moreover, in the current study, pregnant women who were not working, resided in the village/town, were members of an extended family, had a spouse with low-level education, and had a spouse not working expenses had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women. These variables were found to affect sexual myths during pregnancy. It is inevitable that the aforementioned demographic factors affect sexual beliefs and sex life in association with the family's low socio-cultural level and its failure to cope with economic challenges. Similar results were obtained also in the study performed by Alves et al. (2021) on adolescents.

Also, in our study, it was discerned that pregnant women had more negative attitudes and beliefs toward sexuality during pregnancy as the gravidity, the number of living children, and gestational age (week) increased. Likewise, in the study by Chebabe et al. (2019), it was found that multiparous women had lower levels of sexual satisfaction than primiparous women. Having higher gravidity and a larger number of children may have induced pregnant women to get distanced from sexuality and to think negatively about this topic on the basis of past experiences and exhaustion. Besides, it was put forward that, as the gestational age increased, concerns about having sexual intercourse during pregnancy increased (Mazúchová et al., 2018) and also, sexual activity, sexual desire, and sexual satisfaction decreased in the last trimester in association with physical and emotional symptoms (Chebabe et al., 2019; Karabulutlu, 2018; Oche et al., 2020; Rahimian et al., 2019). On the other hand, in the study by Sossah (2014), it was identified that there was no significant difference in pregnant women's sexual behaviors as per the gestational age.

Moreover, in our study, pregnant women who had an unplanned pregnancy had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women. In a similar vein,

in the study by Shayan et al. (2020), it was found that women who had an unwanted pregnancy had more negative sexual attitudes. If the pregnancy is not planned in advance by spouses, spouses can blame each other, and hence, sexuality-related negative thoughts and problems can emerge (Karabulutlu, 2018). Also, it was stated that women who got pregnant with assisted reproductive techniques avoided sex during pregnancy due to their concerns about the baby's health, their own health, and the safety of pregnancy (Stevenson et al., 2016; Ranjbar et al., 2015). However, in our study, it is astonishing that women who got pregnant with assisted reproductive techniques had more positive attitudes and beliefs toward sexuality during pregnancy than those getting pregnant spontaneously. Being pregnant with assisted reproductive techniques has affected sexual myths.

It was asserted that the majority of women had sexual intercourse during pregnancy (Oche et al., 2020; Kiemtorè et al., 2016), however, they had a lower libido level and sexual intercourse frequency (Anzaku et al., 2015; Bahloul et al., 2018) just as it was stated in our study.

Besides, in our study, pregnant women who did not have sexual intercourse during pregnancy, pregnant women who were not satisfied with their sex lives before the current pregnancy, and pregnant women who were not satisfied with their sex lives during the current pregnancy had more negative attitudes and beliefs toward sexuality during pregnancy than other respective groups of pregnant women. These variables have affected the myths about sexuality in pregnancy.

Also, in previous studies, it was stated that women who had more negative sexual attitudes during pregnancy had a lower sexual desire and sexual intercourse frequency (Jawed-Wessel et al., 2019; Kiemtorè et al., 2016). Additionally, it was asserted that less frequent vaginal intercourse during the pregnancy period was associated with less satisfaction with the intercourse (Jawed-Wessel et al., 2019).

Furthermore, in our study, it has been determined that women having problems in sexual intercourse during pregnancy increase sexual myths about pregnancy. This situation may have been linked to the physiological, psychological, and emotional changes taking place during pregnancy and the cultural background of pregnant women who avoided talking about their sexual desires and needs (Anzaku et al., 2015; Bahloul et al., 2018).

Sexual myths about pregnancy increase individuals' needs for knowledge, and accordingly, the training about sexuality given to couples affects their sexual attitudes positively (Aliabadian et al., 2020; Uctu et al., 2018). In the current research, it has been determined that women's having knowledge about sex life in pregnancy increases sexual myths about pregnancy. Contrary to this finding of the current research, the study by Sossah (2014) found that women who had a small amount of knowledge about sexuality in pregnancy developed a negative attitude toward sexuality during pregnancy. Again, in the semi-experimental study by Navidian et al. (2016), it was identified that a five-session sexual group consultancy provided for six weeks improved pregnant women's sexuality-related conventional perceptions and attitudes. This situation can be connected with the likelihood that the majority of pregnant women included in our study had knowledge about sex life in pregnancy but most of these women did not obtain this knowledge from reliable sources as was the case in the study by Mazúchová et al. (2018).

Limitations: The study data were collected based on self-reporting by the individuals and the information provided by the participants was assumed to be correct.

Conclusion: This study showed that the pregnant women had moderately negative attitudes and beliefs toward sexuality during pregnancy. The fact that pregnant women experience problems in sexual intercourse during pregnancy, and have knowledge about sex life in pregnancy increase sexual myths about pregnancy. The fact that the pregnant women are having a planned pregnancy, being satisfied with pre-pregnancy sexuality, having sexual intercourse and being satisfied with sexuality during pregnancy decrease their sexual myths about pregnancy. A sexuality-related effective communication, training, and consultancy including also the spouses should be put in place during the prenatal follow-up and care. To mitigate the effects of sexual

myths on the pregnant woman and to protect and enhance pregnant woman's sexual health in proper conditions, health professionals should develop intervention strategies that include also the pregnant woman's spouse and focus on the improvement of societal awareness at the socio-cultural level.

Institutions where the study was conducted:

- Samsun Gynecology and Pediatrics Hospital affiliated to Samsun Training and Research Hospital (Samsun/Turkiye),
- Fırat University Hospital (Elazıg/Turkiye),
- Health Sciences University, Zeynep Kamil Women and Children's Diseases Training and Research Hospital (Istanbul/Turkiye),
- Nigde Omer Halisdemir University, Training and Research Hospital (Nigde/ Turkiye),
- Izmir Democracy University, Buca Seyfi Demirsoy Training and Research Hospital (Izmir/Turkiye),
- Diyarbakır Gynaecology and Paediatrics Hospital (Diyarbakır/Turkiye),
- Mustafa Kemal University Research and Application Hospital (Antakya/Turkiye).

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