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Factors associated with sexual practices and positions performed by pregnant women: a cross-sectional study

Fatores associados às práticas e posições sexuais realizadas por mulheres grávidas: estudo transversal

Factores relacionados a las prácticas y posiciones sexuales realizadas por mujeres embarazadas: estudio transversal

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ABSTRACT

Objectives: to identify factors associated with the sexual practices and positions performed by pregnant women. **Methods:** a cross-sectional, quantitative study conducted with 354 pregnant women, in the interior of Ceará, Brazil, in 2016. For data collection, a form and a Pregnancy Sexuality Questionnaire were used. **Results:** there was a reduction in the sexual initiative of the woman, sexual disposition of the couple, sexual practices and most of the sexual positions, while the maintenance of preliminary sexual activities and initiative to perform them was verified. Sexual practices and positions decreased ($p<0.0001$): preliminary sexual activities, sexual disposition, lubrication, orgasm, pain or discomfort, sexual positions, sexual practices, and sexual satisfaction. Sexual practices and positions increased ($p<0.0001$) as a function of: education, number of deliveries, sexual life, desire and arousal, and sexual disposition of the pregnant woman, frequency of orgasm and of sexual practices ($p<0.0001$). **Conclusions:** sexual practices and positions of pregnant women were affected by domains of sexual function, sexual, reproductive, physical, and psychological aspects.
Descriptors: Sexuality; Pregnant Women; Sexual Behavior; Prenatal Care; Women's Health.

RESUMO

Objetivos: identificar fatores associados às práticas e posições sexuais realizadas por mulheres grávidas. **Métodos:** estudo transversal, quantitativo, realizado com 354 mulheres grávidas, no interior do Ceará, Brasil, em 2016. Para coleta de dados, utilizou-se formulário e Questionário de Sexualidade na Gestação. **Resultados:** houve redução na iniciativa sexual da mulher, disposição sexual do casal, práticas sexuais e da maioria das posições sexuais, ao passo que se constatou manutenção das atividades sexuais preliminares e da iniciativa para realizá-las. Reduziram-se práticas e posições sexuais ($p<0,0001$): atividades sexuais preliminares, disposição sexual, lubrificação, orgasmo, dor ou desconforto, posições sexuais, práticas sexuais e satisfação sexual. Práticas e posições sexuais aumentaram ($p<0,0001$) em função de: escolaridade, número de partos, vida sexual, desejo e excitação e disposição sexual da gestante, frequência do orgasmo e de práticas sexuais. **Conclusões:** práticas e posições sexuais de mulheres grávidas foram afetadas por domínios da função sexual, aspectos sexuais, reprodutivos, físicos e psicológicos.
Descritores: Sexualidade; Gestantes; Comportamento Sexual; Cuidado Pré-Natal; Saúde da Mulher.

RESUMEN

Objetivos: identificar factores relacionados a prácticas y posiciones sexuales realizadas por mujeres embarazadas. **Métodos:** estudio transversal, cuantitativo, realizado con 354 mujeres embarazadas, en interior Cearense, Brasil, en 2016. Utilizado formulario y Encuesta de Sexualidad en el Embarazo, para recolecta de datos. **Resultados:** hubo reducción en la iniciativa sexual de la mujer, disposición sexual del casal, prácticas sexuales y mayoría de las posiciones sexuales, mientras que se constató manutención de actividades sexuales preliminares e iniciativa para realizarlas. Redujeron prácticas y posiciones sexuales ($p<0,0001$): actividades sexuales preliminares, disposición sexual, lubricación, orgasmo, dolor o incomodidad, posiciones sexuales, prácticas sexuales y satisfacción sexual. Prácticas y posiciones sexuales aumentaron ($p<0,0001$) en función de: escolaridad, número de partos, vida sexual, deseo y excitación y disposición sexual de la embarazada, frecuencia del orgasmo y prácticas sexuales. **Conclusiones:** prácticas y posiciones sexuales de embarazadas fueron afectadas por dominios de la función sexual, aspectos sexuales, reproductivos, físicos y psicológicos.
Descriptores: Sexualidad; Mujeres Embarazadas; Conducta Sexual; Atención Prenatal; Salud de la Mujer.

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INTRODUCTION

During pregnancy, the perception and experience of the body as sexualized are configured as unique and can be challenging, which demands readjustments in the face of these changes. Therefore, difficulties in this area can impact the sexual life[1]. The sexual activity performed before pregnancy, changes experienced during pregnancy in the physical, emotional, existential, and gender role areas can affect the changes in sexual practices and positions and culminate in a decrease or absence of them[1-3].

In a review study[3], it was evidenced that most of the researches with pregnant women do not specify sexual practices or positions performed. When mentioned, a reduction in the frequency of preliminary sexual activities, sexual practices per gestational trimester, or sexual abstinence is observed, as well as a reduction in sexual positions related to the need for adaptation in view of the pregnancy changes.

The sexual practices and positions performed during pregnancy can be negatively affected by beliefs, moral and cultural values, myths and fear regarding negative repercussions on fetal health, body anatomical changes, marital relationship, intrapsychic factors and lack of experience in adapting to sex during pregnancy[3]. However, when used comfortably[4-5] and creative ways to obtain pleasure in a way that favors the closeness of the couple, strengthens the expression of love and desire, affective bonds and complicity[1,3].

Thus, there is a need for sexual positions that adjust to the changes experienced per gestational trimester and that allow for comfort during sex[3]. However, results from an integrative literature review[3] showed that, although there is a reduction in the frequency of sexual practices and positions during pregnancy, there is a gap in scientific knowledge about their specification during pregnancy. Thus, by investigating sexual practices and positions of pregnant women, as well as intervening factors in their realization, this study contributes to fill this gap in the scientific literature.

OBJECTIVES

To identify factors associated with the sexual practices and positions performed by pregnant women.

METHODS

Ethical Aspects

The research was approved by the Research Ethics Committee of the Regional University of Cariri (URCA), in accordance with Resolution no. 466/2012, respecting the national and international standards for research with human beings and guaranteeing the rights of the participants.

Study design, time and place

Cross-sectional study with quantitative approach conducted in the municipalities of Barbalha, Crato, and Juazeiro do Norte, located in the Metropolitan Region of Cariri, state of Ceará, Brazil. According to current data from the Brazilian Institute of Geography and Statistics[6], the municipality of Barbalha has a land area of 608.158 km^2, an estimated population of 61,228 people and a Municipal Human Development Index (HDI) of 0.683; Crato has a land area of 1,138.150 km2, an estimated population of 133,031 inhabitants and an HDI of 0.713; and Juazeiro do Norte has a land area of 258.788 km^2 with an estimated population of 276,264 inhabitants and an HDI of 0.694.

Data collection occurred from February to September 2016. The recommendations described in The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) were adopted.

Population or sample; inclusion and exclusion criteria

The study population consisted of 4,350 pregnant women registered in the Prenatal, Childbirth, Puerperium and Child Monitoring and Evaluation System (SISPRENATAL-WEB) and monitored by the Family Health Strategy (FHS) teams in the cities of Barbalha, Crato, and Juazeiro do Norte. To obtain the sample size calculation, the formula for finite population was used and the confidence level of 95%, the proportion of unfavorable results in the population of 50% and the margin of error of 5% were considered, obtaining a conservative sample size of 353 women. Thus, the sample consisted of 354 women, and the sampling was stratified by gestational trimester.

The inclusion criteria for the selection of participants were: pregnant women who were registered in SISPRENATAL-WEB and followed up in the usual risk prenatal care by the FHS. Exclusion criteria were: being an adolescent (aged 10-19 years) according to the World Health Organization classification, due to the overlapping of heterogeneous, complex and multifactorial aspects in the experience of sexuality during adolescent pregnancy[7]; not having a sexual partner; being illiterate; presenting a physical or mental disability or physical discomfort that would make it impossible to read and or fill out the data collection instruments; and not filling out the data collection instruments.

Study protocol

For data collection, we used stratified proportional sampling by gestational trimesters. This classification by gestational trimesters was performed by weeks of gestational age (GA), as recommended by the Brazilian Ministry of Health: the first trimester goes from the 1st to the 13th week; the second trimester, from the 14th to the 27th week; and the third trimester, from the 28th week to term. Therefore, each gestational trimester included 118 pregnant women, totaling 354 participants.

To obtain the sample, 760 pregnant women were approached, 406 of whom were excluded for: being under 20 years of age (n = 160), being followed-up in high-risk prenatal care (n = 113), not having a sexual partner (n = 20), being illiterate (n = 6), presenting physical disability and/or discomfort that made it impossible to read and/or fill out the data collection instruments (n = 2), having a psychiatric disorder (n = 1), having saturation of the trimester stratum (n = 94) and for not filling out the instruments used for data collection (n = 10).

These approaches occurred in the waiting room of Basic Health Units (BHU) while pregnant women were waiting for prenatal consultations, at home (when approached in the BHU and could not participate in the collection at the time) and in two referral services for ultrasound and prenatal consultations associated with the Unified Health System. The women were informed about the objectives of the study and invited to participate by signing the

Informed Consent Form, the Post-Enlightened Consent Form, and filling out the data collection instruments.

Two instruments were used: a self-made form that contained variables for sociodemographic, affective-sexual and reproductive characterization; and the Pregnancy Sexuality Questionnaire (PSQ) [8], composed of 29 questions about anamnesis, sexual behavior, sexual response/function and symbolic aspects (perception), answered in order to compare data from the pre-pregnancy and gestational periods[8]. The researcher or collaborators trained for data collection were responsible for filling out the form by means of an individual interview in a reserved place. The questionnaire was self-applicable, being filled out by the woman in the presence of the researcher or collaborators available to answer questions without interfering in the answers of the participants.

In this study, we used data from a self-made form and questions from the PSQ inherent to the anamnesis; sexual behavior (frequency of sexual intercourse, preliminary sexual activities, sexual practices and positions performed); and symbolic aspects (perception): pleasurable sexual practices, women's sexual disposition and perception of their partner's sexual disposition.

Analysis of results and statistics

The data was organized in Microsoft Office Excel spreadsheet (version 2010); and, for statistical analysis (descriptive and inferential), the statistical software RStudio (version 386 3.2.4)[9].

The Shapiro-Wilk test identified the non-normality of the data. The association of the score of sexual practices and positions with all the variables of the form and the PSQ was analyzed using Pearson's chi-square, Spearman, Kruskal-Wallis or Mann-Whitney U tests. To apply the statistical tests, the following covariates were considered: pre-pregnancy, gestational periods and gestational trimesters; the classification and the different possible combinations between two variables. A p value of less than 0.05 was adopted as a parameter of statistical significance.

To investigate the variables that interfered with sexual practices and positions, a score of sexual practices and positions was created. Because the response options of these variables in the PSQ are not mutually exclusive and because there is an equal possibility of all alternatives being representative of the sexual practices and positions performed, each response item was considered equivalent to 1 point, with the possibility of totaling at least 0 and at most 20 points. The result referring to the sum of sexual practices and positions was multiplied by the constant 5, determined in such a way that the score assumed values between 0% and 100%, according to the answers of the participants.

The results were presented in tables and figures by means of descriptive statistics of frequency (relative and absolute), central tendency values, dispersion and inferential statistics.

RESULTS

Regarding sociodemographic aspects, the participants were between 20 and 35 years old and mean 26.9 years (SD±4.3), predominantly living in urban areas (n = 309; 87.3%), with monthly family income of up to one minimum wage (n = 227; 64,1% - the value of the minimum wage in force in the period was R$ 880.00), had completed high school (n = 152; 42.9%), were catholic (n = 293; 82.8%), had a heterosexual relationship (n = 353; 99.8%), and were married (n = 153; 43.2%).

As for obstetric, reproductive, and affective-sexual characteristics, the participants were mostly multigender, multiparous, with no history of abortion (n = 304, 85.9%). Gestational age ranged from 4 to 41 weeks and 1 day, with a mean of 22 weeks and 2 days. Sexual initiation occurred between 10 and 34 years of age, with a mean of 17.7 years, and the number of sexual partners ranged from 1 to 16, with a mean of 2.2 partners.

Sexual practice(s) performed by women in the pre-pregnancy and gestational periods

The sexual practices performed by women can be seen in Table 1.

The frequency of sexual practice(s) during pregnancy when compared to the pre-pregnancy period was predominantly reduced (n = 237; 67%), followed by maintenance (n = 101; 28.5%) and increase (n = 16; 4.5%). This result was statistically significant (p < 0.0001) between the analyzed periods. During pregnancy, the frequency of weekly sexual practice(s) predominated in the range of one to four times, being more frequent among women in the second trimester 72% (n = 85). There was no statistical significance (p = 0,06228) between gestational trimesters, and seven women (0.5%) reported sexual abstinence during pregnancy.

Regarding the frequency of preliminary sexual activity(s) (kissing, hugging, massaging, intimate touching, licking, and fondling), there was a predominance of maintenance (n = 265; 74.9%), followed by decrease (n = 72; 20.33%) and increase (n = 17; 4.8%). These changes were statistically significant (p < 0.0001). During pregnancy, most women reported "always" performing these activities, reaching 46.6% in the second trimester (n = 55), 45.7% (n = 54) in the third trimester, and 43.3% (n = 51) in the first trimester. There was no statistical significance (p = 0.5607) by gestational trimesters.

Regarding the initiative of the woman, her partner or both to practice sex before pregnancy, it was found that 6.7% (n = 24) of the participants reported having the sexual initiative, 41.5% (n = 147) said it was done by their partner, 51.4% (n = 182) said there was mutual sexual initiative, and 0.2% (n = 01) did not answer the questionnaire.

During pregnancy, we found a higher frequency of partner's initiative reported by 50.3% (n = 178) of the women, while self-initiative was reported by 6% (n = 21); mutual initiative, by 42.6% (n = 151) of the women; and 1.1% (n = 04) did not answer. The sexual initiative of the partner predominated in both periods analyzed.

When this data is analyzed by gestational trimester, the initiative to engage in sexual practices was predominantly from the partner, reaching 52.6% (n = 62) in the first trimester, 50.9% (n = 60) in the second; and, in the third trimester, the partner's initiative was equal to the mutual initiative (n = 56; 47.45%). No statistically significant relations were identified between the initiative to engage in sexual practices and gestational trimesters (p = 0.1331).

Regarding the initiative to perform preliminary sexual activity(s) during pregnancy, when compared to the pre-pregnancy period, we observed predominantly maintenance (n = 281; 79.3%), followed by decrease (n = 52; 14.7%) and increase (n = 21; 6%). These changes were statistically significant (p < 0.0001).

Table 1 – Sexual practice performed by women, Barbalha, Crato and Juazeiro do Norte, Ceará, Brazil, 2016

Sexual practice performed	Pregnancy				Trimesters					
	Before		During		1st		2nd		3rd	
	n	%	n	%	n	%	n	%	n	%
Solo Masturbation	43	4.5	25	3.1	07	2.8	11	4.0	07	2.5
Masturbation performed by partner	114	12.1	102	12.7	33	13.0	32	11.9	37	13.4
Masturbation performed on partner	72	7.6	68	8.4	22	8.7	21	7.8	25	9.0
Mutual masturbation	68	7.2	57	7.1	18	7.0	18	6.7	21	7.6
Receiving oral sex	112	11.9	80	10.0	24	9.4	28	10.4	28	10.9
Performing oral sex on your partner	83	8.8	62	7.7	20	7.9	21	7.8	21	6.7
Mutual oral sex, known as "69	61	6.5	37	4.6	08	3.1	17	6.2	12	4.4
Vaginal sex	353	37.4	344	42.9	111	43.7	116	43.0	117	42.3
Anal sex	32	3.4	17	2.1	05	2.0	05	1.8	07	2.5
Vibrator stimulation	06	0.6	04	0.5	01	0.4	01	0.4	02	0.7
Others	00	0.0	00	0.0	0.0	0.0	00	0.0	00	0.0
Did not answer	00	0.0	05	0.6	05	2.0	00	0.0	00	0.0
Total	944	100	801	100	254	100	270	100	277	100

The answers were not mutually exclusive.

Table 2 – Sexual practice that provided sexual pleasure to the woman, Barbalha, Crato and Juazeiro do Norte, Ceará, Brazil, 2016

Pleasant sexual practice	Pregnancy				Trimesters					
	Before		During		1st		2nd		3rd	
	n	%	n	%	n	%	n	%	n	%
Solo Masturbation	28	3.8	19	2.7	06	3.0	06	3.0	07	3.2
Masturbation performed by partner	95	12.8	84	12.0	25	12.1	28	13.8	31	14.2
Masturbation performed on partner	46	6.2	43	6.1	12	6.0	15	7.4	16	7.3
Mutual masturbation	46	6.2	37	5.6	15	7.2	09	4.4	13	6.0
Receiving oral sex	97	13.1	66	9.7	24	11.6	21	10.3	21	9.6
Performing oral sex on your partner	50	6.8	35	5.0	10	4.8	10	4.9	15	6.9
Mutual oral sex, known as "69	41	5.5	26	3.9	06	2.9	08	3.9	12	5.5
Vaginal sex	315	42.6	295	42.8	99	48.0	101	49.8	95	43.6
Anal sex	19	2.6	11	1.7	03	1.5	04	2.0	04	1.8
Vibrator stimulation	03	0.4	00	0.0	00	0.0	00	0.0	00	0.0
Others (oral stumulation on the breasts)	00	0.0	01	0.1	01	0.5	00	0.0	00	0.0
Did not answer	00	0.0	06	0.0	05	2.4	01	0.5	00	0.0
None	00	0.0	04	10.4	00	0.0	00	0.0	04	1.8
Total	740	100	627	100	206	100	203	100	218	100

The answers were not mutually exclusive.

Table 3 – Weekly sexual disposition among pregnant women by gestational trimester and partner's perspective, Barbalha, Crato and Juazeiro do Norte, Ceará, Brazil, 2016

Weekly sexual disposition	1st trimester				2nd trimester				3rd trimester			
	Pregnant woman		Partner		Pregnant woman		Partner		Pregnant woman		Partner	
	n	%	n	%	n	%	n	%	n	%	n	%
<once	25	21.2	14	11.9	33	28.0	14	11.8	39	33.0	12	10.2
Between 1 and 4 times	64	54.2	63	53.4	67	56.8	69	58.5	53	45.0	54	45.8
> 4 times	29	24.6	41	34.7	18	15.2	35	29.7	26	22.0	52	44.0
Total	118	100	118	100	118	100	118	100	118	100	118	100

Most women reported only vaginal sexual practice in both periods, 40.7% (n = 144) in the pregestational period and 46.9% (n = 166) during pregnancy. There was a significant association between the pre-pregnancy and gestational periods ($p < 0.0001$), and no significant association was identified by gestational trimesters ($p = 0.2875$).

The realization of sexual practices had been more pleasurable before pregnancy, especially vaginal sexual practice. During pregnancy, the sexual pleasure obtained with this practice predominated in the second trimester, as shown in Table 2.

The frequency of sexual practices considered pleasurable by women in the pre-pregnancy and gestational periods (Table 2) differed from the frequency of sexual practices performed in both periods (Table 1). A statistically significant association was identified between the pre-pregnancy and gestational periods ($p < 0.0001$); however, a statistically significant association with gestational trimesters was not evidenced ($p = 0.3169$).

During pregnancy, there was a predominant decrease in sexual disposition (pregnant woman: n = 321; 90.7%; partner: n = 258; 72.9%), followed by maintenance (pregnant woman: n = 32; 9%; partner: n = 92; 26%) and increase (pregnant woman: n = 01; 0.3%; partner: n = 04; 1.1%). This change was statistically significant (pregnant woman: $p < 0.0001$; partner: $p < 0.0001$), as was the comparison between sexual disposition between the couple ($p < 0.0001$).

The weekly sexual disposition among pregnant women by gestational trimester and partner is shown in Table 3. There was no statistical significance between pregnant women's sexual disposition and gestational trimesters ($p = 0.1126$) and between pregnant women's ($p = 0.1126$) or partner's ($p = 0.2377$) sexual disposition by gestational trimesters.

Sexual position(s) performed by women in the pre-pregnancy and gestational periods

When comparing the sexual positions performed by women before and during pregnancy, we observed a marked reduction in most of them. Regardless of the period and/or trimester, position 1, called "missionary position," showed a higher frequency of performance, according to Table 4.

Table 4 – Sexual position performed during sexual practice, Barbalha, Crato and Juazeiro do Norte, Ceará, Brazil, 2016

Sexual position performed	Pregnancy				Trimesters					
	Before		During		1º		2º		3º	
	n	%	n	%	n	%	n	%	n	%
Position 1 - face to face, man on top, lying down (missionary position)	321	23.3	247	28.4	87	28.2	84	29.2	76	27.9
Position 2 - no eye contact ("spooning"), man on top, lying down	144	10.5	50	5.8	27	8.7	13	4.5	10	3.7
Position 3 - no eye contact ("spooning"), man on his knees and woman on all fours	198	14.4	136	15.7	49	15.8	43	15.0	44	16.2
Position 4 - no eye contact ("spooning"), side by side	120	8.7	126	14.5	34	11.0	50	17.4	42	15.4
Position 5 - face to face, woman lying on her back and man on his side	113	8.2	108	12.5	29	9.4	39	13.5	40	14.7
Position 6 - face to face, woman on top, sitting	116	8.4	47	5.4	23	7.4	11	3.8	13	4.8
Position 7 - no eye contact ("spooning"), woman on top, sitting	82	6.0	29	3.3	06	1.9	10	3.5	13	4.8
Position 8 - face to face, woman on top sitting and man lying down	155	11.3	69	7.9	30	9.7	22	7.6	17	6.2
Position 9 - no eye contact ("spooning"), woman on top sitting and man lying on his back	126	9.2	51	5.8	18	5.8	16	5.5	17	6.2
Did not answer	00	0.0	06	0.7	06	1.9	00	0.0	00	0.0
Total	1375	100	869	100	309	100	288	100	272	100

The answers were not mutually exclusive; The sexual positions were named to facilitate the description/interpretation of the results[10], however, in the PSQ instrument[8], there is also a representative figure indicating each sexual position.

There was a statistically significant association between sexual position(s) when pre-pregnancy and gestational periods were compared ($p < 0.0001$) with no statistical significance by gestational trimesters ($p = 0.1311$).

Factors associated with sexual practice(s) and position(s) performed by women during pregnancy

This study sought to investigate sociodemographic, affective-sexual, and reproductive factors associated with an increase (left) or decrease (right) in the score of sexual practices and positions. The variables with statistically significant association are presented in Figure 1.

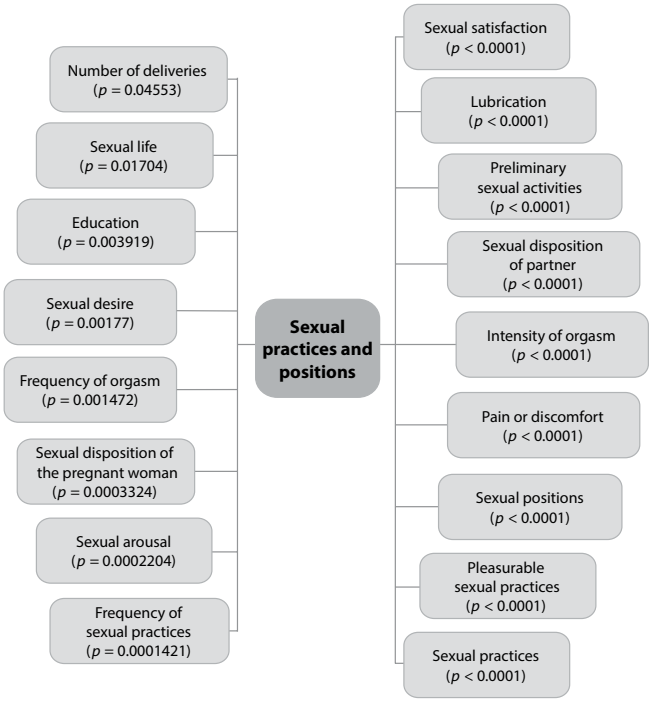

Figure 1 – Factors that influenced positively (left) and negatively (right) the sexual practices and positions performed during pregnancy

DISCUSSION

Sexual activity as a dimension of sexual behavior and sexuality can be performed for various purposes, among them reproduction, expression of affection, stimulation of intimacy, communication, reducing tension, and obtaining pleasure[11-12]. During pregnancy, some of these goals may not be applicable or feasible and, consequently, affect sexual behavior.

A reduction in the frequency of sexual activity during pregnancy has been demonstrated in previous studies[2-3,12-14].Although this experience is unique for each pregnant woman and couple, these changes can be associated with: beliefs, myths and taboos[3,14-16]; behavioral, physiological, pathological, marital, emotional changes, and changes in self-esteem and body image[1,3,16]; to reduced desire and eroticism[1]; and to lack of information about sex in pregnancy[5].

This research corroborated the reduction in the sexual disposition[3,8,17] of the woman and the couple throughout pregnancy, with greater frequency in the third trimester[17]. Decreased willingness and frequency of sexual activity can be motivated by the presence of pain and discomfort during penetration, sociodemographic variables (age, marital status, length of marriage, parity/number of children, ethnicity/race, education, social class, employment status, and religion), self-perceived or partner-perceived attractiveness, quality of the relationship and/or marital conflicts, changes in sexual activity over time, women's physical health, as well as by the couple's attitudes and feelings towards pregnancy and fetus[17].

Vaginal sexual practice was prevalent during pregnancy and by gestational trimester, however there is a tendency of reduction during pregnancy[3]. Although sexual dysfunctions are reported in the literature[18-21] and changes in sexual behavior during gestation[2,5,15], it was verified that the initiative to perform preliminary sexual activities was maintained.

Sexual and erotic activities with touching, hugging with non-genital stimulation[13-14,17], breast stimulation[17], clitoral[13,17], mutual masturbation and use of sex toys tends to remain during pregnancy[13-14,17], with women preferring less vaginal stimulation

in the second and third trimesters as a strategy to avoid discomfort and due to fear of affecting fetal health[17].

Sexual stimuli that are not restricted to the genitals are a strategy for exploring new ways of obtaining pleasure and can result in adaptations of sexual positions[13-14], which confirms the maintenance of preliminary sexual activities. These do not necessarily lead to penetrative sex, but they contribute to bringing the couple closer together and intensifying the union and intimacy[15], since, during the touching and caressing, there is greater body contact and appreciation that stimulate the woman's sexual pleasure[4].

Studies[1-3,17] found a reduction in the frequency of sexual practices in the first and third trimesters, with stability in the second trimester. However, in the population under study, a progressive reduction in the frequency of sexual practices was observed, confirming studies[2,5] that showed that during the third trimester, there is a greater decline in the frequency of sexual activity.

This decrease may result from lack of experience with sexual activity in pregnancy[5], of changes in self-esteem[2,13] and self-image due to the increase in pregnancy abdomen, discomfort in performing sexual positions[1], physical changes, mobility alterations[5], changes in sexual response with reduced sexual desire[1-2,5,17], sexual excitement and orgasm[2], dyspareunia[18], and centralization of attention on the fetus due to fear of causing damage and obstetric complications[5], as well as expectations and concerns about childbirth[2], attributing less importance to sexual satisfaction[5].

Contradictorily, in the third gestational trimester, a greater diversity of sexual practices was observed in the study population. This variability can be justified by the need for emotional adaptations, attitudes, and physical practices[2].

The sexual practices performed were more pleasurable before pregnancy. During pregnancy, sociocultural and psychological influences and physiological alterations can reverberate in adjustments of the couples in the sexual life or reduction of moments of pleasure, being that the accomplishment of sexual practices in this period is not predictive of the existence of sexual desire and pleasure, although these can remain during sexual activity[4].

In the second trimester, there is a higher frequency of pleasure with vaginal sexual practice, which is equalized in the first and third trimesters. This association may occur because it is the most frequent sexual practice. It is emphasized that curiosity about the body and its exploration during pregnancy, sensitivity, and femininity can favor new discoveries by the couple and even lead women to reach orgasm for the first time in sexual practices performed during pregnancy[4].

Sexual satisfaction during pregnancy can be associated with kissing, massages, masturbation, vaginal intercourse, and the use of a sex toy alone or with a partner. Although men may show greater sexual satisfaction, the improvement in sexual satisfaction in pregnant couples depends on the sexual behaviors adopted[14].

A reduction in the frequency of sexual positions was evidenced, although the "missionary position" is more used in all gestational periods and trimesters, which confirms a previous study[22], which identified a higher prevalence of this position. These findings raise reflections on the relationship between the choice of sexual positions and sexual activity during pregnancy.

Sexual positions are adapted as a result of physical changes[5], and their variability results from their creative use to obtain pleasure[4] and comfort during performance[4-5], as well as the search for places and positions adequate to the development of sexual intercourse, with emphasis on penetrative practices[1].

Changes in sexual function may interfere with sexual practices and positions adopted during pregnancy[3]. Thus, there is a need to strengthen the effective implementation of sexual and reproductive health actions in Primary Health Care[23], since sex education carried out in prenatal care by trained professionals contributes to improve sexual response and promote adaptive behaviors[24].

Study limitations

This study had as limitations the cross-sectional evaluation with an individual approach to the woman and the non-approach of the participants in the pre-pregnancy and post-pregnancy periods. In addition, the scarcity in the literature regarding the description of sexual practices and positions adopted by pregnant women limited the discussion and comparison of factors intervening in the results obtained.

In view of the above, we suggest the development of experimental studies that use a longitudinal and prospective methodological approach, in order to elucidate the relationship between the sexual practices and positions, the characteristics of the gestational period and the analysis of the concomitant experience with the partner.

Contributions to the field of Nursing, Health or Public Policy

Identifying factors associated with the sexual practices and positions of pregnant women provides subsidies for health professionals working in obstetric care to guide them about sexual behavior, clarify doubts, and contribute to the healthy experience of sexual activity. The results presented help in the elaboration and implementation of clinical care in sexual health during prenatal care; and its use in integrated approaches and sexual counseling carried out by health professionals, among them nurses, can help to improve sexual function, promote marital satisfaction, and improve the quality of sexual life of pregnant women.

Furthermore, the results found contribute to fill the gap in scientific knowledge regarding the specification of sexual practices and positions during usual risk pregnancy and intervening factors.

CONCLUSIONS

Pregnancy results in changes in the sexual practices and positions performed by women, although these changes, for the most part, do not present statistical significance by gestational trimesters. During the usual risk pregnancy, when compared to the pre-pregnancy period, there is a reduction in the frequency of sexual practices and most of the sexual positions, in the sexual disposition of the woman and partner, and in the performance of preliminary sexual activities.

Sexual practices and positions of pregnant women were negatively affected by domains of sexual function and related

aspects, sexual behavior, schooling and symbolic aspect (perception). The increase in sexual practices and positions performed by pregnant women in this study was related to the domains of sexual function, sexual behavior, parity, schooling, and symbolic aspects (perception). The subjectivity inherent in female sexual behavior is highlighted, while variables related to the same field can affect differently the performance of sexual practices and positions.

The incorporation of the results presented to the development of guidelines for clinical nursing care in the sexual field during prenatal care will allow a better understanding of the subjectivity inherent in sexual activity during this period. Also, it will favor adaptive behaviors of couples regarding sexual practices and positions with a view to the integrality of care in sexual health.

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