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## Sexual activity based fears during pregnancy, sexual function and dyadic adjustment in couples who are expecting their first child

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### ABSTRACT

**Purpose:** Sexual activity based fears during pregnancy are common, but very few studies have examined their association with relationship variables. Secondary analysis of associations between these fears during pregnancy and both partners' sexual function and dyadic adjustment were conducted.

**Materials and Methods:** A sample of 67 French-Canadian first-time parenting couples living in Ontario completed online questionnaires on sexual activity based fears, sexual function, and dyadic adjustment as experienced during pregnancy.

**Results:** While one-third of participants reported no fears, other couples experienced one to six fears, the two most common fears among partners being inducing labor and causing a miscarriage. Dyadic path analyses supported indirect associations between sexual activity based fears and lower dyadic adjustment *via* poorer sexual function. During pregnancy, these fears in women and men are associated with poorer dyadic adjustment in both partners through the women's poorer sexual function.

**Conclusion:** These findings suggest including prenatal sexual activity based fears in perinatal sexuality counseling, education, and interventions.

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Increased sexual difficulties and lowered relationship satisfaction are common in couples during pregnancy, especially for first-time parents [1–6]. Since sexuality is intrinsically linked to the partners' health and well-being [3,5,6], experiencing sexual and relational disturbances during pregnancy can negatively impact the well-being and stability of the relationship and the family [6,7]. Studies exploring psychological factors associated with prenatal sexual and relationship disturbances are still scarce. Sexual activity based fears, which are fears related to sexual activity that are thought to be threatening to the pregnancy and cause complications during pregnancy, are often experienced by pregnant couples [3,7,8] and could help explain why certain couples engage in sexual activities less often, avoid sex, or are abstinent. Sexual activity based fears, particularly pain-related fears in women, are likely to interfere with their sexual function [9,10], yet few studies have explored this issue in the perinatal context [11]. Several studies have documented the positive association between sexual function

(desire, satisfaction, sexual problems) and relationship satisfaction – the most studied component of dyadic adjustment – among pregnant women [12,13], and in first-time parents [14]. However, whether prenatal sexual activity based fears are related to relationship satisfaction – directly or indirectly *via* sexual function – is still unknown. To promote better sexual and relationship well-being in future parents, it is important to examine the associations among sexual activity based fears and sexual and relationship well-being. Secondary analysis of an original retrospective study investigated couples' sexual activity based fears in relation to their sexual function and dyadic adjustment during pregnancy.

### Prenatal sexual activity based fears

Researchers have identified seven main prenatal sexual activity based fears [7,8,15–19]: (1) fear of causing bleeding; (2) premature labor; (3) premature rupture of the membranes; (4) miscarriage; (5) infection; (6)

discomfort/pain; and (7) fear of hurting the baby, especially during vaginal penetration. However, research on these fears has been mostly descriptive and has explored associations between fears and sociodemographic or pregnancy-related variables only, including women's parity [7,15], education [7,15], religion and age [15], and stage of pregnancy [15,17].

Very few studies have examined how sexual activity based fears contribute to relationship difficulties in both partners during pregnancy. Only one study [11] specifically investigated sexual activity based fears and relationship well-being in the perinatal context, which found an association between greater fear-based reasons for not having sex and higher sexual distress in 261 pregnant women. However, no associations between women's fears and sexual functioning, sexual satisfaction, and relationship well-being were found. Only two studies have documented men's prenatal sexual experiences, including sexual fears [16,19]. Other studies [15,17] have explored men's sexual fears from their partner's perspective, thus limiting researchers' and clinicians' understanding of men's sexual fears during pregnancy. No study has examined prenatal sexual activity based fears from a dyadic viewpoint: further investigation including both women and men is thus warranted. Such an approach would allow us to better understand how both partners' sexual activity based fears may contribute to their own and their partners' sexual function and dyadic adjustment during pregnancy. Furthermore, understanding whether these fears may relate to a lower dyadic adjustment through a poorer sexual function may prove useful to improve perinatal sexuality counseling, education, and interventions.

## Research question

The research question underlying this study is: What are the direct and indirect associations between sexual activity based fears during pregnancy and dyadic adjustment through sexual function among both partners of first-time pregnant couples?

## Materials and methods

### Data collection

Couples were recruited as part of a larger retrospective study describing the sexual experiences of couples during and after pregnancy. Inclusion criteria were: (1) both partners of a heterosexual couple; (2) identify as French-Canadian living in Ontario; (3) live together for at least one year before the pregnancy; and (4) have a

first child aged between 6 and 12 months and born at term following an uncomplicated pregnancy and birth. Couples with high-risk pregnancies were excluded, since their sexual fears can be justified. Since language was considered a determinant of healthcare in the larger study, only French-Canadian couples were included in this sample. Ethics approvals were obtained from the researchers' institution, a local hospital, and a public health unit.

Eligible participants completed online questionnaires separately. Retrospective questionnaires were used to assess their experience during pregnancy. Participants indicated whether or not they experienced a series of sexual activity based fears compiled based on a literature search [1]: (1) miscarriage, (2) develop an infection, (3) hurt the baby, (4) cause bleeding, (5) induce labor, (6) induce premature rupture of the membranes, (7) discomfort/pain, (8) other. A total score was calculated by summing the number of sexual fears, ranging from 0 to 8.

Participants were invited to reflect on their prenatal sexual life and responded to a retrospective scale of sexual function during pregnancy. Women completed the Female Sexual Function Index (FSFI) [20], which measures sexual function (19 items) in six domains: desire, arousal, lubrication, orgasm, satisfaction, and pain. The total score ranges from 2 to 36; higher scores indicate better sexual function. The alpha coefficient in the validation study [20] was .97, which is the same for this study. Men completed the Brief Male Sexual Function Index (BMSFI) [21] which measures sexual function (11 items) in five domains: arousal/desire, erection, ejaculation, sexual problems, and satisfaction. The total score ranges from 0 to 44; higher scores indicate better sexual function. The alpha coefficient in the validation study [22] was .94; it was .73 in this study. Scores were standardized to allow comparing women's and men's sexual function scores.

Participants were also asked to reflect on their couple relationship during pregnancy. Partners' dyadic adjustment during pregnancy was measured retrospectively with the Dyadic Adjustment Scale (DAS; 32 items) [23]. The total score ranges from 0 to 151. Higher scores indicate better dyadic adjustment. The alpha coefficient was high in the validation study (.96) [23] and in the current study (women: .92; men: .93).

### Data analysis strategy

Descriptive analyses were conducted to provide a portrait of the sample. To verify whether sexual activity based fears were indirectly associated with dyadic

adjustment *via* sexual function in both partners during pregnancy, dyadic path analyses based on the Actor-Partner Interdependence Model [24] were conducted with AMOS 26 software using bootstrapping [25] with confidence intervals (2000 samples). To rule-out alternative hypotheses, an alternative model was also tested, in which dyadic adjustment was the mediator of the sexual activity based fears – sexual function association. The models’ adjustment was assessed with four fit indices: a non-significant chi-square, a Comparative Fit Index (CFI) > .95, a Root Mean Square Error of Approximation (RMSEA) and a Standardized Root Mean Square Residuals (SRMR) < .08 [26–28].

## Results

### Descriptive statistics

A total of 67 couples were included in the original study; sociodemographic data are presented in Table 1. Participants’ prenatal sexual activity based fears are presented in Table 2. One-third of the women and one-third of the men reported no fears. The two most common sexual activity based fears were inducing labor and causing a miscarriage. More women than men were afraid of inducing premature rupture of membranes, whereas more men than women were

afraid of causing discomfort and/or pain. Table 3 presents descriptive data for the study variables. Women experienced significantly more prenatal sexual activity based fears than men, although the number of fears in women and men were strongly correlated ( $r = .724, p < .001$ ). As for sexual function, women experienced problems with sexual desire, sexual arousal, lubrication, orgasm, sexual satisfaction and sexual pain, while men experienced problems with sexual desire, ejaculation (premature and delayed ejaculation), erection (erectile dysfunction), and sexual satisfaction.

### Main analyses

Figure 1 presents the results of the path analyses assessing the direct and indirect associations between partners’ sexual activity based fears and dyadic adjustment *via* sexual function. An alternative model was tested (i.e. sexual activity based fears → dyadic adjustment → sexual function), but it yielded a poorer fit ( $\chi^2 = 11.408, p = .003, CFI = .953, RMSEA = .267, SRMR = .119$ ) than the hypothesized model ( $\chi^2 = 0.239, p = .888, CFI = 1.000, RMSEA = .000, SRMR = .013$ ). We found three significant indirect associations. Women’s sexual activity based fears were related to their own lower dyadic adjustment through their own lower sexual function ( $\beta = -.28; SE = .14, p = .001, 90\% CI [-.57; -.13]$ ). Men’s sexual activity based fears were related to their own lower dyadic adjustment through their own lower sexual function ( $\beta = -.12; SE = .06, p = .042, 90\% CI [-.20; -.02]$ ). Finally, women’s sexual activity based fears were related to their partner’s lower dyadic adjustment through women’s lower sexual function ( $\beta = -.22; SE = .13, p = .001, 90\% CI [-.54; -.11]$ ).

## Discussion

This secondary analysis explored the indirect dyadic associations between sexual activity based fears and

**Table 1.** Participants sociodemographic portrait.

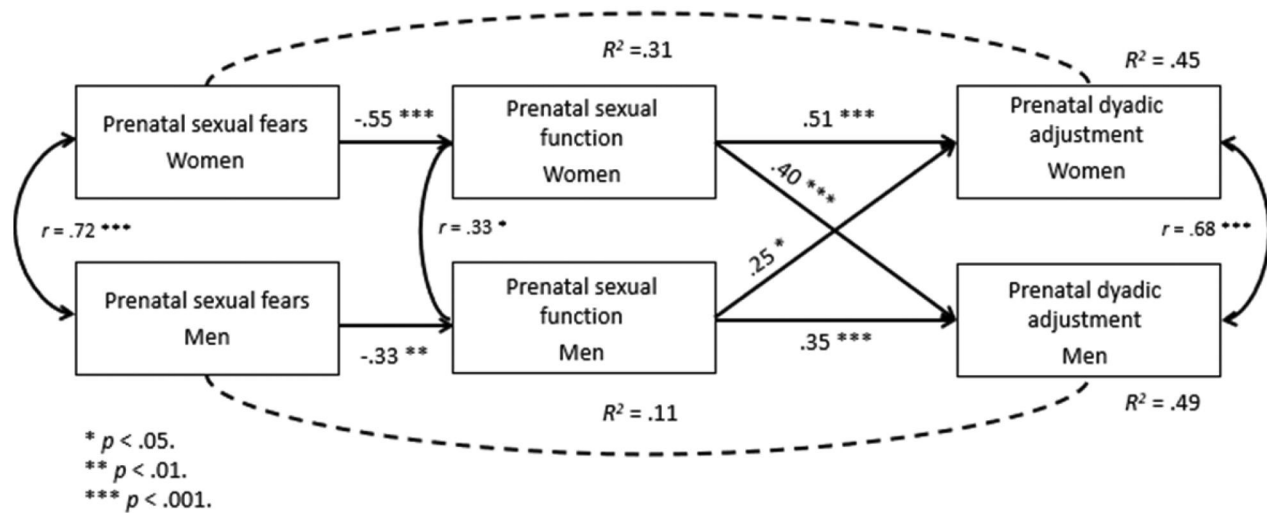
	Women (n = 67)	Men (n = 67)	Total (N = 134)
Age			
22–27 years	7.5%	3.0%	5.2%
28–33 years	70.1%	53.0%	61.9%
34–39 years	22.4%	43.3%	32.9%
Relationship			
Married	–	–	77.6%
Common-law	–	–	22.4%
Education			
Secondary or professional diploma	26.8%	14.9%	20.9%
Bachelor degree	58.2%	47.8%	53.0%
Post-graduate degree	14.9%	37.3%	26.1%
Family income			
\$40,000–\$59,999	–	–	0.7%
\$60,000–\$79,999	–	–	21.6%
\$80,000–\$99,999	–	–	26.1%
\$100,000 and over	–	–	47.8%

**Table 2.** Prenatal sexual fears.

Sexual fear	Women (n = 67)	Men (n = 67)	Total (N = 134)
Induce labor	53.7%	43.3%	48.5%
Cause miscarriage	52.2%	40.3%	46.3%
Hurt the baby	32.8%	43.3%	38.1%
Induce premature rupture of membranes	43.3%	16.4%	29.9%
Cause/feel discomfort and/or pain	13.4%	31.1%	22.4%
Cause bleeding	13.4%	4.5%	9.0%
Develop an infection	3.0%	1.5%	2.2%
Other(s)	1.5%	0.0%	0.7%
No fear	32.8%	31.3%	32.1%

**Table 3.** Descriptive statistics for sexual fears, dyadic adjustment and sexual function during pregnancy.

	Women (n = 67)	Men (n = 67)	Paired t test
Sexual fears	M: 2.13 SD: 1.82 Range: 0–6	M: 1.81 SD: 1.58 Range: 0–6	t(66) = 2.094, p = .040
Dyadic adjustment	M: 133.33 SD: 9.67 Range: 109–151	M: 133.26 SD: 11.31 Range: 85–150	t(67) = 0.081, p = .935
Sexual function	M: 30.58 SD: 4.94 Range: 14–36	M: 42.47 SD: 2.13 Range: 35–44	–



**Figure 1.** Dyadic direct and indirect associations between sexual activity based fears and dyadic adjustment of both partners through sexual function.

dyadic adjustment *via* sexual function in pregnant couples. The findings reveal that sexual activity based fears are relatively common, with two thirds of the partners recalling having up to six types of fears regarding sexual activity during their pregnancy. These findings corroborate those from previous studies showing that women and men often experience prenatal sexual activity based fears, especially regarding sexual intercourse, that could lead to obstetric complications or adverse effects on the fetus [3,7,8,11]. Many couples mistakenly think that sexual intercourse during pregnancy can cause injury to the fetus and cause premature labor, birth, rupture of the membranes, or perinatal loss. Fortunately, for the majority of low-risk pregnancies, sexual intercourse does not have negative or harmful effects on the pregnancy and the fetus [3,7,11,18]. Nevertheless, certain pregnancy conditions require sexual restrictions to avoid the risk of obstetric complications specifically in the following cases, such as presence of vaginal bleeding, placenta praevia, premature cervical dilatation, premature rupture of the membranes, history of miscarriage or preterm birth, threat of premature labor, history of being pregnant with multiples (e.g. twins), and history of multiple abortions [3,16,19].

The results of the dyadic analyses help clarify how sexual activity based fears are associated with dyadic adjustment during pregnancy. Specifically, having prenatal sexual activity based fears in women was related to lower dyadic adjustment in both partners through the women's lower sexual function during pregnancy. This finding is consistent with the associations between relationship well-being and sexual function [14,29,30]. According to Basson's model of female

sexual response [31], intimacy and relationship satisfaction are closely related to women's sexual response cycle and sexual function. If pregnant women have fears about sexuality and sexual activity, their sexual function may be adversely impacted, since different stages of the female sexual response cycle (notably desire and sexual arousal) are directly affected by psychological factors, including negative emotions such as anxiety and fears, possibly creating a ripple effect on other stages of their response cycle (lubrication, orgasm, and satisfaction) [31]. Problems in sexual function may contribute to lower relationship adjustment for women, but also for their partners, since men's dyadic adjustment is related to their own and their partners' sexual function. Since sexuality and relationship well-being are intrinsically linked in couples [3,5,6], disturbances in sexual functioning stemming from sexual activity based fears may interfere with the couple's relationship itself.

Finally, this study reveals that prenatal sexual activity based fears in men were also indirectly associated with their lower dyadic adjustment through their own lower sexual function during pregnancy. Thus, it seems that men's relationship adjustment and sexual function may also be altered by psychological factors, including fears, stress, and anxiety [30,32]. Studies have shown that anxiety and stress in men (which may stem from sexual activity based fears) may partially explain their lower sexual functioning [30]. However, since studies on men during pregnancy are rare, it is difficult to generalize this part of the study's findings, yet it provides a new understanding of their sexuality during this period.



## Limitations and future directions

This study is the first to address the associations among prenatal sexual activity based fears, sexual function, and dyadic adjustment during pregnancy among both first-time parents. However, important limitations are worth mentioning. The use of retrospective data may have caused a recall bias among participants and a possible confusion for them regarding the time frame that was being evaluated (e.g. participants may have different perceptions of their sexual function according to the trimester of pregnancy). Nonetheless, this study is comparable to many studies in the field of perinatal sexuality, which commonly rely on retrospective designs [33,34]. A reflection on the ideal moment to assess prenatal sexual activity based fears is warranted since such fears can occur at any time during pregnancy, which requires either regular assessment during the pregnancy or the use of retrospective data, both of which have limitations. It also requires a deeper consideration on the most effective way to assess prenatal sexual activity based fears, without provoking them during pregnancy.

Moreover, the small sample size fitting many specific inclusion criteria may have limited our ability to find other significant associations. Yet, we did reach sufficient power to detect significant medium to large effects. This study primarily included white, heterosexual, well-educated, and relatively wealthy individuals, whom may also not represent all pregnant couples, especially those with lower socioeconomic backgrounds, non-caucasian, and LGBTQ+ couples. Finally, the cross-sectional design of the study precluded us from inferring causality.

Future studies in perinatal sexuality should use larger and more representative samples of perinatal couples, including couples with several children, same-sex couples, and couples of diverse socio-cultural backgrounds. Prospective studies are necessary to better understand the trajectories in sexual well-being at various stages (pregnancy, childbirth, postpartum, breastfeeding period). Finally, the inclusion of other possible variables to further explain the associations between sexual activity based fears and couples' dyadic adjustment could include frequency of sex, perceived intimacy, communication, and relationship support. To understand the origins of prenatal sexual activity based fears, researchers should consider individual and sociocultural influences on the beliefs of future parents. Culture and religion [3,18] are known to influence couples' fears to varying degrees. Thus, a better understanding of the role of culture and

religion is needed to increase couples' knowledge about sexuality during pregnancy.

## Implications

Because sexual activity based fears are common during pregnancy and because of their associations with sexual function and dyadic adjustment, our findings highlight the need for perinatal sexuality counseling to counter these unfounded fears. Perinatal sexuality education can help partners to overcome myths and false beliefs, reassure and support them, reduce their stress and anxiety, and help them to develop realistic expectations so that they can adjust to sexual changes occurring during pregnancy. It can also help to improve the sexual lives of pregnant partners and their overall relationship itself. As such, perinatal sexuality education should be included in medical or health follow-ups as well as in prenatal classes to increase access for all couples. Family physicians, obstetricians/gynecologists, midwives, nurses, birth attendants (doulas), lactation consultants, and perinatal educators are encouraged to address sexuality directly, including sexual fears, with couples. They can educate future parents by sharing accurate information to disprove myths and misinformation on sexual activity based fears and help couples identify the role of such fears in their sexual and relational lives. Lastly, developing, implementing and evaluating personalized psycho-educational interventions should be encouraged to counter the effects of sexual activity based fears during pregnancy. To improve sexual health and sexual well-being throughout pregnancy, recent studies reported the relevance and positive impact of sex education and interventions during pregnancy regarding anxiety related to sexuality and sexual function [35–38]; those interventions could contribute to counteract furthermore sexual activity based fears during pregnancy and their effects.

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## References

- [1] de Pierrepont C, Polomeno V, Bouchard L, et al. Que savons-nous sur la sexualité périnatale? Un examen de la portée sur la sexopérinatalité – partie 1. *J Gynecol Obstet Biol Reprod.* 2016;45(8):796–808.
- [2] de Pierrepont C, Polomeno V, Bouchard L, et al. Que savons-nous sur la sexualité périnatale? Un examen de la portée sur la sexopérinatalité – partie 2. *J Gynecol Obstet Biol Reprod.* 2016;45(8):809–820.
- [3] Johnson CE. Sexual health during pregnancy and the postpartum. *J Sex Med.* 2011;8(5):1267–1284.
- [4] Doss BD, Rhoades GK, Stanley SM, et al. The effect of the transition to parenthood on relationship quality: an 8-year prospective study. *J Pers Soc Psychol.* 2009;96(3):601–619.
- [5] Cowan CP, Cowan PA. When partners become parents: the big life change for couples. Mahwah, NJ: Lawrence Erlbaum Associates; 2000.
- [6] Jawed-Wessel S, Sevic E. The impact of pregnancy and childbirth on sexual behaviors: a systematic review. *J Sex Res.* 2017;54(4-5):411–423.
- [7] Isajeva J, Šilkūnas M, Drąstienė GS, et al. Features of the sexual life during pregnancy. *AML.* 2012;19(2):67–74.
- [8] Yanikkerem E, Goker A, Ustgorul S, et al. Evaluation of sexual functions and marital adjustment of pregnant women in Turkey. *Int J Impot Res.* 2016;28(5):176–183.
- [9] Brauer M, ter Kuile MM, Janssen SA, et al. The effect of pain-related fear on sexual arousal in women with superficial dyspareunia. *Eur J Pain.* 2007;11(7):788–798.
- [10] Desrochers G, Bergeron S, Khalifé S, et al. Fear avoidance and self-efficacy in relation to pain and sexual impairment in women with provoked vestibulodynia. *Clin J Pain.* 2009;25(6):520–527.
- [11] Beveridge JK, Vannier SA, Rosen NO. Fear-based reasons for not engaging in sexual activity during pregnancy: associations with sexual and relationship well-being. *J Psychosom Obstet Gynaecol.* 2018;39(2):138–145.
- [12] Kisa S, Zeyneloğlu S, Yilmaz D, et al. Quality of sexual life and its effect on marital adjustment of Turkish women in pregnancy. *J Sex Marital Ther.* 2014;40(4):309–322.
- [13] Vannier SA, Rosen NO. Sexual distress and sexual problems during pregnancy: associations with sexual and relationship satisfaction. *J Sex Med.* 2017;14(3):387–395.
- [14] Nezhad MZ, Goodarzi AM. Sexuality, intimacy, and marital satisfaction in Iranian first-time parents. *J Sex Marital Ther.* 2011;37(2):77–88.
- [15] Bartellas E, Crane JMG, Daley M, et al. Sexuality and sexual activity in pregnancy. *BJOG.* 2000;107(8):964–968.
- [16] Doucet-Jeffray N, Miton-Conrath S, Le Mauff P, et al. Quelle sexualité pour les hommes pendant la grossesse? *Revue Exercer.* 2004;71:111–119.
- [17] Fok WY, Chan LYS, Yuen PM. Sexual behavior and activity in Chinese pregnant women. *Acta Obstet Gynecol Scand.* 2005;84(10):934–938.
- [18] Pauleta JR, Pereira NM, Graça LM. Sexuality during pregnancy. *J Sex Med.* 2010;7(1):136–142.
- [19] Reichenbach S, Lorson AF. J. Le comportement sexuel masculin pendant la grossesse: Une étude pilote portant sur 72 hommes. *Sexologies.* 2001;11:1–6.
- [20] Rosen R, Brown C, Heiman J, et al. The female sexual function index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther.* 2000;26:191–208.
- [21] O'Leary MP, Fowler FJ, Lenderking WR, et al. A brief male sexual function inventory for urology. *Urology.* 1995;46(5):697–706.
- [22] Mykletun A, Dahl AA, O'Leary MP, et al. Assessment of male sexual function by the brief sexual function inventory. *BJU Int.* 2006;97(2):316–323.
- [23] Spanier GB. Measuring dyadic adjustment: new scales for assessing the quality of marriage and similar dyads. *J Marriage Fam.* 1976;38(1):15–28.
- [24] Kenny DA, Kashy DA, Cook WL. *Dyadic data analysis.* New York: Guilford Press; 2006.
- [25] Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav Res Methods.* 2008;40(3):879–891.
- [26] Hoyle RH. *Structural equation modeling: concepts, issues, and applications.* Thousand Oaks, CA: SAGE; 1995.
- [27] Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Struct Equ Modeling.* 1999;6(1):1–55.
- [28] Tomarken AJ, Waller NG. Potential problems with “well fitting” models. *J Abnorm Psychol.* 2003;112(4):578–598.
- [29] Charfi N, Moalla M, Abbes W, et al. Évaluation du fonctionnement sexuel de la femme tunisienne dans sa relation avec l'ajustement conjugal. *Sexologies.* 2017;26(3):146–152.
- [30] Trudel G, Goldfarb MR. Fonctionnement et dysfonctionnement conjugal et sexuel, dépression et anxiété. *Sexologies.* 2010;19(3):164–169.

- [31] Basson R. Female sexual response revisited. *J Obstet Gynaecol Can.* 2000;22:383–387.
- [32] Leavitt CE, McDaniel BT, Maas MK, et al. Parenting stress and sexual satisfaction among first-time parents: a dyadic approach. *Sex Roles.* 2017;76(5–6): 346–355.
- [33] Hipp LE, Low LK, van Anders SM. Exploring women’s postpartum sexuality: social, psychological, relational, and birth-related contextual factors. *J Sex Med.* 2012; 9(9):2330–2341.
- [34] Sacomori C, Cardoso FL. Sexual initiative and intercourse behavior during pregnancy among Brazilian women: a retrospective study. *J Sex Marital Ther.* 2010;36(2):124–136.
- [35] Afshar M, Mohammad-Alizadeh-Charandabi S, Merghti-Khoei E-S, et al. The effect of sex education on the sexual function of women in the first half of pregnancy: a randomized controlled trial. *J Caring Sci.* 2012;1:173–181.
- [36] Alizadeh S, Riazi H, Alavi Majd H, et al. The effect of sexual health education on sexual activity, sexual quality of life, and sexual violence in pregnancy: a prospective randomized controlled trial. *BMC Pregnancy Childbirth.* 2021;21(1):334.
- [37] Eserdag S, Akalin EE. Evaluation of characteristics and clinical outcomes of vaginismus treatment during pregnancy. *South Clin Ist Euras.* 2021;32:134–140.
- [38] Heidari M, Shokravi FA, Zayeri F, Azin SA, et al. Sexual life during pregnancy: Effect of an educational intervention on the sexuality of Iranian couples: a quasiexperimental study. *J Sex Marital Ther.* 2018; 44(1):45–55.