



## Prevalence of dyspareunia in women within postpartum one-year period and related factors<sup>1</sup>

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### Abstract

This study aimed to determine prevalence of postpartum dyspareunia and related factors. In cross-sectional and descriptive study, a questionnaire was used to collect data. Universe of the study was composed of all women in the first postpartum one year, Sampling consisted of 246 women in postpartum one-year period admitted to public healthcare centers in Konya, Turkey. While the rates of experiencing dyspareunia were 20.8% in prenatal period, 22.9% during pregnancy and 36.6% in the first intercourse after delivery, the rate was found as 41.5% in postpartum period. According to the results of logistic regression analysis; decision given by partners to start intercourse, worrying about intercourse, having challenges with the partner and experiencing dyspareunia during pregnancy were found to be important risk factors. Dyspareunia seems to be a major challenge affecting the sexual life of women in postpartum period. During postpartum follow-ups, and training and counseling may be suggested.

**Keywords:** Dyspareunia, postpartum, sexual health.

### 1. Introduction

Sexuality is a natural part of life (Boroumandfar et al., 2010) and one of important determinants of quality of life (Botros et al., 2006). When sexual wellbeing is deteriorated, sexual disfunctions appear. Sexuality and sexual health alters by being affected by different life periods, especially by pregnancy and postpartum period (Rathfisch et al., 2010).

The onset moment of starting intercourse in postpartum period changes, and the frequency of intercourse notably decreases in pregnancy and postpartum period (Buhling et al., 2006). It is reported that painless intercourse takes place between weeks 5 and 8, at mean week 6 in general (Rowland et al., 2005) and that the challenges related to sexual functions due to traumas of delivery are solved in almost one year (Connolly et al., 2005). Sexual challenges experienced in postpartum period are reported to be associated with such factors as physiology, history of delivery, fatigue (Acar, 2008), hormones of fatigue (Meston and Fröhlich, 2000), psycho-social factors and lactation (Avery et al., 2000; LaMarre et al., 2005; Ahlborg et al., 2005; Acar, 2008).

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One in every five women is reported to suffer from dyspareunia in postpartum six-month period (Brubaker et al., 2008). Perineal pain experienced within six-month periods may extend to postpartum one year in some women and leads to the deterioration of normal sexual functions. The aim of the study was to determine the prevalence of dyspareunia in postpartum one-year period and related factors.

## 2. Material and method

The descriptive study was performed in a cross-sectional way. The research was carried out on the applicant admitted to three public health centers in Konya, Turkey. The data were randomly collected between 1<sup>st</sup> March and 15<sup>th</sup> June 2013. In determining the sample size of the study, a table prepared to estimate with 90% confidence for absolute score P in as much as was utilized. Regarding the incidence of dyspareunia in postpartum period to be as 32.7% in the studies carried out in Turkey (Rathfisch et al. 2010), the sample size was found as 246 in the table at the level of  $d = 0.05$ . The criteria for sampling were designed as follows: Existence of a sexual partner, being in postpartum one-year period, dwelling in a city center. In order to perform the study, an ethical approval was obtained from the ethical board of Selcuk Medical School, Selcuk University. Data analysis was performed via SPSS package software. Relational correlates were also investigated together with descriptive statistics. In relational correlates, student's *t* and chi-square tests, and logistic regression analysis were used.

## 3. Results

Of the women in the study, 51.8% were primary school graduates and lower. Mean age rate was  $28.2 \pm 5.2$  years, and mean duration of marriage was  $6.8 \pm 5.2$  years. While the rates of experiencing dyspareunia were 20.8% in prenatal period, 22.9% during pregnancy and 36.6% in the first intercourse after delivery, the rate was found as 41.5% in postpartum period. It was found that there was statistically significant difference between rate of experiencing postpartum painful intercourse of woman and women's education, partner's education, dyspareunia before, during pregnancy and postpartum period, worry about starting postpartum intercourse and challenges with partner in postpartum period ( $p < 0.05$ ) (Table 1).

**Table 1.** Distribution of experiencing dyspareunia according to some characteristics

Socio-demographic Variables	Dyspareunia (+) Number (%)	Dyspareunia (-) Number (%)	Test Score
<b>Educational Status</b>			
Primary school and lower	72(49.0)	75(51.0)	$\chi^2 = 6.927$ $P = .008$
Secondary school and upper	46(33.6)	91(66.4)	
<b>Educational Status of Partners</b>			
Primary school and lower	56(52.3)	51(47.7)	$\chi^2 = 8.226$ $P = .004$
Secondary school and upper	62(35.0)	115(65.0)	
<b>Before pregnancy</b>			
Yes	39(66.1)	20(33.9)	$\chi^2 = 18.485$ $P = .000$
No	79(35.1)	146(64.9)	
<b>During pregnancy</b>			
Yes	45(69.2)	20(30.8)	$\chi^2 = 26.596$ $P = .000$
No	73(33.3)	146(66.7)	
<b>In first postpartum intercourse</b>			
Yes	90 (86.5)	14(13.5)	$\chi^2 = 136.755$ $P = .000$
No	28(15.6)	152(84.4)	

<b>Start sexual life after delivery</b>			
Decision together with partner	55(32,2)	116(67,8)	$\chi^2=15.588$
Decision by partner	63(55,8)	50(44,2)	$P=.001$
<b>Worry about starting postpartum intercourse</b>			
Yes	77 (55.8)	61(44.2)	$\chi^2=22.43$
No	41(28.1)	105(71.9)	$P=.001$
<b>Challenges with partner in postpartum period</b>			
Yes	23(82.1)	5(17.9)	$\chi^2=21.07$
No	95(37.1)	161(62.9)	$P=.001$

Whether the variables found as significant in single analysis were a risk factor was assessed with logistic regression analysis. According to the results of this analysis, women's own educational status, partners' being primary school graduates and lower and experiencing dyspareunia in prenatal period were detected not to be a risk factor affecting dyspareunia. However, decision given by partners to start intercourse, worrying about intercourse, having challenges with the partner, and experiencing dyspareunia during pregnancy were found to be important risk factors (Table 2).

**Table 2.** Risk factors for dyspareunia (logistic regression analysis)

	$\beta$	OR	%95 CI	P
Women's educational level being primary school and lower	0.192	1.212	(0.662-2.218)	.533
Partners' educational level being primary school and lower *	0.225	1.252	0.668-2.346	.483
Decision given by partners to start intercourse	0.767	2.153	1.224-3.786	.008
Feeling worried in intercoursing*	0.711	2.036	1.174-3.531	.011
Challenges with partners*	1.159	3.187	(1.056-9.620)	.040
Experiencing dyspareunia before pregnancy	0.487	1.628	(0.769-3.447)	.203
Experiencing dyspareunia during pregnancy	1.041	2.831	1.381-5.804	.004

\*Variables coded as 1 in analysis

#### 4. Discussion

In the study, the prevalence of dyspareunia in women was investigated within postpartum one-year period and its related factors. In literature, couples are recommended to start intercourse after completing the involution period. No matter how unclear the etiology of dyspareunia is in postpartum period, it is reported that underlying reasons may be affected mainly by three factors like physical ones (infections of genital system, postpartum tears, etc.), behavioural ones (avoidance intercourse) and cognitive ones (fear, anxiety, etc.) (Xu et al., 2003; Botros et al., 2006). In our study, while the rates of experiencing dyspareunia in postpartum period were found as 20.8% in prenatal period, 22.9% during pregnancy and 35.6% in the first postpartum intercourse, the rate of postpartum dyspareunia was detected to be 41.5%. Similarly, in studies dyspareunia was described between postpartum 3-6 months in 41 and 67% of women (Barrett et al., 2000; Clarkson et al., 2001; Dejudicibus and McCabe, 2002; Acele and Karacam, 2012; Connolly et al., 2005; Buhling et al., 2006; Webb et al., 2008). In their study, Karacam and Calışır (2012), reported that 57% of women with postpartum dyspareunia had also experienced the condition in prenatal period, but dyspareunia started in 43% of these women in postpartum period. Signerello

et al(2001) emphasized that dyspareunia is a continuing health challenge in 22% of women despite decreasing at postpartum six months. Our findings suggested that performing such a study was appropriate for evaluating dyspareunia in postpartum one-year period. In our study, women experiencing dyspareunia in postpartum period were detected to have fears related to starting postpartum intercourse. Also, among women reporting to have challenges with their partners in postpartum period, the prevalence of dyspareunia was found to be higher ( $p < 0.05$ ) (Table 1). In light of multiple regression analysis, decision to start intercourse given one-sidedly by only their partner, feeling anxious about intercourse, having challenges with the partner and experiencing dyspareunia during pregnancy were determined to increase the risk of postpartum dyspareunia (Table 2). Perineal pain and dyspareunia is defined mostly to be the reason of episiotomy and perineal traumas like intervened delivery. As well as increasing caesarean sections, routine episiotomy procedures are also obstetric interventions becoming more prevalent in vaginal deliveries. Episiotomy performed frequently in vaginal deliveries and tears formed may affect the sexual lives of couples due to negative short or long-term consequences (Minkin, 2000). Perineal traumas may have social, psychological and physiologic long-term effects on women in later period as much as in postnatal period. Painful intercourse, urinary and fecal incontinence, and continuous perineal pain are the effects of dyspareunia that may be witnessed in longer period. There is evidence asserting such distresses are less in those with intact perineum. We determined in the study that no difference was present between episiotomy and dyspareunia ( $P > 0.05$ ). As there are studies suggesting parallel findings to ours (Williams et al., 2007; Karaçam and Çalışır, 2012), others assert that episiotomy leads to dyspareunia (Barret et al., 2000; Hartmann et al., 2005; Barrett et al., 2005; Bahl et al., 2005; Buhling et al., 2006). Our study findings suggested that the existence of episiotomy may be associated with postpartum dyspareunia, and challenges may be experienced during tissue healing process.

In our study, a significant difference was not found between the type of delivery and dyspareunia ( $P > 0.05$ ). As different from our findings, dyspareunia was reported in literature to be associated with vaginal delivery in the first postpartum three month (Thompson et al., 2002; Xu et al., 2003; Barrett et al., 2005).

## 5. Conclusion

Consequently, when the prevalence of dyspareunia in women and related factors in postpartum one-year period were investigated, a significant association was detected to be present between dyspareunia, and the first intercourse before pregnancy, during pregnancy and after delivery, experiencing fear for postpartum intercourse and having problems with partners. A challenge of women's health, dyspareunia should be taken into account before and during pregnancy, and in postpartum period; and, the rate of awareness and sensitivity should be increased via in-service training programs. Asking more questions over sexual challenges, healthcare professionals should encourage women to utter their problems and maintain the training and counseling activities.

**Conflict of interest:** The authors declare no conflict of interest.

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