The Relationship of Anxiety Level to Marital Adjustment and Sexual Satisfaction in Pregnant Women

Gebelerde Kaygı Düzeyinin Evlilik Uyumu ve Cinsel Doyum ile İlişkisi

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Abstract

Aim: In this study, we aimed to investigate whether anxiety levels were related to marital adjustment and sexual satisfaction in pregnant women.

Methods: The prospective study was conducted at a gynecology and obstetrics outpatient clinic between June and August 2020 and included 70 pregnant women. The Turkish versions of the Marital Adjustment Scale (MAS), the Golombok–Rust Inventory of Sexual Satisfaction (GRISS), and the Beck Anxiety Inventory (BAI) were used to evaluate the participants. The Kolmogorov–Smirnov and Spearman correlation tests were used to evaluate the normal distribution of the data and the relationship between the BAI and the GRISS and MAS, respectively.

Results: The mean participant age was 27.97±3.83 years. Of all participants, 47.1% had a high school degree, 70% had an income of ₺3000 to ₺10000, 68.6% were working women, and 31.4% were smokers. Fifty-two (74.3%) had been married for 1 to 3 years. The mean BAI score was 10.66±9.45, indicating mild anxiety. The mean MAS score was 37.71±10.11, indicating marital maladjustment. The mean GRISS score was 31.30±12.28, which indicated no sexual dysfunction. We found a negative correlation between anxiety and marital adjustment (p=0.020) and a positive correlation between anxiety and sexual dysfunction (p=0.006).

Conclusion: The anxiety level of pregnant women can be affected by marital adjustment and sexual satisfaction. Pregnant women with marital maladjustment should be assessed for anxiety in pregnancy during their visits to healthcare centers.

Keywords: anxiety; marital adjustment; pregnancy; sexual dysfunction; sexual satisfaction

Öz

Amaç: Bu çalışmada gebe kadınlarda kaygı düzeyinin evlilik uyumu ve cinsel doyum ile ilişkili olup olmadığını araştırmak amaçlanmıştır.

Yöntem: Prospektif çalışmamız Haziran—Ağustos 2020 döneminde bir kadın hastalıkları ve doğum kliniğinde gerçekleştirilmiş ve 70 gebe kadın içermiştir. Katılımcıları değerlendirmek için Evlilik Uyum Ölçeği (EUÖ), Golombok–Rust Cinsel Doyum Envanteri (GRCDE) ve Beck Anksiyete Envanteri'nin (BAE) Türkçe versiyonları kullanılmıştır. Verilerin normal dağılımı Kolmogorov–Smirnov testiyle, BAE ile GRCDE ve EUÖ arasındaki ilişki ise Spearman korelasyon testiyle değerlendirilmiştir.

Bulgular: Ortalama katılımcı yaşı 27,97±3,83 yıldı. Tüm katılımcıların %47,1'i lise mezunu, %68,6'sı aktif çalışan, %70'i 3000₺ ila 10000₺ gelir sahibi, %31,4'ü sigara içicisi idi. Elli iki (%74,3) katılımcı 1 ila 3 yıldır evliydi. Ortalama BAE skoru 10,66±9,45 olup hafif anksiyeteye işaret etmekteydi. Ortalama EUÖ skoru 37,71±10,11 olup evlilikte uyumsuzluğa işaret etmekteydi. Ortalama GRCDE skoru ise 31,30±12,28 olup cinsel işlev bozukluğu olmadığı anlamına gelmekteydi. Anksiyete ile evlilik uyumu arasında negatif (p=0,020), anksiyete ile cinsel işlev bozukluğu arasında pozitif korelasyon (p=0,006) saptandı.

Sonuç: Gebe kadınların anksiyete düzeyi evlilik uyumundan ve cinsel doyumdan etkilenebilir. Evlilik uyumsuzluğu olan gebeler sağlık merkezlerine başvuruları sırasında gebelikte anksiyete bakımından değerlendirilmelidirler.

Anahtar Sözcükler: cinsel doyum; cinsel işlev bozukluğu; evlilik uyumu; gebelik; kaygı

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INTRODUCTION

Pregnancy, one of the major events in a woman's life, causes simultaneous psychosocial and biological changes. It has been reported that the positive feelings of pregnant women are often accompanied by negative ones, such as fear, stress, and concern, leading to declined maternal and neonatal health and psychological disorders (1,2). It has been estimated that 15 to 23% of all pregnant women experience anxiety, which is associated with a higher risk of negative neonatal and maternal outcomes (3–5). A recent systematic review reported the prevalence of anxiety symptoms during pregnancy as 22.9% (3).

The anxiety levels of pregnant women are significantly affected by several factors, including low education level, place of residence, and gravidity (6). Pregnant women with a monthly income of <₺1000 were found to have higher rates of anxiety (7). Other risk factors for antenatal anxiety include unemployment, marital difficulties, and lack of social and/or spousal support (8–10).

The term "marital adjustment" refers to the quality of family and marriage relationships, satisfaction, and marital success and happiness (11). According to Spanier et al. (11), marital adjustment means the spouses' adjustment to changing conditions and routine life. Studies have shown that marriage affects physical health, with a significant relationship between low marital adjustment and poor general physical health (13,14) and a bilateral relationship between marital satisfaction and mental problems during pregnancy (15). Pregnant women who have lower marital satisfaction are thought to experience greater anxiety (16).

The most important factors affecting marital adjustment are understanding, philosophy of life, loyalty, common interests, sharing, and a satisfactory sex life (17,18). Sexual satisfaction means the happiness and joy felt during sexual relations (18). The partnership and sexuality characteristics of women can be affected by the physical, hormonal, and mental changes during pregnancy, with an increase in sexual problems in early pregnancy and a return to normal levels in the postpartum period (19). Accordingly, in this study we aimed to investigate the possible effects of marital adjustment and sexual satisfaction on the anxiety levels of pregnant women.

MATERIALS AND METHODS

The prospective study was conducted at the Gynecology and Obstetrics Outpatient Clinic of the Medistate Hospital between June and August 2020 and included 70 pregnant women. The participants were re-examined by a psychiatrist. Women with symptoms of mental retardation, psychosis, and dementia and women who were illiterate were excluded. The participants were evaluated using the Turkish versions of the Marital Adjustment Scale (MAS), the Golombok–Rust Inventory of Sexual Satisfaction (GRISS), and the Beck Anxiety Inventory (BAI).

The participant anxiety levels were determined by the BAI. The inventory contains 21 items and the total score ranges from 0 to 63. Scores of 8 to 15 show mild anxiety, scores of 16 to 25 show moderate anxiety, and scores of 26 to 63 indicate severe anxiety.

In the MAS, the total score ranges from 1 to 60, with higher scores representing higher marital adjustment while lower scores indicate marital maladjustment. Scores greater than 43 indicate adjusted marriage while those below 43 represent maladjusted marriage.

The GRISS is used to evaluate the quality of sexual relations between males and females. In this study, the female version of the GRISS was used. Higher scores indicate more impaired sexual function; scores greater than 5 indicate sexual dysfunction. The subscales of the female version of the GRISS are non-communication, avoidance, infrequency, non-sensuality, dissatisfaction, vaginismus, and anorgasmia.

Participant demographics were collected by face-to-face interviews; participant names and data on age, education level, income level, working status, smoking status, and marriage duration were recorded.

Statistical analysis

Statistical analysis was done using the Statistical Package for Social Sciences (SPSS, v. 26.0) software (SPSS Inc., Chicago, IL, USA). The Kolmogorov-Smirnov test was used to evaluate the normal distribution of the data. The Spearman correlation test was used to evaluate the relationship between the BAI and the GRISS and MAS. Categorical data were expressed as numbers and percentages and continuous data as mean and standard deviation. $p<0.05$ was considered statistically

Table 1. Patient sociodemographic characteristics

Mean age		**27.97±3.83 years**
Education level	Primary school	—
	Junior high school	4 (5.7%)
	High school	33 (47.1%)
	University	31 (44.3%)
	Master's degree	2 (2.9%)
Income level	< ₺3000	16 (22.9%)
	₺3000–₺10000	49 (70%)
	> ₺10000	5 (7.1%)
Working status	Not working	22 (31.4%)
	Working	48 (68.6%)
Smoking status	Yes	22 (31.4%)
	No	48 (68.6%)
Marriage duration	1–3 years	52 (74.3%)
	4–6 years	13 (18.6%)
	>6 years	5 (7.1%)

significant.

Study ethics

The study was carried out with the permission of the Research Ethics Committee of the Maltepe University Hospital (22.05.2020/04-16). All procedures involving human participants were performed in accordance with the institutional and national ethical standards and with the principles of the 1964 Declaration of Helsinki and its later amendments. A consent form was filled out by all participants.

RESULTS

Participant sociodemographic characteristics are shown in Table 1. The mean age was 27.97±3.83 years. Of all participants, 47.1% had a high school degree; 44.3%, university degree; 5.7%, junior high school degree; and 2.9%, master's degree. Seventy percent had an income of ₺3000 to ₺10000; 22.9%, <₺3000; and 7.1%, >₺10000. Sixty-eight percent were working women; 31.4% were smokers. Fifty-two (74.3%) women had been married for 1 to 3 years; 13 (18.6%), 4 to 6 years; and 5 (7.1%), 6 years or more.

The mean BAI, MAS, and GRISS scores are shown in Table 2. The mean BAI score was 10.66±9.45, indicating mild anxiety. The mean MAS score was 37.71±10.11, indicating marital maladjustment, and the mean GRISS score was 31.30±12.28, which indicated no sexual dysfunction.

The GRISS subscale results for women with a score of ≤5 were as follows: infrequency (3.80±1.9), non-communication (3.20±2.27), avoidance (2.46±2.26), non-sensuality (3.34±2.96), dissatisfaction (4.01±2.49), vaginismus (4.97±2.88), and anorgasmia (4.97±2.63).

The correlations between the BAI, MAS, and GRISS are shown in Table 3. The mean MAS score was 37.71±10.11, with a p-value of 0.020, indicating a statistically significant reverse relationship between anxiety and marital adjustment. The mean total GRISS score was 31.30±12.28 (p=0.006), indicating a direct relationship between anxiety and the deterioration in sexual satisfaction.

DISCUSSION AND CONCLUSION

We aimed to investigate the relationship of anxiety level to marital adjustment and sexual satisfaction in pregnant women. We found that our participants had mild anxiety and marital maladjustment, with no sexual dysfunction. There was a negative correlation between anxiety and marital adjustment, indicating that the higher the anxiety level, the lower the marital adjustment. Also, there was a direct relationship between anxiety and sexual dysfunction, meaning that the higher the anxiety level, the higher the sexual dysfunction.

Our results are consistent with previous studies (15,20,21) which found a reverse relationship between anxiety and marital satisfaction and lower development of the emotional relationship between couples due to low marital satisfaction (22). Also, Whisman et al. reported that relationship adjustment was a predictor of anxiety and depressive symptoms (23).

Çömez İkican et al. (24) reported a low risk of depression in women half of whom had marital maladjustment and most of whom had sexual dysfunction with depressive symptoms, while we observed mild anxiety and high maladjustment with no sexual dysfunction. A systematic review showed that poor marital relationship was the most consistent variable in predicting anxiety levels during pregnancy (25).

Our results are further supported by previous studies. Ozcan et al. (26), reported mild anxiety in their participants and found a negative association between the MAS and BDI scores. Another study on the association between marital adaptation and depression and emotional expression reported lower depressive symptoms in couples with a higher marital adjustment (27). Afusat (28) suggested that depressive and anxious symptoms tended to increase with decreased relationship adjustment, and that during pregnancy marital adjustments were significantly associated with depressive symptoms. Jamali et al. (29) stated that anxiety and the natural fear felt during pregnancy might discourage pregnant women to have a sexual relationship, and Erbil (30) found that sexual problems during pregnancy had negative effects on the marital relationship, creating more stressors for couples during that period of time.

Nik-Azin et al. (31), who found highly prevalent sexual dissatisfaction among pregnant women, showed a weak but significant negative correlation between female sexual function and anxiety, and reported depression as a significant predictor of female sexual function, while we observed mild anxiety in our participants despite our finding that the anxiety level was negatively affected by sexual dysfunction. Other studies (32,33) stated that factors for sexual dysfunction during pregnancy included satisfaction with spousal relationship, pregnancy planning, anxiety, and depression, in consistence with our results.

Table 2. The mean BAI, MAS, and GRISS scores (±standard deviation)

BAI	**10.66±9.45**
MAS	**37.71±10.11**
GRISS total score	
Infrequency	31.30±12.28
Non-communication	3.80±1.9
Avoidance	3.20±2.27
Non-sensuality	2.46±2.26
Dissatisfaction	3.34±2.96
Vaginismus	4.01±2.49
Anorgasmia	4.97±2.88
Sexual dysfunction	4.97±2.63
	4±2.32

Table 3. The correlation of the Beck Anxiety Inventory (BAI), the Marital Adjustment Scale (MAS), and the Golombok–Rust Inventory of Sexual Satisfaction (GRISS)

	Correlation coefficient	**p**
MAS	**-0.278**	**0.020***
GRISS total score	0.328	0.006*
Infrequency	0.222	0.065
Non-communication	0.012	0.920
Avoidance	0.440	<0.001*
Non-sensuality	0.316	0.008*
Dissatisfaction	0.072	0.552
Vaginismus	0.205	0.089
Anorgasmia	0.156	0.198
Sexual dysfunction	0.395	0.001*

* significant correlation

In conclusion, the pregnant women included in our study exhibited mild anxiety, high marital maladjustment, and no sexual dysfunction. The anxiety level of pregnant women can be affected by marital adjustment and sexual satisfaction, with higher levels in parallel to lower marital adjustment and sexual satisfaction. Pregnant women with marital maladjustment should be assessed for anxiety in pregnancy during their visits to healthcare centers.

Conflict-of-Interest and Financial Disclosure

The authors declare that they have no conflict of interest to disclose. The authors also declare that they did not receive any financial support for the study.

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