TOGÜ SAĞLIK BİLİMLERİ DERGİSİ
*Journal of TOGU Health Sciences*

***ISSN:**2791-8653*
**Ay-Yıl/Cilt/Sayı:** Eylül-2024/4/3

***Araştırma Makalesi/Original Article***

# The Impact of Birth Experience on Postpartum Depression and Sexual Life in Women Having Vaginal Delivery

*Vajinal Doğum Yapan Kadınlarda Doğum Deneyiminin Postpartum Depresyon ve Cinsel Yaşam Üzerine Etkisi*

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**ÖZET**

**Amaç**: Bu çalışma vajinal doğum yapan kadınlarda doğum deneyiminin postpartum depresyon ve cinsel yaşam üzerine etkisini incelemek amacıyla yapıldı.

**Gereç ve Yöntem**: Kesitsel ve tanımlayıcı tipteki bu çalışma, Aralık 2021-Mayıs 2022 tarihleri arasında kartopu örnekleme yöntemi ile çevrimiçi anketler kullanılarak elde edilmiştir. Araştırmanın evrenini vajinal doğum yapmış, İstanbul'da yaşayan ve Aile Hekimliği hizmetlerinden yararlanan kadınlar oluşturmaktadır. Örneklem İstanbul genelinde 228 kadından oluşmaktadır. Örneklem grubu vajinal yolla doğum yapan, doğum sonrası 6. ve 12. aylarda olan kadınlardan oluşuyordu. Verilerin toplanmasında bilgi formu, Doğum Deneyimi Ölçeği, Kadın Cinsel İşlev İndeksi ve Edinburgh Doğum Sonrası Depresyon Ölçeği kullanılmıştır.

**Bulgular:** Kadınların yaş ortalaması 29,04±5,01'dir. Bu çalışmada kadınların depresyon düzeyleri ile çalışma durumları arasında ilişki bulunmuştur ($p<0.05$). Ayrıca gebelikte cinsel yaşamdan memnuniyet ile depresyon düzeyi arasında ilişki bulunmuştur ($p<0.05$). Araştırmada yer alan doğum deneyimi ölçeği toplam puan ortalaması 61.24±14.71'dir. Depresyon ölçeği toplam puan ortalaması 11.18 ±6.30 olup, kadınların %59.6'sında depresyon riski bulunmamaktadır. Doğum deneyiminin cinsel işlevi olumlu yönde etkilediği ($r=0.145$), depresyonu ise olumsuz etkilediği ($r=-0.257$) gösterilmiştir.

**Sonuç:** Doğum deneyimi, depresyon ve cinsel işlev arasındaki ilişkiyi inceledik ve olumlu doğum deneyiminin cinsel işlevi pozitif, depresyonu olumsuz etkilediğini saptadık. Bu çalışma, doğum deneyiminin kadınların depresyonu ve cinsel sağlığı üzerindeki etkilerini ortaya koymaktadır.

**Anahtar Kelimeler:** Cinsellik, Cinsel Yaşam, Doğum Deneyimi, Depresyon, Postpartum, Normal Doğum

**ABSTRACT**

**Objective:** To examine the effect of birth experience on postpartum depression and sexual life in women who had vaginal delivery.

**Methods :** This cross-sectional and descriptive study were obtained using online surveys with the snowball sampling method between December 2021 and May 2022. The population of the research includes women who have had a vaginal birth, living in Istanbul, and benefiting from Family Medicine services. The sample consists of 228 women across Istanbul. The sample group consisted of women who gave birth vaginally and were in the 6th and 12th months postpartum. Information form, Birth Experience Scale, Female Sexual Function Index and Edinburgh Postpartum Depression Scale were used to collect data.

**Results:** The average age of women is 29.04±5.01. In this study, a relationship was found between the level of depression and the employment status of women ($p<0.05$). Additionally, a relationship was found between satisfaction with sexual life during pregnancy and depression level ($p<0.05$). The total score average of the birth experience scale in the study is 61.24±14.71. The depression scale total score average is 11.18 ±6.30, and 59.6% of women do not have a risk of depression. It has been shown that the birth experience affects sexual function positively ($r = 0.145$) and negatively affects depression ($r = -0.257$).

**Conclusion :** We examined the relationship between positive birth experience, depression and sexual function and found that birth experience positively affects sexual function and negatively affects depression. This study reveals the effects of birth experience on women's depression and sexual health.

**Key Words:** Sexuality, Sexual Life, Birth Experience, Depression, Postpartum, Normal Birth

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**Başvuru/Submitted:** 25.03.2024 **Kabul/Accepted:** 29.08.2024
**Cite this article as:** Tandoğan Ö, Oskay Ü, Gürbüz The Impact of Birth Experience on Postpartum Depression and Sexual Life in Women Having Vaginal Delivery. J TOGU Heal Sci. 2024;4(3): 291-306.

## INTRODUCTION

The birth experience is influenced by multifaceted factors and is difficult to explain. The quality of this experience affects the health of the mother and her child (1). Adverse birth experiences, in particular, are known to have serious effects on the psychological and physical health of the mother. Women who experience these types of experiences often describe themselves as failures, resulting in emotional reactions such as anger, guilt, frustration, loss of control, and inadequacy. This increases the risk of postpartum depression (2). In addition, it is known that hidden psychological problems experienced during pregnancy can occur in the postpartum period and affect the sexual life of couples. Therefore, understanding the negative effects of the birth experience and identifying risk groups can be an important step to improve the health of the mother (2,3). For this reason, women's birth experiences, how postpartum depression and sexuality are affected and their effects on women should be investigated in detail.

It is known that postpartum psychological and physiological changes can also affect sexual desire and action. This makes it all the more important to investigate women's individual postpartum sexual experiences. The relationship between sexuality and depression is an important issue both in Turkey and in the world. Worldwide research shows that depression can lead to sexual reluctance and dysfunction; For example, the negative effects of postpartum depression on sexual life have been documented (4,5,6). However, the mechanisms of this relationship are not yet fully understood, and more work is needed on how it changes in different cultural contexts (5). In Turkey, sexuality is still seen as a taboo subject, so data on sexuality and depression is limited. It is thought that more research needs to be done on the perceptions of individuals in Turkey about sexual health and depression (7). The impact of societal stigma on sexuality and mental health issues can help to better understand these issues. As a result, increasing education and support programs on sexuality and depression can contribute to a healthy sexual life for individuals. However, there are very few studies in the available literature that have examined the effects of childbirth experience on postpartum depression and sexual function in women who have had vaginal births.

Therefore, there is a need for more comprehensive and detailed research focusing on the sexual health of women after vaginal delivery. The results of these studies can provide important information that can positively affect women's sex lives in the postpartum period. In addition, a

better understanding of the effects of postpartum depression on sexual function may allow for the development of more effective treatment and support programs in this regard. In this context, it is necessary to evaluate in detail the effect of birth experience on postpartum depression and sexual life in women who have vaginal birth. In addition, the views of the health professionals who care for these women about the woman's experience of childbirth and the impact of this experience on the woman are also extremely important. Because the perception of meaning and stress that women attribute to the birth experience can directly affect their postpartum psychological mood and sexuality. It is thought that studies on this subject can make important contributions to improving the health of mothers and children. Therefore, health professionals should encourage more research on this issue and conduct studies in this area.

## MATERIAL AND METHODS

### Type of Study

The study was conducted in a cross-sectional and descriptive design to determine the effect of birth experience on postpartum depression and sexual life in women who gave birth vaginally.

### Time of Study

Data for the study was collected between December 2021 and May 2022 using online surveys.

### Study Population and Sample of the Study

The study adhered to the STROBE Statement for design, planning, implementation, and reporting. The study population was taken as the overall prevalence of depression among women in Turkey (19%), according to the prevalence of postpartum depression (PPD) in Turkey (8). The sample size of this study was determined using the G*Power (version 3.1.7) program. The sample size was determined as 231 with a 95% confidence level and a sensitivity level of 0.05. The number of questionnaires was completed as 228.

### Participant Characteristics

The sample group consisted of non-pregnant, vaginally delivered multiparous and primiparous women at 6 and 12 months postpartum. Women under 18 years of age and women receiving psychological treatment were excluded.

**Procedure**

The data collection tool prepared on the research online platform was shared online by the researcher. All midwives and nurses working in family practices were sent information about the study and the survey web link by the researchers via e-mail and/or text message, and they were asked to share it with their mothers. In the first part of the survey link, an explanation was made about the purpose of the study, and their consent was obtained digitally without asking for their identity information. Additionally, there was a statement at the beginning of the survey stating that the women confirmed in writing that they were willing to participate in the research. It was possible to move on to other questions based on the questions covering the inclusion and exclusion criteria at the beginning of the form. Those who did not fill out these kits were excluded from the study because they could not see the other questions.

**Data Collection Tools**

The sociodemographic and obstetric-gynecological characteristics of the women were questioned in the personal information form. This form was prepared by the researchers. The birth experience scale was used to evaluate women's experiences during birth, the female sexual function index was used to evaluate their sexuality, and the Edinburgh postpartum depression scale was used to assess postpartum depression.

**Childbirth experience scale**

This scale evaluates women's birth experiences in different contexts. The scale consists of 22 items in total, sub-dimensions of birth process, professional help/support, perceived safety, and participation in decisions. This scale was adapted into Turkish by Mamuk et al. The Cronbach alpha reliability coefficient of the scale is 0.76. An increase in the score obtained from the scale indicates that the pregnant woman had a positive birth experience (9). In this study, it was stated that the Cronbach Alpha reliability coefficient varied between 0.775 and 0.917.

**The female sexual function index**

The Female Sexual Function Index (FSFI) was developed by Mary Jane M. Rosen and colleagues in 2000. The FSFI is a comprehensive scale for assessing women's sexual function. The Turkish adaptation of the Female Sexual Function Index (FSFI) was conducted by Aydın et al.

(2005). This study ensured the suitability and validity of the FSFI for the Turkish female population. This scale evaluates sexual function and problems in the last month. The scale has subscales of desire, arousal, lubrication, orgasm, satisfaction, and pain. Each item is scored from 0 to 5. The highest score is 36.0 and the lowest score is 2.0. The cut-off value of the scale score is normal sexual function if the total score is >22.7, and sexual dysfunction if the total score is ≤22 (10).

**Edinburgh postpartum depression scale**

This scale was developed by Cox in 1987.The purpose of the scale is to screen for postpartum depression in women. Its validity and reliability in Turkey were determined by Engindeniz (11). This Scale consists of 10 items. Items are evaluated on a 4-point Likert scale. The lowest score on the scale is 0 and the highest score is 30. The cut-off score of the scale is calculated as 12. Individuals who score above this score are at risk for depression.

**Ethics Consideration**

Ethical approval for the study was received (2021.11.24; E-138). Oral permissions were obtained for the study in family practices. In addition, all participants were informed about the study, the Helsinki Information was presented, and their approval was obtained. In this data were included in the study. The online survey was left open for 6 months.

**Data analysis**

Data were analyzed with SPSS 21.0 and 95% confidence level. Kurtosis and skewness coefficients of the variables of this study were examined to ensure their suitability for normal distribution. It was decided that the kurtosis and skewness values obtained from variables between +3 and -3 were sufficient for normal distribution (12). The relationship between Pearson correlation and scale scores was analyzed. Chi-square test was used for the relationship between categorical variables.

**Limitations**

The first limitation is the cross-sectional nature of the study and the fact that the calculated sample size could not be reached in its entirety. The study was limited because the calculated sample size could not be reached. In cross-sectional studies, since the information is obtained in a

certain period, the results may differ according to the time the study was conducted and thus the population being researched. The second limitation is that the results of our study were obtained from women receiving services from a family medicine center in the largest metropolitan area of Turkey where the socioeconomic level is high. Therefore, these results cannot be generalized to the entire population of women with vaginal delivery in Turkey. The main reasons for not reaching the calculated sample size during the research process were time constraints, the low number of vaginal deliveries in Turkey, and the difficulty in finding participants in the research setting. Another reason is that situations such as data loss or deficiencies caused the sample size to be incomplete. This is an important problem in terms of the reliability and validity of the research. This may negatively affect the generalizability and representativeness of the results obtained.

## RESULTS

The mean age of women is 29.04±5.01 years. The proportion of women who were employed was 41.2% and the number of years of education was 14.08%. 68.8% of the women had their first pregnancy and 74.5% had at least one child. Episiotomy was applied to 33.3% of the women and artificial induction was applied to 42.1%. 24.6% of the women had difficult and prolonged deliveries. More than half of the women (60.5%) communicated with their babies within the first 5 minutes after birth. And the majority (82.5%) had a planned pregnancy (Table 1). Women generally (48.2%) described their marriage as good. They were satisfied with their sexuality before pregnancy (94.7%) and during pregnancy (78.9%).The majority (85.1%) had no sexual problems with their husbands. Women were not satisfied with their relationship with their husbands during pregnancy (74.6%; Table 1).

In this study, a relationship was found between depression level and women's employment status ($p<0.05$). There was a risk for depression in 31.9% of the employed and 46.3% of the non-employed. There was a difference between depression level and satisfaction with sexual life during pregnancy ($p<0.05$; Table 2). In addition, there was a difference between sexual functioning and satisfaction with sexual life during pregnancy ($p<0.05$). A statistically significant difference was found between sexual functioning and support during the puerperium ($p<0.05$). Sexual functioning was normal in 56.5% of those who had support during the puerperium, while it was impaired in 83.3% of those who did not have support (Table 2).

Compares women with depression scale and sexual functioning scale according to some variables. It was determined that there was a statistical difference in sexual functioning and depression levels of women according to age, having problems with the baby and satisfaction with marriage ($p<0.05$; Table2).

Table 2 compares women with depression scale and sexual functioning scale according to some variables. It was determined that there was a statistical difference in sexual functioning and depression levels of women according to age, having problems with the baby and satisfaction with marriage ($p<0.05$).

In this study, the mean total score of the birth experience scale was 61.24±14.71. The mean scores of the sub-dimensions of the birth experience scale were found to be 21.66±5.10 in the birth process sub-dimension, 14.39±4.98 in the sub-dimension of receiving professional help support, 17.23±4.83 in the perceived moment of safety sub-dimension and 7.96±2.83 in the sub-dimension of harmony in decisions. The mean total score of the depression scale was found to be 11.18±6.30. The total mean score of the sexual function scale was 20.90±8.06. The mean scores of the sub-dimensions of the sexual desire scale were 3.20±1.02 in the sexual desire sub-dimension, 3.37±1.72 in the sexual arousal sub-dimension, 3.58±1.70 in the lubrication sub-dimension, 3.54±1.91 in the orgasm sub-dimension, 4.21±1.70 in the satisfaction sub-dimension and 2.99±1.40 in the pain/discomfort sub-dimension (Table 3).

In this study, when the relationship between birth experience and depression and sexual functioning was examined, a negative weak relationship was found between the birth process and depression scale (r=-0,299); a positive weak relationship between sexual desire (r=0,149); a positive weak relationship between orgasm (r=0,161); a positive weak relationship between Satisfaction (r=0,149); and a positive weak relationship between Sexual Function Scale (r=0,139). In addition, there was a weak positive correlation between professional help support and sexual desire (r=0,180), a moderate negative correlation between perceived safety and Depression Scale (r=-0,332), and a weak positive correlation between sexual desire (r=0,137); lubrication (r=0,132); orgasm (r=0,184); satisfaction (r=0,139); Sexual Function Scale (r=0,145; Table 4)

**Table 1. Sociodemographic and obstetric characteristics of women**

| | **Avr.* ± ss**** | |
|---|---|---|
| **Age** | 29.04±5.01 | |
| **Study years** | 14.08±3.87 | |
| **Employment status** | n | % |
| Employed | 94 | 41.2 |
| Unemployed | 134 | 58.8 |
| **Number of Pregnancy** | | |
| First pregnancy | 154 | 68.8 |
| 2 and above | 70 | 31.2 |
| **Pregnancy plan** | | |
| Planned | 188 | 82.5 |
| Unplanned | 40 | 17.5 |
| **Number of Children** | | |
| 1 child | 146 | 74.5 |
| 2 and above | 50 | 25.5 |
| **Health problem in the baby after birth** | | |
| Occurred | 34 | 14.9 |
| Not occurred | 194 | 85.1 |
| **Overall marital status** | | |
| Very good | 90 | 39,5 |
| Good | 110 | 48,2 |
| Medium / Bad | 28 | 12,3 |
| **Satisfaction with the relationship with the partner before pregnancy** | | |
| Satisfied | 216 | 94.7 |
| Not satisfied | 12 | 5.3 |
| **Satisfaction with the relationship with the partner during pregnancy** | | |
| Satisfied | 58 | 25,4 |
| Not satisfied | 170 | 74,6 |
| **Satisfaction with sexual life during pregnancy** | | |
| Satisfied | 180 | 78.9 |
| Partially satisfied | 34 | 14,9 |
| Not satisfied | 14 | 6.2 |
| **Spouse's satisfaction with sexual life before pregnancy** | | |
| Satisfied | 186 | 81.6 |

| | | |
|---|---|---|
| Not totally/I don't know | 38 | 16.8 |
| Not satisfied | 4 | 1.8 |
| **Your partner's sexual problems before pregnancy** | | |
| Premature ejaculation | 26 | 11.4 |
| Reluctance | 6 | 2.6 |
| Erectile dysfunction and premature ejaculation together | 2 | .9 |
| No problem | 194 | 85.1 |
| **Sexual problems in the partner during pregnancy** | | |
| Occurred | 140 | 61.4 |
| Not occurred | 88 | 38.6 |

* Average ** Standard deviation

There was a weak negative correlation between the Birth Experience Scale and the Depression Scale (r=-0,257); a weak positive correlation between Sexual Desire (r=0,170); a weak positive correlation between Orgasm (r=0,171); a weak positive correlation between Satisfaction (r=0,132); and a weak positive correlation between Sexual Function Scale (r=0,139; Table 3).

The regression model established to examine the impact of birth experience dimensions on depression and sexual functioning was statistically significant ($p<0.05$; Table 5). The regression model established to examine the effect of birth experience dimensions on depression is significant ($p<0.05$). $\beta$= 0.252 and the p value was determined as 0.002*. This shows that the effect of professional help on depression is significant. The perception of a moment of trust has a positive effect on sexual function ($\beta$=0.145 and p: 0.029**). These findings suggest that changes in depression, sexual function and birth experience are influenced by professional help support and perception of a moment of trust.

**Table 2. Data on the Comparison of EPDS and FSFI Scores with Demographic and Obstetric Characteristics of Women**

| | | Depression level | | | | χ2 | p | Sexual functi | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | There is no risk (≤12) | | There is a risk (>12) | | | | Sexual dysfunction (≤22.7) | | f |
| | | n | % | n | % | | | n | % | n |
| **Age** | 29 years and below | 84 | 60.0 | 56 | 40.0 | ,019 | ,892 | 66 | 47.1 | 74 |
| | 30 years and older | 52 | 59.1 | 36 | 40.9 | | | 38 | 43.2 | 50 |
| **How many years did you education** | 8 years and less | 14 | 58.3 | 10 | 41.7 | 7.132 | ,028* | 10 | 41.7 | 14 |
| | 9-12 years | 34 | 77.3 | 10 | 22.7 | | | 18 | 40.9 | 26 |
| | More than 12 years | 88 | 55.0 | 72 | 45.0 | | | 76 | 47.5 | 84 |
| **Employment status** | Employed | 64 | 68.1 | 30 | 31.9 | 4.729 | ,030* | 40 | 42.6 | 54 |
| | Unemployed | 72 | 53.7 | 62 | 46.3 | | | 64 | 47.8 | 70 |
| **How many pregnancies did you experience?** | First pregnancy | 88 | 57.1 | 66 | 42.9 | 1.471 | ,225 | 66 | 42.9 | 88 |
| | 2 and above | 46 | 65.7 | 24 | 34.3 | | | 36 | 51.4 | 34 |
| **Number of Children** | 1 | 94 | 64.4 | 52 | 35.6 | ,656 | ,325 | 66 | 45.2 | 80 |
| | 2 and above | 36 | 72.0 | 14 | 28.0 | | | 22 | 44.0 | 28 |
| **Health problem in the baby after birth** | Yes | 14 | 41.2 | 20 | 5,871[a] | ,015* | ,017* | 22 | 64.7 | 12 |
| | No | 122 | 62.9 | 72 | 37.1 | | | 82 | 42.3 | 112 |
| **Pregnancy plan** | Planned | 112 | 59.6 | 76 | 1,723[a] | ,189 | ,960 | 82 | 43.6 | 106 |
| | Unplanned | 24 | 60.0 | 16 | 40.0 | | | 22 | 55.0 | 18 |
| **Your marriage in general** | Very good | 68 | 75.6 | 22 | 24.4 | 26.948 | ,000* | 32 | 35.6 | 58 |
| | Good | 62 | 56.4 | 48 | 43.6 | | | 52 | 47.3 | 58 |
| | Tolerable/bad | 6 | 21.4 | 22 | 78.6 | | | 20 | 71.4 | 8 |
| **Affected sexuality during pregnancy** | Affected | 76 | 54.3 | 64 | 7,671[a] | 4.335 | ,037* | 74 | 52.9 | 66 |
| | Not affected | 60 | 68.2 | 28 | 31.8 | | | 30 | 34.1 | 58 |
| **Satisfaction with sexual life during pregnancy** | Satisfied | 98 | 64.5 | 54 | 35.5 | 4.410 | ,036* | 54 | 35.5 | 98 |
| | Not satisfied | 38 | 50.0 | 38 | 50.0 | | | 50 | 65.8 | 26 |
| **Partner's satisfaction with sexual life during pregnancy** | Yes | 76 | 69.1 | 34 | 30.9 | 7.997 | ,018* | 38 | 34.5 | 72 |
| | No | 14 | 53.8 | 12 | 46.2 | | | 16 | 61.5 | 10 |
| | Partially or completely, I don't know | 46 | 50.0 | 46 | 50.0 | | | 50 | 54.3 | 42 |
| **Support during the puerperium** | Yes, available | 132 | 61.1 | 84 | 38.9 | 3.645 | ,056 | 94 | 43.5 | 122 |
| | No, not available | 4 | 33.3 | 8 | 66.7 | | | 10 | 83.3 | 2 |

*p<0.05; EPDS: Edinburgh postpartum depression scale; FSFI: The female sexual function index

**Table 3: Total Scores Obtained From The Birth Experience Scale And İts Sub-Dimensions, EPDS and FSFI Scales**

| | **Min-Max*** | **x̄±SD**** |
|---|---|---|
| Birth Process | 9,00-31 | 21,66±5,10 |
| Professional help support intake | 5,00-20 | 14,39±4,98 |
| Perceived moment of safety | 6,00-24 | 17,23±4,82 |
| Harmony in decisions | 3,00-12 | 7,96±2,83 |
| Birth experience scale | 24,00-85 | 61,24±14,71 |
| Depression scale | 0,00 | 11,18±6,30 |
| Sexual Desire | 1,20-6 | 3,20±1,02 |
| Sexual Arousal | 0,00-6 | 3,37±1,72 |
| Lubrication | 0,00-6 | 3,58±1,70 |
| Orgasm | 0,00-6 | 3,54±1,91 |
| Satisfaction | ,80-6 | 4,21±1,70 |
| Pain/discomfort | 0,00-5,6 | 2,99±1,40 |
| Sexual function scale | 2,00-31,9 | 20,90±8,06 |

*Minimum,Maximum; **Standard Deviation. EPDS: Edinburgh postpartum depression scale; FSFI: The female sexual function index

**Table 4: Examination of the Relationship between Birth Experience and Depression and Sexual Functionality**

| | | Birth Process | Professional Assistance Support | Moment of Perceived Safety | Compliance in Decisions | Birth Experience Scale |
|---|---|---|---|---|---|---|
| Depression Scale | **r** | -.299** | -.058 | -.332** | -.129 | -.257** |
| | **p** | .000 | .387 | .000 | .051 | .000 |
| Sexual Desire | **r** | .149* | .180** | .137* | .065 | .170* |
| | **p** | .025 | .006 | .038 | .329 | .010 |
| Sexual Arousal | **r** | .087 | .041 | .094 | .088 | .092 |
| | **p** | .188 | .537 | .157 | .187 | .166 |
| Lubrication | **r** | .101 | .026 | .132* | .128 | .112 |
| | **p** | .128 | .693 | .046 | .053 | .092 |
| Orgasm | **r** | .161* | .090 | .184** | .125 | .171** |
| | **p** | .015 | .175 | ,005 | .060 | .010 |
| Satisfaction | **r** | .149* | .049 | .139* | .097 | .132* |
| | **p** | .025 | .464 | .036 | .142 | .046 |
| Pain/Discomfort | **r** | ,060 | -.008 | .037 | .025 | .035 |
| | **p** | .366 | .908 | .580 | .709 | .598 |
| Sexual Function Scale | **r** | .139* | .067 | .145* | .108 | .139* |
| | **p** | .037 | .312 | .029 | .103 | .036 |

*p<0.05; **p<0.01 Pearson correlation test

**Table 5: Examination of the Effect of Birth Experience Dimensions on Depression and Sexual Functioning**

| Impacted | Affecting | Beta | t | p | R2 |
|---|---|---|---|---|---|
| **Depression Scale** | Professional Assistance Support | ,252 | 3,175 | ,002* | ,148 |
| | Moment of Perceived Safety | -,491 | -6,190 | ,000* | |
| **Sexual Function Scale** | Moment of Perceived Safety | ,145 | 2,196 | ,029** | ,021 |
| **Depression Scale** | Birth Experience Scale | -,257 | -3,997 | ,000*** | ,066 |

*p<0.05; **p<0.01; *** p<0.001

## DISCUSSION

In this study, the effects of vaginal childbirth experience on women's postpartum depression and sexual functioning were examined. It was also noted that the birth experience included the relationship with health professionals and the birth process. It was emphasized that psychological factors related to childbirth are critical to understanding postpartum sexuality and postpartum depression. For women, the sense of confidence associated with the birth experience has a positive impact on their sexuality and emotional health. This study is in line with previous studies that have found that the experience of childbirth triggers women's emotional responses (13,14). For example, in one study, low birth satisfaction was shown to be an important predictor of a high risk of postpartum depression (15).

For women, the birth experience has become a moment of 'self-affirmation' that is central to the mother's psychological well-being. A positive birth experience is associated with a positive attitude toward motherhood and contributes to a woman's self-esteem and feelings (16). And supportive care has a profound impact on the birth experience. It has been reported that the higher the perception of support from health professionals during childbirth, the greater the perceived sense of security, and the lower the anxiety and negative mood (17). In a recent study, the education of the partner, receiving regular care during the gestation period, the person giving birth, the presence of a companion, receiving spinal anesthesia, perineal conditions, anxiety, and satisfaction factors related to pregnancy were found to be factors affecting the birth experience (18). In this study, it was seen that the women had a good birth experience. The fact that women received professional support during childbirth and interacted with their partners may have given them a sense that they were not alone in childbirth and increased their birth experience. However, the birth

experience is not only a physical event, but also encompasses the psychological and social needs of women. This study was conducted in an area with a good socioeconomic level. Therefore, meeting women's social and psychological needs may be reflected in their birth experiences.

The decrease in a woman's sexuality after childbirth can be associated with many conditions, including mode of delivery, the presence of episiotomy or perineal tears, pelvic floor dysfunction, and breastfeeding. However, subjective birth experience has also been reported to be associated with sexual function and sexual satisfaction (19). In one study, a positive relationship between birth experience and sexual function was emphasized (16). In a different study, it was reported that women who gave birth in water described birth as a unique experience, felt safe, and that being with their partner created more positive emotions in them. It was later reported that these women experienced positive feelings about sexuality (including orgasm) and emphasized more intimacy with their partners (20). This study shows that positive memories of the birth process also affect women's sexuality. Given that childbirth is a multifaceted experience, we argue that health professionals should consider a holistic approach when caring for women during labor (21).

In addition, the study found that women's sense of confidence in childbirth had a positive effect on sexual desire. It was observed that it positively affected women's sexual desire, including sexual satisfaction, lubrication, and orgasm. This is because making love or giving birth are similar processes in a private and safe environment for the couple. Given the parallels between childbirth and sexual intercourse, where similar hormones are involved, we can assume that childbirth is as pleasurable as sexual intercourse. For example, a different study examining the relationship between birth experiences and sexual function of women who gave birth for the first time shows that positive birth experiences positively affect women's sexual function (22). It can be said that women who gave birth in a safe environment may have felt the same feelings about their postpartum sexuality and their sense of confidence in their sexuality may have affected them positively. For this reason, the fact that women feel that they receive professional support in childbirth and interact with their spouses positively affects them psychologically by giving them the feeling that they are not alone and reflects on their sexuality (23).

On the other hand, women's sexual anxiety can also be caused by the physical and psychological difficulties they experience after childbirth (24). Some women may be physiologically ready for sexual intercourse but not psychologically (25). Depression decreases

sexual desire during the postpartum, and decreased sexual satisfaction is the main predictor of reduced frequency of sexual intercourse after 12 weeks (26). About half (40.4%) of the women in this study were at risk for depression, and about half of the participants (45.6%) were experiencing sexual dysfunction. It has also been found that there is a negative relationship between birth experience and postpartum depression. Although many factors influence the prediction of postpartum depression, studies in the literature support a potential association between birth experience and the risk of postpartum depression (27,13). One study, while examining the relationship between birth satisfaction and the risk of postpartum depression, stated that a low level of birth satisfaction was an important predictor of the risk of postpartum depression (13). Another systemic review noted that 11 of the 15 studies reviewed reported a significant association between women's postpartum outlooks and postnatal depression (28). In this context, the importance of strategies that promote positive birth experiences, such as providing support to women during childbirth, providing minimal interventions, and helping with childbirth preparation, is emphasized. These findings suggest that healthcare providers need to develop approaches that will improve women's birth experience.

The experience of childbirth can have long-term effects on a woman's health and well-being. A positive birth experience has been associated with internal factors, such as the woman's own ability and strength, and external factors, such as trusting and respecting the midwife during labor (29). These experiences can positively affect a woman's relationship with the child, as well as her relationship with her husband. Individualized emotional support empowers women and increases the likelihood of a positive birth experience. As a result, it is extremely important for midwives and other caregivers to build relationships with women where mutual trust is important and to express a strong belief in the woman's ability to give birth. This helps to create an environment where everyone works as a team for the benefit of the woman and the child.

## Conclusion

Within the scope of this study, a detailed analysis was made on the relationship between postpartum depression and vaginal birth experience and its possible effects on sexual life. According to the results of the research, it was observed that the experience of vaginal birth had a decisive effect on the risk of postpartum depression in women. In addition, postpartum depression has been found to have negative effects on sex life and is associated with the experience of vaginal

birth. It is emphasized that more studies should be carried out on this subject and health policies should be shaped according to these findings. These findings highlight the importance of the vaginal birth experience for the prevention and treatment of postpartum depression. It is emphasized that the experiences of women during the birth process are important in terms of both psychological and sexual health, and therefore it is necessary to provide a supportive environment during the birth process. In order to increase awareness of sexual health, informative seminars on postpartum sexual health should be organized and workshops that encourage open communication between partners should be held. It is also critical for parents to be trained to understand the needs of women in the postpartum period and to adopt a multidisciplinary approach between midwives, nurses and doctors. Providing a safe and supportive birth environment, ensuring that family members also support women, and establishing regular follow-up programs to monitor postpartum mental health and sexual function can improve the vaginal birth experience.

**Acknowledgments**: We thank the women who agreed to participate in our study.

**Conflict of Interest Statement**: The authors have no conflict of interest.

**Informed Consent**: The purpose of the study was explained to the pregnant women who participated in the study, and the research information about the study and verbal and written informed consent was obtained from the pregnant women.

**Ethical Approval**: The study was conducted in accordance with the Declaration of Helsinki in accordance with the principles of ethics. For the research to be implemented, first, ethical board permission (dated 2021.11.24, numbered E-138) and institutional permission for data collection were taken. Verbal and written informed consent was obtained for their voluntary participation in the study.

**Author Contributions**: Conception: Ö.T. Design: Ö.T., Ü.O. Literature Review Ö.T.

Data Collection: A.G. Statistics: Ö.T., Writing: Ö.T. Critical Review: U.O

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