Annals of Medicine and Medical Sciences (AMMS)
Volume 04, 2025, *Page No.: 317 to 323*
Available at: *http://ammspub.com*

Original Article

OPEN ACCESS

Does Postpartum Depression Affect Maternal Attachment? A Sectional Study

Aynur BAHAR [1], Hatice Serap KOÇAK [2], Derya ÖZBAŞ GENÇARSLAN [1], Döndü ÇUHADAR [1]

[1]Faculty of Health Sciences, Department of Psychiatric Nursing, Gaziantep University, Türkiye.
[2]Faculty of Health Sciences, Department of Public Health Nursing, Gaziantep University, Türkiye.

*Corresponding author: Aynur BAHAR; *abahar@gantep.edu.tr*

Abstract

Aim: This cross-sectional study was conducted to determine the relationship between maternal attachment and postpartum depression and the affecting factors. ***Method:*** 132 Women who applying to Family Health Centers constitute the population of the study. Personal Information Form, Edinburgh Postpartum Depression Scale and Maternal Attachment scale were used to collect data. The data were evaluated in SPSS by using frequency, mean, t-test, Anova and correlation analysis. ***Results:*** The results obtained from this study showed that there was a negative and highly significant relationship between postpartum depression and maternal attachment($p<0.05$). In the statistical analysis, a significant difference was found between the women's depression risk and maternal attachment score averages according to where they live, education status, social security status, income status, desire to become pregnant, and whether the spouse helps with baby care ($p<0.05$). ***Conclusion:*** A mother experiencing postpartum depression may have difficulties bonding with her baby. Therefore, it is important to know the factors related to maternal behavior in the early postpartum period and to determine the needs of mothers. Psychiatric help and counseling services should be provided to women who show depressive symptoms during pregnancy in order to provide them with coping skills.

Keywords: ***Postpartum Depression, Maternal Attachment, Nursing***

Introduction

Attachment is a process of mutual interaction that begins with the acquaintance phase and ends with the development of attachment, and is a strong and emotional bond established between the baby and the person raising it. Attachment is not only a bond of love, but also a vital bond that shapes the child's physical and emotional development and directs close relationships throughout his life [1].

Maternal attachment, which is accepted to begin with pregnancy, is a type of attachment that continues after birth and has a significant impact on the development of the maternal role [2,3,4]. The period immediately after birth is critical in the formation of maternal attachment. This period includes maternal behaviors such as positive expression, touching, contact behavior, hugging, smiling, and adapting to the cues expressed by the baby [5]. Recent research shows that insecure attachment to the mother not only increases the risk of postpartum depression but can also lead to attachment disorders. Researchers report that maternal postpartum depression partially mediates the link between maternal attachment style and mother-infant bonding [6,7].

Studies have found that maternal depression and mother-infant attachment disorders are related [6,8]. It has been stated that mothers' depression levels have a direct and negative effect on maternal attachment [4]. Conditions such as concentration difficulties, anhedonia, and lack of energy caused by depression can limit the mother's attention to the baby's needs and lead to a decrease in caregiving skills [5].

The relationship established between mother and baby in the postpartum period helps the mother cope with postpartum depression. Postpartum depression (PPD) is an important mental health problem that should not be ignored, considering its negative effects on the mother, baby and family. Therefore, it is important to prevent the development of postpartum depression through early initiation of mother-infant interaction and effective treatment interventions. The aim of this study is to examine the factors affecting maternal attachment and postpartum depression and to determine the relationship between them.

Materials and Methods

Desing

This study has descriptive, relationship-seeking and cross-sectional features.

Study setting and recruitment

Women applying to Family Health Centers constitute the population of the study. There are 132 Family Health Centers in the city center where the study was conducted. Among these, two family health centers were selected by lottery method. Power analysis was performed to calculate the sample size and 91 women were determined as the research sample. The research was completed with 149 women.

Collection of Data

Personal Information Form, Edinburgh Postpartum Depression Scale and Maternal Attachment scale were used to collect data.

Received: March 25, 2025; **Revised:** April 29, 2025; **Accepted:** May 03, 2025

Criteria for inclusion in the study; The criteria were being over 18 years of age, the baby being between 1-4 months old, having no communication problems that would prevent answering the survey, not being diagnosed with depression, and agreeing to participate in the study after being informed.

The surveys were administered face to face to mothers who applied to the family health center after birth to have their babies vaccinated. Data was collected between 01 April 2021 and 01 April 2022.

Data collection tools

Personal Information Form: The form prepared by the researchers includes 19 questions to determine the demographic information of mothers who have just given birth.

Edinburgh Postpartum Depression Scale (EPDS): EPDS is a scale prepared for screening purposes. The scale developed by Cox et al. was adapted into Turkish by Engindeniz et al. (1996) [9]. The scale determines the risk of postpartum depression in women in the postpartum period. The four-point Likert type scale consists of 10 questions. Answers are scored between 0-3 and consist of 4 options. The highest score that can be obtained from the scale is 30 and the lowest score is 0. People who score more than 12 points from the scale are considered to be in the risk group. Engindeniz et al. (1996) found the Cronbach Alpha value of the scale to be 0.87 [9]. In our study, this value is 0.83.

Maternal Attachment Scale (MAS): Maternal Attachment Scale was developed by Mary E. Muller. The validity and reliability of the Turkish form was determined by Kavlak and Şirin (2009) [10]. It consists of 26 questions. The lowest score is 26 and the highest score is 104. It is a 26-item scale with a four-point Likert type, with each item ranging from "always" to "never". Each item contains direct statements and is calculated as always (a) = 4 points, often (b) = 3 points, sometimes (c) = 2 points and never (d) = 1 point. A high score from the scale indicates a high level of maternal attachment, and a low score indicates a low level of maternal attachment. In the original article, Cronbach's alpha coefficient was found to be 0.77 in the first month and 0.82 in the fourth month, and it was concluded that its reliability was high. In our study, this value is 0.81.

Evaluation of Data

The data were evaluated in SPSS version 22. In evaluating the data, percentages, arithmetic mean and standard deviation were used to examine the descriptive characteristics of the mothers; t-test and analysis of variance in comparing the descriptive characteristics of the mothers and the average score of the scale; Correlation analysis was performed to determine the relationship between postpartum depression and maternal attachment. The significance level was taken as $p<0.05$.

Ethics of the Research

Before starting the study, approval was obtained from the Clinical Research Ethics Committee of the relevant university. Permissions were obtained from the institution where the study would be conducted and for the use of measurement tools. The sample group was informed about the study and their permission was obtained. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Results

Table 1 shows the introductory characteristics of the mother and the baby. The average age of the mothers in the study is 27.02±4.7. Nearly half (46.3%) are secondary school graduates and 71.1% are not working. 88.6% of women live in the city center and 89.9% have social security. Most women (49%) stated their income level as low. 18.1% of women reported a history of miscarriage and 13.4% of women reported an abortion. The number of pregnancies is 1-3 (81.9%) and the number of births is 1-2 (68.5%). The majority of women stated that they became pregnant willingly (60.4%) and that they went for more than 6 check-ups during their pregnancy (84.6%). 35.6% of the babies of the group participating in the study were in their 3rd month. The gender of the babies is 55% boys and 45% girls.

Comparisons between variables and scales are shown in Table 2. In the statistical analysis, a significant difference was found between the women's depression risk score averages according to where they live, working status, education status, social security status, income status, desire to become pregnant, miscarriage and abortion history, and whether the spouse helps with baby care ($p<0.05$). A significant difference was found between the mean maternal attachment scores according to the women's place of residence, education level, social security status, income level, type of birth, desire for pregnancy, number of births, gender of the baby and whether the spouse helps with baby care ($p <0.05$). There is no significance between the scale score averages according to other variables (age, family type, number of check-ups during pregnancy, baby age, breastfeeding and supplementary feeding status) ($p>0.05$).

Table 3 shows the scale score averages and the relationship between the scales. EPDS scale mean score was 9.18±5.80; The average score of the MAS scale was determined as 96.59±11.86. In the correlation analysis between EPDS and MAS, a negative, moderate, highly significant relationship was detected. As postpartum depression increases, the level of maternal attachment decreases.

Table 1: Distribution of Descriptive Characteristics of Mother and Baby

MOTHER		**n**	**%**
Age	X=27.02±4.7		
Education	Illeterate	13	8.7
	secondary education	69	46.3
	high school and above	67	45.0
Social security	Yes	134	89.9
	No	15	10.1
Working	Yes	43	28.9
	No	106	71.1
Income	Income is less than expenses	73	49.0
	Income equals expenses	64	43.0
	Income exceeds expenses	12	8.0
Place of residince	City	132	88.6

	town/village	17	11.4
Family type	Core family	126	84.6
	extended family	23	15.4
Number of pregnancies	1-3	122	81.9
	4 and above	27	18.1
Number of births	1-2	102	68.5
	3 and above	47	31.5
Number of miscarriages	Yes	27	18.1
	No	122	81.9
Abortion history	Yes	20	13.4
	No	129	86.6
Voluntary pregnancy	Yes	90	60.4
	No	59	39.6
Number of check-ups during pregnancy	0-5 times	23	15.4
	6 and above	126	84.6
Type of birth	Vaginal birth	81	54.4
	Cesarean	68	45.6
Baby			
Age	1 month	25	16.8
	2 month	27	18.1
	3 month	53	35.6
	4 month	44	29.5
Gender	Boy	82	55
	Girl	67	45
Breastfeeding	Yes	125	83.9
	No	24	16.1
Taking supplementary food	Yes	74	49.7
	No	75	50.3
Spouse Assistance for Baby Care	Yes	92	61.7
	No	57	38.3
Total		**149**	**100.0**

Tablo 2: Comparison of Scale Score Averages According to Some Variables

		EPDS	**MAS**
Place of residence	city	8.77±5.77	95.9±12.3
	Town/village	12.41±5.09	101.6±4.18
Test and p value		**t:-2.477 p:0.014**	**t:-3.853 p:0.001**
Working	Yes	6.13±4.06	98.76±7.41
	No	10.42±5.95	95.71±13.1
Test and p value		**t:5.056 p:0.001**	t:-1.786 p:0.076
Education	Illeterate	9.92±3.59	96.15±9.35
	Secondary school	10.4±6.30	93.56±15.81
	High school and above	7.71±5.30	99.80±4.67
Test and p value		**F:4.136 p:0.018**	**F:4.966 p:0.008**
Social securty	Yes	8.61±5.70	98.47±8.73
	No	14.26±3.99	79.80±20.6
Test and p value		**t:4.945 p:0.001**	**t:-3.464 p:0.004**
Income	Income is less then expenses	11.50±5.72	93.17±15.51
	Income is equal to expenses	6.75±5.02	99.81±5.08
	Income is exceeds expenses	8.08±4.66	100.25±4.24
Test and p value		**F:13.718 p:0.001**	**F:6.384 p:0.002**
Birth type	Vaginal birth	8.58±5.34	98.62±7.41
	Cesarean	9.91±6.26	94.17±15.3
Test and p value		t:-1.400 p:0.164	**t:2.193 p:0.031**
Voluntary pregnancy	Yes	8.00±5.72	99.11±5.50
	No	11.00±5.48	92.76±16.9
Test and p value		**t:-3.182 p:0.002**	**t:2.780 p:0.007**
Number of pregnancies	1-2	8.6±5.98	98.61±8.93
	3 and above	10.36±5.24	92.21±15.7
Test and p value		t:-1.772 p:0.079	**t:2.598 p:0.012**

History of misscarriage	Yes	12.44±6.18	93.00±16.1
	No	8.53±5.52	97.39±10.6
Test and p value		**t:-3.010 p:0.003**	t:1.350 p:0.187
History of abortion	Yes	11.85±6.82	91.10±17.2
	No	8.77±5.54	97.44±10.6
Test and p value		**t:-2.236 p:0.027**	t:1.598 p:0.125
Gender of the baby	Boy	8.56±6.42	94.71±7.11
	Girl	9.95±4.86	98.89±14.4
Test and p value		t:-1.506 p:0.134	**t:-2.302 p:0.023**
Spouse Assistance for Baby Care	No	10.32±6.38	94.90±13.7
	Yes	7.35±4.12	99.33±7.29
Test and p value		**t:3.453 p:0.001**	**t:-2.565 p:0.011**

F: One-Way ANOVA; t: Independent-Samples T Test

Tablo 3: EPDS and MAS Avarege Score and Correlation Between EPDS and MAS

Scale	Min-Max	x̄±SD	EPDS- MAS Correlation
EPDS	0-25	9.18±5.80	r= -,382* p=0.001
MAS	55-104	96.59±11.86	

** Correlation is significant at the 0.01 level*

Discussion

There are many factors that affect maternal attachment, which is defined as the unique, loving, emotional bond formed between the pregnant woman and the unborn child. In our study, a significant difference was found between maternal attachment scores according to women's place of residence, education level, social security status, income status, type of birth, desire for pregnancy, number of births, gender of the baby and whether the spouse helps with baby care.

When the place where women live and their maternal attachment score averages are compared, the maternal attachment levels of those living in district and village environments were found to be high. No findings regarding location and maternal attachment have been found in the literature. However, it is thought that district or village life (being in a small area) may have increased the desire to interact with the baby due to situations such as a quieter life, healthy nutrition and healthy sleeping habits.

In our study, the mean maternal attachment scores of mothers with high school education or above were found to be high. Mothers with low education levels may have difficulties in coping with stressful situations after birth and difficulties in embracing the maternal role may have negatively affected maternal attachment. Our finding is compatible with the literature [11].

In our study, it was determined that social security and income level were effective on attachment. It has been found that the family's social security and a good income level statistically affect maternal attachment. Our finding is similar to other studies that suggest that income status affects the motherhood role [11-13].

One of the important factors affecting attachment is the desire for pregnancy. Positive maternal attachment is observed in women with planned pregnancies. In our study, the average attachment score of mothers who became pregnant without planning was found to be low. It is also stated in the literature that maternal attachment is weaker in unplanned pregnancies compared to planned pregnancies [14-19]. Women who are not ready for the role of motherhood and become pregnant without planning may have difficulty establishing a relationship with their babies in the postpartum period; they may not have enough interest in their babies.

In our study, it was found that the mean maternal attachment scores of mothers who gave birth vaginally were high. During cesarean birth, compared to normal birth, women may be more anxious and anxious due to the difficulties of the surgical operation. This may cause the bonding process between mother and baby to be prolonged. There is evidence that situations such as the mother's exposure to anesthesia during cesarean births, anesthesia complications and prolonged hospitalization, and pain after cesarean section delay maternal attachment [20,21]. It has also been reported that vaginal birth increases maternal attachment [11]. After normal birth, mothers can meet their babies earlier and show more behaviors such as touching and hugging. Situations that provide sensory bonding, such as the first contact between the mother and the baby in the postpartum period and breastfeeding, are of great importance in the development of the baby [22]. When the mother starts breastfeeding her baby as soon as possible, it accelerates the maternal bonding process. This situation positively affects maternal attachment.

In our study, it was determined that as the number of births increased, the mean maternal attachment scores decreased. In one study, maternal attachment scores of primiparous mothers were found to be higher than multiparous mothers [17]. When we look at the studies, it is reported that the attachment of mothers is more positive if they have only one child and the number of births is three or less [10,11]. In our study, mothers whose baby was a girl reported higher adherence. Similarly, in a study, it was reported that women whose babies are girls have more positive relationships with their babies and have higher maternal attachment scores [23]. Social support provided by family/partners and friends makes it easier for mothers to cope with stressors by providing emotional and cognitive relief. Social supports strengthen maternal attachment by ensuring adaptation to the maternal role [24]. In our study, the mean maternal attachment scores of mothers who reported receiving spousal support in baby care were found to be high. The mother's relationship with her partner significantly affects maternal attachment. Literature information mostly indicates that women who receive spousal support feel healthier and this positively affects their motherhood roles [11].

There are many factors that can cause postpartum depression. In our study, it was found that depression risk score averages differed significantly according to characteristics such as where women live, employment status, education level, social security status, income status, desire to become pregnant, miscarriage, abortion history, and spouse's assistance in baby care.

In a study, it was reported that the place of residence affects psychosocial well-being [25]. In our study, postpartum depression scores of women who reported their place of residence as a district

or village were found to be high. Low income levels, cultural factors and difficulties arising from living conditions may be the reason for this result.

In our study, consistent with the literature [26-28], we found that the postpartum depression scores of working mothers were significantly lower than those of non-working mothers. Mother's employment had a positive effect on depression. In a study, it was stated that postpartum stress levels of non-working mothers were high [29]. We think that this situation is related to the time spent with the child, and that working mothers compensate for their losses during the day by spending more productive time with their babies. Additionally, the fact that working in an income-generating job can reduce economic concerns may also have affected this result.

In our study, a significant difference was found between women's educational status and depression scores, and it was determined that women with high school education or above had lower depression scores. High education level may have a positive effect on women's mood by increasing their ability to cope with stress.

In our study, depressive symptom levels of mothers who reported that their income was less than their expenses were found to be high. It has been reported in the literature that low income levels increase psychological stress in the postpartum period [29]. We think that the family's lack of social security and low income negatively affects the mother's attachment by increasing her anxiety about the future due to economic difficulties.

In our study, depression levels were found to be high in women who had unwanted or unplanned pregnancies. Our finding shows that physical or psychological problems may increase in women who become pregnant unintentionally, and deterioration may occur in their spouse and family relationships. It is thought that early diagnosis of problems related to pregnancy desire will contribute to preventing postpartum depression.

Miscarriage and abortion are negative life experiences for individuals, and it is reported that a history of miscarriage and abortion may pose a risk for depression in subsequent pregnancies [30-32]. In our study, mean depression scores were found to be high in women who had pregnancies that ended in miscarriage or abortion. Our findings, which are consistent with the literature, show that negative pregnancy experiences may increase postpartum depression.

It has been reported that close circle support provides psychological relief by reducing the mother's duties and responsibilities [33]. In our study, it was determined that spousal support reduced depression scores. It is thought that a safe and supportive partner relationship plays a very important role in coping with the problems of this period in a healthy way [34]. It is known that the spouse, in addition to being a good source of emotional support in the postpartum period, can also provide support by helping with child care and home-related tasks [35]. In a study, it was found that as mothers' perception of spousal support increased in the early postpartum period, their postpartum stress decreased [36]. In another study, it was found that spousal support was protective against postpartum depression [37]. Therefore, encouraging spouses to help with baby care may contribute to protecting the mother's mental health.

The development of secure attachment orientation between a mother and her child depends on the mother's sensitivity and her ability to meet her child's needs [38]. It is known that mothers experiencing depression often cannot provide sensitivity to their children [39]. Maternal depression is linked to negative affect and behaviors [40]. Mothers' focus on their own mental state can harm mothers' ability to focus on their babies' mental development. It may result in difficulties in the baby's emotional development and attachment security [41]. In our study, the correlation analysis between postpartum depression and maternal attachment scales revealed a negative, moderate, highly significant relationship. Our finding revealed that mothers' depression levels had a negative effect on maternal attachment. Weak attachment level causes depression [4]. Many studies have shown that postpartum depression negatively affects maternal attachment [11,13,16,42-44]. These results reveal the importance of developing psychosocial support programs for pregnant women. It is emphasized that programs to prevent and reduce depressive symptoms implemented during pregnancy have positive effects on mother-infant attachment [45]. It is also important to detect the risk of depression through screening during the postpartum period. We believe that early interventions for mothers who are determined to be at risk will contribute not only to improving the mental health of the mother, but also to strengthening the bond between mother and baby.

Conclusion

The results obtained from this study showed that there was a negative and highly significant relationship between postpartum depression and maternal attachment. A mother experiencing postpartum depression may have difficulties bonding with her baby. Therefore, it is important to know the factors related to maternal behavior in the early postpartum period and to determine the needs of mothers.

Relevance to Clinical Practice

1. There is a negative and highly significant relationship between postpartum depression and maternal attachment.
2. Psychiatric help and counseling services should be provided to women who show depressive symptoms during pregnancy in order to provide them with coping skills.
3. It is important to know the factors related to maternal behavior in the early postpartum period and to determine the needs of mothers.
4. Women who have a history of miscarriage and abortion or who become pregnant without planning should be supported in their adaptation to the role of mother.
5. Considering the effect of spousal support in preventing postpartum depression, couple therapy or emotion-focused therapeutic practices aimed at strengthening the relationship between spouses may contribute to both preventing depression and strengthening the effect between mother and baby.

Limitations

Since our study is cross-sectional, it does not represent the general population. Additionally, the fact that self-rating scales were used and other psychiatric symptoms were not questioned are among our limitations. Despite these limitations, it is thought that our findings will shed light on future studies.

List of abbreviations

PPD: Postpartum depression

MAS: Maternal Attachment Scale

EPDS: Edinburgh Postpartum Depression Scale

Declaration

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding Statement

None

Ethics approval and consent to participate

Before starting the study, approval was obtained from the Clinical Research Ethics Committee of the relevant university (Decision date:10.03.2021; Decision no:2021/20). Permissions were obtained from the institution where the study would be conducted and for the use of measurement tools. The sample group was informed about the study and their permission was obtained. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Data Availability

All data supporting the findings of this study are available within the paper

Authors' contributions

Design and conceptualization: HSK; Data collection: DÖG; Methodology: AB, HSK; Writing: AB, HSK; Review and editing: HSK, DÇ, AB.

Acknowledgments

The authors also want to thank all the patients who took time to contribute to this study.

References

[1] Kavlak, O., & Şirin, A. (2007). Anne ve babaya ait bağlanma ve hemşirenin rolü. Ege Üniversitesi Hemşirelik Yüksek Okulu Dergisi, 23(2), 183- 94.

[2] Kinsey, B.C., & Hupcey, J.E. (2013). State of the science of maternal–ınfant bonding: a principle-based concept analysis. Midwifery, 29, 1314-1320.

[3] Muzik, M., Bocknek, E.L., Broderick, A., Richardson, P., Rosenblum, K.L., Thelen, K., & Seng, J.S. (2013). Mother-Infant Bonding Impairment across the First 6 Months Postpartum: The Primacy of Psychopathology in Women with Childhood Abuse and Neglect Histories. Archives of Women's Mental Health, 16, 29-38.

[4] Nacar, E., & Gökkaya, F. (2019). Bağlanma ve Maternal Bağlanma Konusunda Bir Derleme. Kıbrıs Türk Psikiyatri ve Psikoloji Dergisi, 1(1), 49-55. doi:10.35365/ctjpp.19.1.06

[5] Vanwalleghem, S., Miljkovitch, R., Sirparanta, A., Toléon, C., Leclercq, S., & Deborde, A.S. (2023). Maternal attachment networks and mother–ınfant bonding disturbances among mothers with postpartum major depression. International Journal of Environmental Research and Public Health, 20, 6155. Doi: 10.3390/ijerph20126155

[6] Nonnenmacher, N., Noe, D., Ehrenthal, J.C., & Reck, C. (2016). Postpartum Bonding: The Impact of Maternal Depression and Adult Attachment Style. Archives of Women's Mental Health, 19, 927-935.

[7] Handelzalts, J.E., Levy, S., Molmen-Lichter, M., Ayers, S., Krissi, H., Wiznitzer, A., & Peled, Y. (2021). The association of attachment style, postpartum PTSD and Depression with Bonding-A longitudinal path analysis model, from childbirth to six months. The Journal of Affective Disorders, 280, 17-25.

[8] Kasamatsu, H., Tsuchida, A., Matsumura, K., Shimao, M., Hamazaki, K., & Inadera, H. (2020). Japan Environment and Children's Study Group. Understanding the relationship between postpartum depression one month and six months after delivery and mother-infant bonding failure one-year after birth: results from the Japan Environment and Children's study (JECS). Psychological Medicine, 50(1), 161-169. doi: 10.1017/S0033291719002101.

[9] Engindeniz, A.N., Küey, L. & Kültür, S. (1997). Edinburg Doğum Sonrası Depresyon Ölçeği Türkçe Formu geçerlilik ve güvenirlik çalışması, Bahar Sempozyumları, 1, 51-52.

[10] Kavlak O, & Şirin A. (2009). Maternal Bağlanma Ölçeği'nin Türk toplumuna uyarlanması. Uluslararası İnsan Bilimleri Dergisi, 6, 188-202.

[11] Çankaya, S, Dereli Yılmaz, S, Can R, & Değerli Kodaz N. (2017). Postpartum Depresyonun Maternal Bağlanma Üzerine Etkisi. Acıbadem Üniversitesi Sağlık Bilimleri Dergisi, (4), 232-240.

[12] Elkin, N. (2015). Gebelerin Prenatal Bağlanma Düzeyleri ve Bunları Etkileyen Faktörler. Sürekli Tıp Eğitimi Dergisi, 24(6), 230-237.

[13] Dereli Yılmaz S. (2013). Prenatal Anne - Bebek Bağlanması. Hemşirelikte Eğitim ve Araştırma Dergisi, 10(3), 28-33.

[14] Taner Büyüksarı, S., & Çalışır, H. (2021). Planlanmamış gebeliklerin doğum sonrası erken dönemdeki annelik davranışına etkisi. Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, 5(1), 37-50. https://doi.org/10.46237/amusbfd.707683

[15] Kınık, E., & Özcan, H. (2020). Factors affecting maternal attachment and maternal status in primipara. Journal of Health Professıonals Research, (2), 47-53.

[16] Koptur, A., & Emül, T.G. (2017). Fetüs Ve Yenidoğanda Bağlanmanin Iki Yüzü: Maternal Ve Paternal Bağlanma. Ege Üniversitesi Hemşirelik Fakültesi Dergisi, 33(3), 138-152.

[17] Şolt Kırca, A., & Savaşer, S. (2017). Doğum Sayısının Anne Bebek Bağlanmasına Etkisi. Sağlık Bilimleri ve Meslekleri Dergisi, 4(3), 236-243. Doi: 10.17681/hsp.288941

[18] Bilgin, Z., & Ecevit Alpar, Ş. (2018). Kadınların Maternal Bağlanma Algısı ve Anneliğe İlişkin Görüşleri. Journal of Health Science and Profession, 5(1), 6-15.

[19] Dereli Yılmaz, S., & Kızılkaya Beji, N. (2010). Gebelerin stresle başa çıkma ve depresyon düzeyleri. Genel Tıp Dergisi, 20(3), 99-108.

[20] Belkız, L.I. (2017). Doğum Şeklinin Anne-Bebek Bağı Üzerine Etkisinin İncelenmesi. Haliç Üniversitesi.

[21] Bat Tonkuş, M., & Muslu S. N. (2021). Maternal Bağlanma ve İlişkili Faktörler. Journal of Medical Sciences, 2(2), 32-40. https://doi.org/10.46629/JMS.2021.39

[22] Güleşen, A., & Yıldız, D. (2013). Erken postpartum dönemde anne bebek bağlanmasının kanıta dayalı uygulamalar ile incelenmesi. TAF Preventive Medicine Bulletin, 12(2), 177-82.

[23] Sabuncuoğlu, O., & Berkem, M. (2006). Bağlanma biçimi ve doğum sonrası depresyon belirtileri arasındaki ilişki: Türkiye'den bulgular. Türk Psikiyatri Dergisi, 17, 252-8.
[24] Özdemir, K., Başkaya, Y., & İdare, A. (2021). Annelerin maternal bağlanma düzeyleri ile algıladıkları sosyal destek arasındaki ilişkinin değerlendirilmesi. Jinekoloji Obstetrik ve Neonatoloji Tıp Dergisi, 18(1), 638-642. Doi: 10.38136/jgon.715703
[25] Erdemoğlu, Ç., Karakayalı, Ç., Özşahin, Z. (2018). Gebelikte psikososyal sağlık düzeyi ve ilişkili faktörler. The Journal of Turkish Family Physician, 9(2), 34-46.
[26] Dülgeroğlu Bayazıt, D., Noyan Ahlatcıoğlu, E., Dönmez, M., Yavuzlar Civan, H., & Aydın, N. (2021). The effects of maternal employment on depression, anxiety, maternal attachment, and self-confidence. Neuropsychiatric Investigation, 59(4), 96-101.
[27] Gurudatt, N. (2014). Postpartum depression in working and non-working women. International Proceedings of Economics Development and Research, 78; 2014.
[28] Adhikari, H. (2012). Anxiety and depression: comparative study between working and non-working mothers. Global Journal of Human Socıal Science Sociology, Economics & Political Science, 12, 216-225.
[29] Mollard, E., Kupzyk, K., & Moore, T. (2021). Postpartum stress and protective factors in women who gave birth in the United States during the COVID-19 pandemic. Women's Health 17, 1-10. Doi: 10.1177/17455065211042.
[30] Çakır, L., & Can, H. (2012). Gebelikte sosyodemografik değişkenlerin anksiyete ve depresyon düzeyleriyle ilişkisi. Turkish Family Physician, 3(2), 35-42.
[31] Kapan, M., & Yanıkkerem, E. (2016). Kırsal ve kentsel alanda yaşayan gebelerin depresyon, yalnızlık ve şiddete maruz kalma durumları. TAF Preventive Medicine Bulletin, 15(5):431-439.
[32] Zaman, F.K., Özkan, N., & Toprak, D. (2018). Gebelikte depresyon ve anksiyete. Konuralp Tıp Dergisi, 10(1), 20-25.
[33] Bingöl, T.Y., & Tel, H. (2010). Perceived Social Support, Postpartum Depression and the Effecting Factors in Women in the Postpartum Period. Journal of Anatolian Nursing and Health Sciences, 10(3), 1-6.
[34] Wright, N., Hill, J., Pickles, A., & Sharp, H. (2015). The specific role of relationship life events in the onset of depression during pregnancy and the postpartum. Plos One, 10,1-12.
[35] Zörer, P.B., Akbulut, S.T., & Dirik, G. (2019). Role of attachment patterns and partner support in postpartum depression. Psikiyatride Guncel Yaklaşimlar, 11(2), 154-166.
[36] Aydın R., Palancı Ay, Ö., Yazıcı Topçu, T., & Aktaş, S. (2022). Annelerin erken postpartum dönemdeki eş desteği algısının postpartum stres üzerine etkisi. Sted, 31(2), 126-133. Doi: 10.17942/sted.1027517
[37] Yaksı, N., & Save, D. (2021). How do social and spousal support influence postpartum depression?. Marmara Medical Journal, 34(3), 327-338.
[38] Wan, M. W., & Green, J. (2009). The impact of maternal psychopathology on child–mother attachment. Women's Mental Health, 12, 123–124. https://doi.org/10.1007/s00737-008-0010-0
[39] Barnes, J., & Theule, J. (2019). Mater-nal depression and infant attachment security: A meta-analysis. Infant Mental Health Journal, 40, 817-834. doi:10.1002/imhj.21812
[40] Goodman, S. H., Rouse, M. H., Connell, A. M., Robbins Broth, M., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. Clinical Child and Family Psychology Review, 14, 1–27. https://doi.org/10.1007/s10567-010-0080-1
[41] Bigelow, A.E., Beebe, B., Power, M., Stafford, A.L., Ewing, J., Egleson, A., & Kaminer, T. (2018). Longitudinal relations among maternal depressive symptoms, maternal mind-mindedness, and infant attachment behavior. Infant Behavior & Development, 51, 33-44.
[42] Denizli, R., Farisoğulları, N., Sakcak, B., Çiçekli, N., Özdemir M., & Sakin Ö. (2022). Evaluation of postpartum depression and maternal attachment scale in a low socioeconomic level region: How was it affected during the Covid-19 pandemic period? Medical Science and Discovery, 9(4), 228-232. Doi: 10.36472/msd.v9i4.711
[43] Goecke, T.W., Voigt, F., Faschingbauer, F., Spangler, G., Beckmann, M.W., & Beetz, A. (2012). The association of prenatal attachment and perinatal factors with preand postpartum depression in first-time mothers. Archives of Gynecology and Obstetrics, 286, 309-16. doi: 10.1007/s00404-012-2286-6
[44] O'Higgins, M., Roberts, I.S.J., Glover, V. & Taylor, A. (2013). Mother-child bonding at 1 year; associations with symptoms of postnatal depression and bonding in the first few weeks. Archives of Women's Mental Health, 16(5), 381-389.
[45] Nieto, L., Lara, M.A., & Navarrette, L. (2017). Prenatal Predictors of Maternal Attachment and Their Association with Postpartum Depressive Symptoms in Mexican Women at Risk of Depression. Maternal and Child Health Journal, 21, 1250-1259.