Euras J Fam Med 2021;10(4):219-26. doi:10.33880/ejfm.2021100408 **Original Research**

Investigation of the Relationship Between Postpartum-Specific Anxiety and Maternal Attachment and Affecting Factors in a Turkish Sample

Songul Duran[1], Serap Kaynak[2]

[1]*Izmir Demokrasi University Health Services Vocational College, Care of Elderly Program, Izmir, Turkey. ORCID iD: 0000-0002-2565-7784. songul.duran@gmail.com (Corresponding Author)*
[2]*Balikesir University Faculty of Health, Department of Child Health Nursing, Balikesir, Turkey. ORCID iD: 0000-0001-9482-5254*

ABSTRACT

Aim: Postpartum-specific anxiety is associated with impaired mother-infant attachment, postpartum depression, reduced probability of breastfeeding, increased risk of infant abuse, and increased probability of anxiety in children and may lead to psychological, cognitive, and psycho-motor disorders in child development. This descriptive and cross-sectional study aims to determine the effect of anxiety level in the postpartum period in women on maternal attachment.

Methods: The participants were 384 postpartum women who have a 1-3-month old baby. Data were collected using a personal information form, Postpartum Specific Anxiety Scale, and Maternal Attachment Inventory.

Results: It was found that the Postpartum Specific Anxiety Scale in women was at a medium level, while maternal attachment was at a high level. While the Postpartum Specific Anxiety Scale was at higher levels in those who were younger, unemployed, and had no other children, the younger age of the partner increased the Postpartum Specific Anxiety Scale score. No statistically significant relationship was found between Postpartum Specific Anxiety Scale and maternal attachment.

Conclusion: It is seen that to evaluate women in terms of anxiety in the postpartum period and to provide the necessary psychosocial support is necessary. The fact that maternal attachment in women was high may have had a positive effect on her relationship with postpartum anxiety.

Keywords: postpartum, anxiety, children, bonding

Date of submission: 29.09.2021 / **Date of acceptance:** 17.12.2021

How to cite: Duran S, Kaynak S. Investigation of the relationship between postpartum-specific anxiety and maternal attachment and affecting factors in a Turkish sample. Euras J Fam Med 2021;10(4):219-26. doi:10.33880/ejfm.2021100408.

Conflict of interest: No conflict of interest was declared by the authors.
Financial disclosure: No financial disclosure was declared by the authors.

Introduction

Postpartum maternal attachment refers to the unique emotional bond from mother to her baby and positive feelings towards the baby are characterized by emotional warmth and affection (1). Maternal attachment expressions include seeking closeness to baby, touching, gazing into each other's eyes, talking to baby, making positive expressions, cuddling, smiling, adaptation to the cues expressed by the baby (2). Biologically, maternal attachment has the function of feeding and protecting the baby and thus ensuring the survival of the child (3). The relationship between mother and child established in the early stages of life is very important as it serves as a prototype for various relationships in the later stages of an individual's life. Children's later social, emotional, and cognitive development can be affected by the early mother-infant relationship (4,5). Breakdowns in mother-baby interactions can have a negative effect on children (6). Some studies have shown that postpartum-specific anxiety harms maternal attachment (1,7).

It has been reported that depression and anxiety may be associated with impaired mother-infant interaction and insecure attachment and that this may cause difficulties in the emotional development and social interaction of the baby (8). It has been stated that mothers with high anxiety levels are less warm and positive, as well as being more critical and destructive compared to their healthy precedents (9). Postpartum-specific anxiety has been reported to be at a higher level than the normal population (10). It has been reported that the prevalence of anxiety in the first 6 months of the postpartum period varies between 6.1% and 27.9% (11). Women suffering from postpartum anxiety display behaviors such as reduced feelings of competence in parental roles, decreased coping skills, decreased maternal reactivity, and sensitivity (12). Postpartum-specific anxiety is associated with impaired mother-infant attachment, postpartum depression, reduced probability of breastfeeding, increased risk of infant abuse, and increased probability of anxiety in children (11). Besides, postpartum anxiety disorders may lead to psychological, cognitive, and psycho-motor disorders in child development (1).

Based on all this information, determining the effect of postpartum-specific anxiety on maternal attachment is important for the measures to be taken. This study was conducted to determine the relationship between postpartum-specific anxiety and maternal attachment and affecting factors in the Turkish sample.

Methods

This descriptive and analytical study was carried out between January-August 2020 in the well-child care clinic of a state hospital in Turkey.

Three hundred eighty-four mothers with 1-3 months old infants, who applied to the well-child care clinic of a state hospital and who were volunteers were included in the study. To examine the prevalence of the event in sample calculation G*Power version 3.1 was used (13). As a result of the analysis, the minimum sample size was calculated as 300. 384 people were included in the sample. A post-hoc power analysis was performed by accepting the alpha error of 0.05 and the effect size as medium (d=0.5) in the single-group sample. The power of the study was found to be 0.95.

Inclusion criteria: women with a 1-3-month-old infant and being a volunteer to participate in the study.

Personal Information Form, Postpartum Specific Anxiety Scale (PSAS), and Maternal Attachment Inventory (MAI) were administered to the women with a 1-3-month old infant who applied to the well-child care clinic. The data were collected by the researcher by only filling in the assessment tools in face-to-face interviews. The interviews (on the survey items) lasted about 20 minutes.

Personal Information Form: This form, developed by the researcher, consists of 12 questions investigating the demographic characteristics of the woman and the infant.

Postpartum Specific Anxiety Scale (PSAS): This scale was developed by Fallon et al. (7) to examine the symptoms of postpartum specific anxiety. The validity and reliability study of the scale was conducted by Duran (14) in 2020 and Cronbach's alpha coefficient was found as r=0.91. The original form of the scale

consists of 51 items and 4 sub-dimensions in total: maternal competence and attachment anxieties (Items 1-15), infant safety and welfare anxieties (Items 16-26), practical infant care anxieties (Items 27-33), and psychosocial adjustment to motherhood (Items 34-51). When the scale was adapted to Turkish, it was observed that the items were grouped under different subscales when examined as a 4-factor structure, as in the original scale. Since many items of the scale (1–3, 1–16, 18, and 19) have been found to shift to a different group, it was decided that the Turkish version of the scale should be one-dimensional. When the factor loadings of each item of the 51-item scale are examined, it was found that the factor loadings of items 1-2-15-46 (English version) remained below 0.30. These 4 items, therefore, were decided not to be included in the Turkish version. These 4 items were specified in the scale but were not included in the scoring. The Turkish version of the scale was evaluated as one-dimensional and 47 items. The postpartum anxiety levels of those who got a score of '73 or below', 'between 74 and 100', and '101 and above' were evaluated as low, medium, and high, respectively (14).

Maternal Attachment Inventory (MAI): It was developed by Mary E. Muller in 1994 to measure maternal attachment. Muller tested the questions of MAI in two phases, maternal attainment, and maternal attachment. While determining these phases, Muller used the Maternal Role Attainment Theory of Mercer. The Cronbach's alpha reliability coefficient of MAI was found to be 0.85. The Turkish validity and reliability study of the scale was performed by Kavlak and Şirin in 2009 (15).

The items of this 26-item 4-point Likert-type scale are scored between "almost always" and "almost never". Each item contains direct statements ranging from 'almost always' (a)= 4 points, 'often' (b)=3 points, 'sometimes' (c)=2 points and 'almost never' (d)=1 point. A general score is obtained from the sum of all items. High scores indicate high maternal attachment. The score to be obtained from the scale ranges from the lowest score to 26 and the highest score to 104. The scale does not have a cut-off score (15).

Ethics committee approval was received from the Clinical Research Ethics Committee of Balıkesir University (2019/201). The women who agreed to participate in the study were informed about the purpose of the study and that their personal information would be kept confidential. Written/verbal informed consent was obtained from the participants.

Parametric tests were used in the study because the data fit the normal distribution. The conformity of the variables to the normal distribution was determined by the Kolmogorov-Smirnov test. We calculated whether socio-demographic characteristics differed in terms of scale mean score using Student's t-test and one-way ANOVA analysis. Mean, standard deviation, minimum and maximum values, frequencies, and percentages were used in the evaluation of the data. It was tested by t-test and ANOVA analysis in independent groups whether there is a difference between the postpartum anxiety levels and maternal attachment in terms of socio-demographic characteristics of the participants. Linear regression analysis was used for the variables predicting the participants' PSAS scores.

Pearson's correlation analysis was used for the relationship between scales. In the study, the type 1 error term was taken as $p<0.05$.

Results

Table 1 shows the socio-demographic characteristics of the participants. Most of the participants were aged between 23 and 32 years. Of the women, 27.1% were not working (housewives), 62% had an educational level of college or above, 88.5% had a child after a wanted pregnancy.

Table 2 shows the means of scale scores. The mean point of PSAS was 89.72±15.40, while the mean point of MAI was 101.86±6.81.

Table 3 shows the scale mean scores by socio-demographic variables. PSAS levels were found to be higher in those who were younger and not working. The lower age of the partner also caused an increase in the PSAS score. PSAS level of those who had no other

Table 1. The participants' descriptive characteristics (n=384)

Descriptive characteristics	n	%
Age		
23-27	154	40.1
28-32	160	41.7
33 or older	70	18.2
Education level of the mother		
High school and below	192	50
High school	192	50
Employment status		
Homemaker	104	27.1
Civil servant	154	40.1
Private sector employee	126	32.8
Age of the partner		
23-27	70	18.2
28-32	186	48.4
33 or older	128	33.3
Education level of the partner		
High school and below	146	38
High school and higher	238	62
Employment status of the partner		
Civil servant	215	56
Private sector employee	169	44
Sex of the infant		
Girl	179	46.6
Boy	205	53.4
Having another child		
Yes	257	66.9
No	127	33.1
Wanted pregnancy		
Yes	340	88.5
No	44	11.5

Table 2. Scores of the participants in the Postpartum Specific Anxiety Scale (PSAS) and the Maternal Attachment Inventory (MAI) (n=384)

Scales	Mean ± SD	Min–Max	Score range
PSAS	89.72±15.40	58-152	47-188
MAI	101.86±6.81	71-104	26-104

Abbreviation: SD, standard deviation

child was statistically significantly higher than those who had another child ($p<0.05$). No statistically significant difference was found in PSAS levels in terms of education level, the gender of the infant, age of the infant, education level of the partner, and profession of the partner. The MAI score does not show a statistically significant difference by the socio-demographic variables.

Table 4 shows that there is no statistically significant relationship between maternal attachment and PSAS scores.

Table 3. Participants' characteristics and comparison of the Postpartum Specific Anxiety Scale and Maternal Attachment Inventory scores (n=384)

	Postpartum Specific Anxiety Scale			Maternal Attachment Inventory		
Characteristics	**Mean ± SD**	**t / F**	**p**	**Mean ± SD**	**t / F**	**p**
Age						
23-27	93.21±17.89	6.978	**0.001**	102.07±6.25	0.360	0.698
28-32	87.75±13.28			101.93±6.93		
33 or older	86.52±12.39			101.25±7.73		
Profession						
Homemaker	95.88±19.87	12.768	**<0.001**	103.01±4.65	2.141	0.119
Civil servant	88.35±11.05			101.59±7.26		
Private sector employee	86.30±14.35			101.24±7.64		
Age of the partner						
23-27	97.50±18.34	11.767	**<0.001**	100.84±8.02	2.588	0.076
28-32	88.46±14.79			102.66±5.48		
33 or older	87.28±13.12			101.26±7.71		
Having another child						
Yes	83.36±11.15	-14.214	**<0.001**	102.03±6.66	0.670	0.503
No	102.59±14.78			101.53±7.14		

Table 4. The correlation between patients' PSAS and MAI

	PSAS	
Variables	Pearson's r	p
MAI	0.056	0.270

Pearson's correlation analysis

The results of the regression analysis explaining the factors affecting the mothers' PSAS levels are given in Table 5. The potential influencing factors showing statistically significant association with the t-test, ANOVA, or correlation test were selected in the linear regression analyses. The predictive power of the linear regression model calculated using the Enter method was 38%. The scores for PSAS were positively correlated with age, profession, having another child.

Table 5. Predictive factors of participants' PSAS

Variables	B (95% CI)	SE	β	t	p
Constant	63.323	10.821		5.852	0.000
Age	-0.065	1.092	-0.003	-0.060	0.952
Profession	-1.204	0.383	-0.129	-3.145	**0.002**
Having another child	18.416	1.381	0.563	13.331	**0.000**
Wanted pregnancy	-3.355	1.969	-0.069	-1.704	0.089
Age of the partner	-1.594	1.140	0ç061	1.499	0.135
MAI	0.138	0.092	0.061	-1.399	0.163

R= 0.61, Adj.R^2=0.38, F= 12.24, p= <0.001; Adj.R^2: Adjusted R square; B: Partial regression coefficient; β: Standard partial regression coefficient; 95% CI: 95% confidence interval.

Discussion

Parents' mental health in the postpartum period is highly important to the well-being of the parent herself, her developing infant, and the family system (16). Within the scope of this study, the level of anxiety of the postpartum women and maternal attachment was determined; socio-demographic factors affecting the level of postpartum anxiety and maternal attachment were examined; the relationship between postpartum anxiety and maternal attachment was investigated. In this study, the PSAS mean score was 89.72±15.40 (medium level); while 101.86±6.81 (high level) for MAI. Fallon et al. (7) determined the postpartum anxiety level as 105.53±23.98. Ashford et al. (17) reported that 70% of postpartum women had moderate or severe anxiety. In a study carried out with postpartum women, the anxiety level in the first week after delivery was found at 22.6% (18). Akçıl et al. (19) found that postpartum anxiety and maternal attachment levels were at high levels. Postpartum anxiety has negative effects on breastfeeding, attachment, mother-infant interactions, infant temperament, sleep, mental development, and internalizing behaviors, and behavior disorders (20). Therefore, it is important to reduce anxiety in the postpartum period. Applying the scale periodically to all women and identifying mothers at risk and providing necessary support are thought to be useful. The fact that maternal attachment level was found to be high in the study was a positive outcome. Conducting qualitative studies to determine the characteristics that positively affect attachment may also contribute positively to the literature.

In the study, the PSAS level of younger participants was found to be at higher levels. In their study carried out with postpartum women, Bener et al. (21) determined that 34.9% of women who were aged 30 or below reported anxiety. Agbaje et al. (22) found that being a mother between the ages of 15-29 has a significant effect on the development of anxiety symptoms in women. Zaidi et al. (23) determined that the rate of postpartum depression in young mothers was higher. Lower age, being inexperienced, and taking maternity responsibility for the first time may have increased anxiety levels in women. To reduce/prevent postpartum anxiety, it is important to provide training to women who will become mothers for the first time from the pregnancy period and to provide the necessary psycho-social support.

If a mother's employment is stable, she will earn a regular income and her economic conditions will be stable. Besides, the mother's work environment will make it easier for her to get social support for childcare (24). In this study, PSAS levels of unemployed women were found to be higher than employed women. Dönmez et al. (25) found that the moderate and high anxiety levels among unemployed mothers were higher than employed mothers. In another study, no

relationship was found between postpartum anxiety symptoms and employment (26). Employment is thought to contribute positively to the mother in terms of social support, economic well-being, and health. Besides, it is also possible for a mother who feels good to have a more positive relationship with her infant. It may be suggested to support the mother who wants to work in this way.

In this study, the younger age of the partner caused an increase in the PSAS score. Zare et al. (27) determined that the age of the partner is among the factors that contribute to the marital satisfaction of women in the postpartum period. Parental support and quality of parental relationships have been identified as factors that consistently increase confidence, protect against the mother's distress, and reduce symptoms of depression and anxiety (28). Younger fathers are thought to be unable to provide adequate psychosocial support to the mother due to lack of experience and that this may have caused an increase in the PSAS level of women. Giving necessary support to young fathers, providing training individuals who will become fathers for the first time, and enabling them to express their feelings and concerns may be useful in this sense.

In this study, the PSAS levels of those who had no other children were statistically significantly higher than those who had another child. That is, having another child is a significant variable that affects PSAS. In another study, it was determined that having fewer pregnancies poses a risk for postpartum anxiety (29). Paul et al. (30) found that the Trait Anxiety Inventory score was higher in women who became mothers for the first time. Unlike mothers who already have children, new mothers seem likely to have higher levels of anxiety due to entering an unknown process.

In the study, no statistically significant relationship was found between maternal attachment and PSAS. Unlike our results, it has been reported in the literature that patients with postpartum anxiety disorder have less maternal attachment (20). In a study, it was found that a high level of postpartum anxiety was associated with impaired maternal attachment, refusal, anger, and infant-focused anxiety scales (7). Tietz et al. (1) found that maternal attachment was low in mothers with postpartum anxiety disorder. Akçıl et al. (19) determined low maternal attachment in mothers with high anxiety levels. Perinatal mood and anxiety were reported to negatively affect caregiver-infant adjustment and attachment (16). In another study, it was found that close maternal-fetal attachment partially suppresses postpartum anxiety symptoms (4). The fact that there was no significant relationship between PSAS and maternal attachment in our study may be due to the participants' high level of maternal attachment. The high maternal attachment score, therefore, did not change at the PSAS level.

This study has some limitations. First, data on pregnancy-related problems that may have possibly increased psychosocial stress factors were not collected. Another limitation of this study, on the other hand, is the inclusion of women who apply to health centers for getting service without considering other populations; this factor, therefore, may limit the generalizability of the study.

Conclusion

In this study, the PSAS score was at a medium level in postpartum women, while maternal attachment was high. The PSAS levels of younger, unemployed participants and those without another child were higher. Those whose partners were at lower ages were found to have higher PSAS levels. No statistically significant relationship was found between PSAS and maternal attachment. It was reported that anxiety-specific screening was not routinely performed in the postpartum period, treatment rates for postpartum anxiety were low, and that more studies are needed to identify women who could benefit from treatment (11). It has been recommended to give the required support and to make an intervention for women at risk for Postpartum Specific Anxiety. The maternal attachment level to be high is a desired and positive result. Carrying out qualitative studies to determine the factors that positively affect women's attachment levels may contribute positively to the literature.

References

1. Tietz A, Zietlow A, Reck C. Maternal bonding in mothers with postpartum anxiety disorder : the crucial role of subclinical depressive symptoms and maternal avoidance behaviour. Arch Womens Ment Heal 2014;17:433–42. doi: 10.1007/s00737-014-0423-x.
2. Nonnenmacher N, Noe D, Ehrenthal JC, Reck C. Postpartum bonding : the impact of maternal depression and adult attachment style. Arch Womens Ment Health 2016;19:927–35. doi: 10.1007/s00737-016-0648-y.
3. Dubber S, Reck C, Müller M, Gawlik S. Postpartum bonding : the role of perinatal depression , anxiety and maternal – fetal bonding during pregnancy. Archives of Women's Mental Health 2015;187–95. doi: 10.1007/s00737-014-0445-4.
4. Matthies LM, Mitho M, Anne D, Christof S, Markus W, Corinna R, et al. Maternal – fetal attachment protects against postpartum anxiety : The mediating role of postpartum bonding and partnership satisfaction. Arch Gynecol Obstet 2020;301(1):107–17. doi: 10.1007/s00404-019-05402-7.
5. Daglar G, Nur N. Level of mother-baby bonding and influencing factrs during pregnancy and postpartum period. Psychiatr Danub 2018;30(4):433–40. doi: 10.24869/psyd.2018.433.
6. Murray L, Cooper P, Fearon P. Parenting difficulties and postnatal depression: implications for primary healthcare assessment and intervention. Community Pract 2014;87(11):34–8. PMID: 25612413.
7. Fallon V, Silverio SA, Christian J, Halford G, Bennett KM, Harrold JA. Postpartum-specific anxiety and maternal bonding : Further evidence to support the use of childbearing specific mood tools. J Reprod Infant Psychol 2021;39(2):114–24. doi: 10.1080/02646838.2019.1680960.
8. Smith CA, Shewamene Z, Galbally M, Schmied V, Dahlen H. The effect of complementary medicines and therapies on maternal anxiety and depression in pregnancy : A systematic review and meta-analysis. J Affect Disord 2019;245:428–39. doi: 10.1016/j.jad.2018.11.054.
9. Reck C, Tietz A, Mu M, Seibold K, Tronick E. The impact of maternal anxiety disorder on mother-infant interaction in the postpartum period. PlosOne 2018;13(5):e0194763. doi: 10.1371/journal.pone.0194763.
10. Agius A, Res M, Senior RM, Xuereb RB, Dip PQ, Midwifery E, et al. The co-existence of depression , anxiety and post-traumatic stress symptoms in the perinatal period : A systematic review. Midwifery 2016;36:70–9. doi: 10.1016/j.midw.2016.02.013.
11. Ali E. Women's experiences with postpartum anxiety disorders: A narrative literature review. Int J Women's Heal 2018;10:237–49. doi: 10.2147/IJWH.S158621.
12. Hillerer KM, Neumann ID, Slattery DA. From stress to postpartum mood and anxiety disorders : How chronic peripartum stress can impair maternal adaptations. Neuroendocrinolog 2012;95:22–38. doi: 10.1159/000330445.
13. Faul F, Erdfelder E, Buchner A, Lang AG. Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. Behav Res Methods 2009;41(4):1149–60. doi: 10.3758/BRM.41.4.1149.
14. Duran S. Postpartum Specific Anxiety Scale (PSAS): Reliability and validity of the Turkish version. Perspect Psychiatr Care 2019;56:95–101. doi: 10.1111/ppc.12385.
15. Kavlak O, Şirin A. Maternal Bağlanma Ölçeği'nin Türk toplumuna uyarlanması. Uluslararası İnsan Bilimleri Dergisi 2009;6(1):188–201.
16. Hoffman C, Dunn DM, Njoroge WFM, Hoffman C, Dunn DM. Impact of postpartum mental illness upon infant development. Curr Psychiatry Rep 2017;19(100):1–6. doi: 10.1007/s11920-017-0857-8.
17. Ashford MT, Ayers S, Olander EK, Ashford MT, Ayers S, Olander EK. Interest in web-based treatments for postpartum anxiety : an exploratory survey exploratory survey. J Reprod Infant Psychol 2017;35(4):394–409. doi: 10.1080/02646838.2017.1320364.

18. Dennis C, Fallah-Hassani K, Brown H, Vigod S. Identifying women at risk for postpartum anxiety: a prospective population-based study. Acta Psyciatrica Scand 2016;134:485–93. doi: 10.1111/acps.12648.
19. Akçıl F, Bütün Ayhan A, Beyazıt U. The examination of the relationship between anxiety and attachment levels of mothers who have baby. Antalya: Eurosian Conference on Languagae & Social Sciences 2019:126–36.
20. Field T. Postnatal anxiety prevalence , predictors and effects on development: A narrative review. Infant Behav Dev 2018;51:24–32. doi: 10.1016/j.infbeh.2018.02.005.
21. Bener A. Prevalence of psychiatric disorders and associated risk factors in women during their postpartum period: a major public health problem and global comparison. Int J Women's Heal 2012;4:191–200. doi: 10.2147/IJWH.S29380.
22. Agbaje OS, Anyanwu JI, Umoke PIC, Iwuagwu TE, Iweama CN, Ozoemena EL, et al. Depressive and anxiety symptoms and associated factors among postnatal women in Enugu-North Senatorial District, South-East Nigeria: a cross-sectional study. Arch Public Heal 2019;77(1):1–16. doi: 10.1186/s13690-018-0329-6.
23. Zaidi F, Nigam A, Anjum R, Agarwalla R. Postpartum depression in women: A risk factor analysis. J Clin Diagnostic Res 2017;11(8):13–6. doi: 10.7860/JCDR/2017/25480.10479.
24. Minamida T, Iseki A, Sakai H, Imura M, Okano T, Tanii H. Do postpartum anxiety and breastfeeding self-efficacy and bonding at early postpartum predict postpartum depression and the breastfeeding method? Infant Ment Health J 2020;41:662-76. doi: 10.1002/imhj.21866.
25. Dönmez M, Civan HY, Ahlatçıoğlu EN, Dülgeroğlu D, Yazıcı E, Aydın N. Annelerin çalışma durumları ile depresyon ve ankisyete düzeyleri ilişkisinin incelenmesi- Bir ön çalışma. Marmara Üniversitesi Kadın ve Toplum Cinsiyet Araştırmaları Dergisi 2017;1:17–22. doi: 10.26695/mukatcad.2017.1.
26. Petri E, Palagini L, Bacci O, Borri C, Teristi V, Corezzi C, et al. Maternal–foetal attachment independently predicts the quality of maternal–infant bonding and post-partum psychopathology maternal–infant bonding and post-partum psychopathology. J Matern Fetal Neonatal Med 2018;31(23):3153–9. doi: 10.1080/14767058.2017.1365130.
27. Zare Z, Golmakani N, Shareh H, Shakeri MT, Ghaebi NK. Factors related to marital satisfaction in primiparous women during postpartum period. J Midwifery Reprod Heal 2014;2(2):120–7. doi: 10.22038/JMRH.2014.2266.
28. Kirova K, Snell T. Women's experiences of positive postnatal partner support. J Reprod Infant Psychol 2019;37(2):206–18. doi: 10.1080/02646838.2018.1542120.
29. Bina R, Harrington D. Differential predictors of postpartum depression and anxiety : The Edinburgh Postnatal Depression Scale Hebrew version two factor structure construct validity. Matern Child Health J 2017;21(12):2237–44. doi: 10.1007/s10995-017-2345-5.
30. Paul IM, State P, Medical H, Schaefer E, State P, Medical H, et al. Postpartum anxiety and maternal-infant health outcomes. Pediatrics 2013;131(4):e1218-e1224. doi: 10.1542/peds.2012-2147.