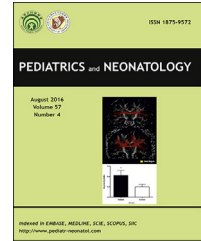


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Original Article

Determination of mothers' thoughts and adaptation behaviors regarding the infant: A descriptive study

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Key Words

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Background: With motherhood, women focus on their new baby. They begin to develop new adaptation behaviors to provide the best care for the infant. The study aims to describe the adaptive behaviors and concerned thoughts of first-time and repeat mothers.

Methods: The study was designed in descriptive and cross-sectional type. Data were collected from mothers using a questionnaire and "The scale of being the mother of a baby." The study was completed with 112 mothers who were reached by snowball sampling method and agreed to participate. The data were analyzed at the 95% confidence interval at the $p < .05$ significance level.

Results: 66.1% of the mothers had a baby for the first time, and 73.2% of the mothers received information/education about baby care. It was determined that they wanted to receive information on topics such as maternal and infant nutrition, diseases, and immunization. A statistically significant difference was found between the age of pacifier use ($p = .032$). It was determined that mothers got 130.7 points in total from the scale, 88.3 points from the evaluation of motherhood sub-dimension, and 42.3 points from the life change sub-dimension. A statistically significant difference was found between the baby care knowledge/training status and the scale scores.

Conclusion: The importance and continuity of education during and after pregnancy has emerged. Nurses are competent people with a key role in this regard, and it is recommended to use individualized care protocols for the training provided.

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1. Introduction

Motherhood is amongst the most important roles in life. The thought of having a child, which begins with the planning of pregnancy, brings uncertainty of whether the child will be healthy or not, although it evokes good feelings and thoughts. Pregnancy is the first step of becoming a parent, but it is a normal physiological process for a woman.^{1,2} The woman needs to adapt to the changes that occur during pregnancy, and the process may turn into a crisis when adaptation is not achieved.³ In addition to physiological changes, women experience a difficult process in which the transition to motherhood is experienced, new roles and responsibilities are undertaken, and relations with their spouses and other family members are restructured.⁴ Even if the woman begins to feel the changes in her life that having a baby during pregnancy will cause, she usually experiences the biggest change after the baby is born.

Many mothers may feel that their expectations about baby care and puerperium in the postpartum period are different from what they have experienced.³ It may be difficult to assume the role of motherhood for those who cannot have an effective adaptation process with their babies.² The mothers who have embraced their first baby may feel distressed in terms of their competence in baby care.^{5,6} Adaptation of the newborn to the outside world is a stressful situation for both the baby and the mother. In this period postpartum mood disorders occur in the mother,² so mothers should be supported with their adaptation to the new role in terms of baby care.⁷ It is a comforting and reassuring situation for mothers to be informed about the nutrition and sleep of the baby, early and late newborn care, and getting answers to their questions. During the postpartum hospital stay of the mothers, health professionals provide them with individualized care and counseling.⁸ Although the procedures vary for the event of delivery at the end of pregnancy, it is known that the average postpartum hospital stay is 24 h.^{1,3,9} Although the quality of the education given in this limited time is comprehensive, it is insufficient for effective mother-baby care and education. It is reported that problems of adaptation to the new process and a new baby occur after discharge (after 4–6 weeks postpartum).³ For this reason, it is very important to evaluate the risk factors in terms of the problems that the mother may experience during the postpartum period and the adaptation to her new baby, to take the necessary precautions in the early period, and to inform mothers about baby care. The study aims to describe the adaptive behaviors and concerned thoughts of first-time and repeat mothers.

2. Methods

2.1. Study aims and design

This study was carried out using a descriptive and cross-sectional design to describe the adaptive behaviors and concerned thoughts of first-time and repeat mothers.

2.2. Participants

The population of the study was planned to be composed of all newly delivered women who could be reached between July, 15 2020 and January, 15 2021. The sample consisted of mothers who could be reached by snowball sampling method between the planned dates, who met the inclusion criteria of the study and volunteered to participate in the study. The inclusion criteria of the study were female gender, having a 1-month-old baby, and speaking the same language. The study was completed by 112 mothers.

2.3. Data collection tools

In this study, the “Data Collection Form” and the scale of which the validity and reliability is well established and titled “What being the parent of a new baby is like (WPL)” were used.¹⁰ The data collection form consists of two parts and 29 questions to glean information about mother and baby. WPL scale consists of two sub-dimensions, namely evaluation of motherhood and life change, and 17 items. The items of the scale range from 1 (none) to 10 (very high). The scores that can be collected from the scale are between 17 and 153 points.¹⁰

2.4. Data collection

The data were collected using the snowball sampling method on the Internet. The data collection form that was prepared in the computer environment was sent to the mothers who had just given birth via messaging application. Before the study, the “informed voluntary consent form” was shown to the mothers on the screen and the questions were answered after the participants had read the form and agreed to participate in the study by checking the “Approve” option.

2.5. Data analysis

Statistical Package for the Social Sciences version 25 (SPSS version 25) program was used to analyze the data. The mean, median, standard deviation, minimum and maximum values were calculated in the analysis of continuous variables; numbers and percentages were analyzed in categorical variables. Chi-square, one-way Anova, and independent t-tests were used in the comparison of the data according to normality. The relationship between the scale score and the characteristics of mother and baby was determined with the Spearman Correlation. A p-value .05 was considered statistically significant with 95 confidence interval.

2.6. Ethical aspects of the research

Before the study, scale permission and ethics committee permission (IRB number: 25.06.2020/60) were obtained. In the study, the rules of the Helsinki Declaration were followed. Written informed consent was also obtained from the participants.

3. Results

A total of 112 new mothers took part in the study. It was found that the average age of the mothers was 28.8 ± 4.2 (22–40) years and the average age of the fathers was 32.5 ± 6 (22–66) years, and most of both parents were found to be between the ages of 26 and 30. The descriptive characteristics of the parents who participated in the study are given in Table 1, and those of the infants are provided

in Table 2. The time in which the mothers completed the questionnaires was calculated, and it was found to be an average of 13.3 days (min–max: 0–30) after delivery.

The answers of mothers asked to express their feelings about parenthood in one word are shown in Fig. 1.

The comparison of the mother's age with the characteristics of their infants is given in Table 3.

In our study, a statistically significant difference was found between maternal age and pacifier use status

Table 1 Distribution of parental identifier properties (n = 112).

Features	Mean \pm Sd	Min–max (median)	
Mother's age (year)	28.8 \pm 4.2	22–40 (29)	
Duration of marriage (year)	3.6 \pm 1.7	0–6 (3)	
		n	%
Mother's education	Literate	1	.9
	Primary school/education	10	8.9
	High School/College	21	18.8
	University	63	56.3
	Master's degree/doctorate	17	15.2
Father's education	Literate	1	.9
	Primary school/education	15	13.4
	High School/College	30	26.8
	University	57	50.9
	Master's degree/Doctorate	9	.8
Previous pregnancy problems ^a	Yes	22	80.4
	No	90	19.6
Number of children	1	74	66.1
	2	32	28.6
	3	6	5.4
Desired/Preferred birth type	Normal spontaneous delivery	81	72.3
	Section	31	27.7
Method of previous delivery	Normal spontaneous delivery	103	92.8
	Section	9	.8
Prenatal baby care experience	Yes	58	52.8
	No	54	48.2
Information/education about baby care	Yes	82	73.2
	No	30	26.8
Where did you get information/training about babysitting? ^b	Books	60	15.9
	The Internet	73	19.3
	Family	78	20.6
	Midwife/Nurse	50	13.2
	Doctor	39	10.3
	Social media/TV	39	10.3
	Friend	39	10.3
	Clothing	21	5.5
What information would you like to be told about the baby and you at the discharge? ^b	Mother and baby feeding	80	21.0
	Lactation	78	20.5
	Breast care	52	13.6
	Childcare	30	7.9
	Bathroom	40	10.5
	Vaccines/doctor's check-up	80	21.0
Availability of person who will help with babysitting	Yes	89	79.5
	No	23	20.5

SD, standard deviation.

^a Miscarriage (n = 13; 11.6%), Abortion (n = 9; 8%).

^b Participants marked multiple responses.

Table 2 Distribution of identifying features related to the baby (n = 112).

Features	Mean ± Sd	Min–max (median)	
Infant age (day)	13.3 ± .5	0–30 (13.7)	
Infants birth weight (gram)	3178 ± 614.6	740–4850 (3212)	
		n	%
Gender	Girl	52	46.4
	Boy	60	53.6
First feeding time	First half hour	59	52.7
	30 min-1 hours	36	32.1
	1–2 h	8	7.1
	More than 2 h	9	.8
The first food	Human milk	101	90.2
	Formula milk	11	9.8
Help during feeding	Yes	88	78.6
	No	24	20.5
Pacifier use	Yes	72	64.3
	No	40	35.7

($p = .032$). When the educational status of the mother was compared with the birth and infant characteristics, a statistically significant difference was found between the mother's education status and the method of birth ($p = .026$), and between the mother's education status and infant care education ($p = .013$).

The scores the mothers got from the WPL scale (total score and the scores of its sub-dimensions) and the scores they got from the features related to motherhood are given in Table 4. A statistically significant difference was found between the baby care knowledge/education status and

the total scale score ($p = .022$) and the evaluation of motherhood sub-dimension ($p < .003$).

4. Discussion

Pregnancy and motherhood are times when women have complex feelings.¹ Women go through a variety of physical and psychosocial emotions at these times.¹¹ The woman struggles to adjust to new sentiments as well as the new role she is thrust into.¹² Having a child for the first time is one of the elements determining adaptation to this new role, in addition to personal traits such as education level. The women in our study were on average 28–32 years old, and the majority of them were having their first child, had a high level of education, and scored higher than the national average (130 points) on the scale of having a new baby. According to a study of 250 women who had just given birth, 70.8% of the women had a high school or higher education level, and their awareness of postpartum care was around average, similar to the age range in our study.¹³ In another study evaluating 250 women's viewpoints on parenting, it was discovered that parental self-efficacy and satisfaction were unaffected by age, marital status, education, or birth type.¹⁴ When considering their marriage duration and age, women may have trouble adjusting to their new role and the newborn, but their education level and high scores on the scale indicate that they are ready for this new role.

One of the most significant issues in preparing for the role is previous pregnancy and childcare experiences. It was discovered in one study that having more than one child boosts parenting self-efficacy and contentment.¹⁴ However, it is well recognized that when women begin to consider having a child, they require a wealth of information about the role of motherhood and baby care, regardless of prior experience.¹⁵ While the scale score in our study was higher

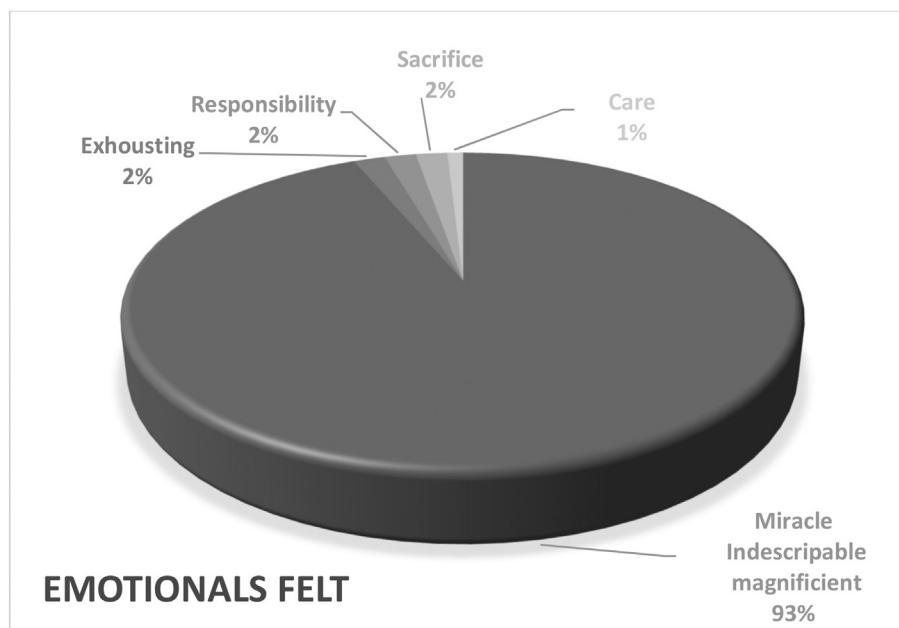


Figure 1 Distribution of feelings of motherhood.

Table 3 Comparison of baby characteristics according to maternal age (n = 112).

Features		Mother's age								X ² P
		20–25 years old		26–30 years old		31.35 years		36 years and older		
		n	%	n	%	n	%	n	%	
Method of last delivery	Section	7	31.8	17	30.9	7	25.0	—	—	3.254
	Normal spontaneous delivery	15	68.2	38	69.1	21	75.0	7	100	.354
Desired/Preferred birth type	Normal spontaneous delivery	18	81.8	43	78.2	17	60.7	3	42.9	6.855
	Section	4	18.2	12	21.8	11	39.3	4	57.1	.077
Baby care experience before birth	Yes	9	40.9	26	47.3	18	64.3	5	71.4	4.325
	No	13	59.1	29	52.7	10	35.7	2	28.6	.228
Information/education about baby care	Yes	13	59.1	42	76.4	22	78.6	5	71.4	2.937
	No	9	40.9	13	23.6	6	21.4	2	28.6	.401
First feeding time	0–30 min	13	59.1	32	58.2	11	39.3	3	42.9	11.416
	30 min–1 hour	6	27.3	18	32.7	8	28.6	4	57.1	.248
	1–2 h	1	4.5	3	5.5	4	14.3	—	—	
	More than 2 h	2	9.1	2	3.6	5	17.9	—	—	
The first food	Human milk	20	90.9	50	90.9	25	89.1	6	85.7	4.913
	Formula milk	2	9.1	5	9.1	3	10.7	1	14.3	.555
Getting help in feeding	Yes	17	77.3	45	81.8	19	67.9	7	100	5.725
	No	5	22.7	10	18.2	9	32.1	—	—	.455
Pacifier use status	Yes	18	81.8	38	69.1	13	46.4	3	42.9	8.787
	No	4	18.2	17	30.9	15	53.6	4	57.1	.032
TOTAL		22	19.6	55	49.1	28	25.0	7	6.3	100

X²: Chi-square test; p < .05.

Table 4 Average scores of the lower dimensions of mothers being a baby's mother and comparison with maternal characteristics.

Features	Mean	Min -max	
Scale total score	130.76	90–153	
Evaluation of motherhood	88.37	39–99	
Life change	42.39	14–54	
	Scale total score	Evaluation of motherhood	Life change
Maternal age	^a .021 p = .826	^a -.085 p = .372	^a .105 p = .268
Maternal education level	^b .626 p = .944	^b 1.006 p = .470	^b .717 p = .852
Duration of marriage	^a -.111 p = .243	^a .042 p = .658	^a -.176 p = .063
Case of receiving baby care information/training	2.317 p = .022	3.058 p = .003	.019 p = .985

p < .05.

^a Spearman correlation test.

^b One-way Anova; independent t-test.

than the national average, the fact that mothers' knowledge levels were close to the national average (41%) in a previous study¹⁵ indicates that they required training, regardless of their level of knowledge. Women can acquire the information they need from magazines or from health professionals who are specialists in their professions, making it easier for them to prepare for this new position.^{15,16} When mothers were asked where they got their information from about infant care, they answered largely from their family and the Internet, as well as from books

and health professionals (midwife, nurse, doctor). In a survey of 150 women who experienced first-time motherhood, it was discovered that mothers-to-be got training from health professionals on infant care and disease management, and particularly on nutrition.¹⁷ Comprehensive and effective baby care education covers all needs and can prepare parents, particularly the mother, for the arrival of the new baby.¹⁷ Furthermore, accurate and effective mother and newborn care will be provided with the implementation of the customized care philosophy.

The fact that parents want the best for their children adds to the demand for knowledge. Despite receiving professional instructions, maintenance and repetition of the training are important for parents. This is especially true for first-time mothers.¹⁸ Our investigation's findings confirm this necessity. According to one survey, of the would-be mothers who were accessing first pregnancy education, 70% wanted the education to begin before pregnancy and continue after birth.¹⁹ Other research confirmed that schooling should continue up to and after delivery.¹²

Pregnancy education should not be offered to only one parent (mother).¹⁸ The notion that bearing a new baby and caring for a newborn is solely a woman's responsibility has now been replaced by the notion that parenting is a shared task and both parents have important roles to play.^{1,20–22} As a result, both mother and father should receive infant care training. Women require a lot of spousal support during the pregnancy and postpartum periods, regardless of how much information they may have about them.^{11,20} In our survey discovered that over 80% of women required assistance with baby care at home. In a study of 160 first-time fathers, respondents mentioned that they wanted to help their spouses and that they too required education.²⁰ Similarly, there was an acknowledged need for someone to assist, particularly on the part of fathers.¹⁷ In contrast, women reported receiving less assistance from their partners during and after pregnancy in a study of 250 couples.¹⁸

According to current guidelines, women should be reunited with their children as soon as possible after giving birth.²³ In this way, women's adjustment to their new roles becomes simpler, and mother-infant bonding starts sooner.^{11,24} Our study discovered that mother-baby interaction and newborn feeding began within at most 1 h after delivery. According to a survey of 75 women and their newborns, the majority of babies were handed to their mothers within 30 min after delivery.²³ Bringing mother and baby together in the early stages provides several advantages for both.¹⁶ Nutrition begins early as a result of the early encounter, and this supports growth and development as well as strengthening of immunological system.¹⁶

The function of motherhood, which is molded by training and prior experiences, gets its full form after delivery. Proper care for the mother and the infant is the priority in the connection, which begins with the first encounter, caressing, and feeding.²¹ Extensive care is available, from feeding to emptying, and from cleanliness standards to health checks. When infant care instruction obtained by women was analyzed in our study, it was shown that nutrition and breastfeeding information came first. According to one study, women had more than half their knowledge of feeding, dressing, umbilical cord care, and infant washing before delivery, whether they had attended prenatal baby care training.¹³

One of the areas in which women are most worried is adjusting to a new baby is the management of infant feeding and breastfeeding.¹⁸ According to a study including 293 women, the percentage of nursing women was 95.1% at the conclusion of baby nutrition education, which began before the delivery and continued after the birth, and the participating women's anxiety decreased.¹⁶ According to

another research study, just 19.6% of mothers felt nervous, and 69.6% of them successfully accomplished the first breastfeeding.¹⁴ As a result, proper nutrition and breastfeeding management training should be incorporated in women's training.²²

Despite receiving thorough and precise dietary knowledge, women's prior experiences and anxiety levels may induce them to engage in inappropriate behavior.²³ Among these behaviors is the early usage of pacifiers and bottles. Although the use of pacifiers in newborns is not encouraged since it causes various dental problems such as tooth and palate development, current studies support the use of pacifiers in preterm infants because it speeds up the transition to full nourishment and provides early feeding. Despite this knowledge, 64.5% of mothers in our survey reported using pacifiers for their newborn newborns despite the education they received to the contrary.¹² One survey of women showed that the usage of pacifiers was strongly recommended.²⁴ This maybe due to conventional knowledge and the widespread use of pacifiers to quiet youngsters.

It is typical for women to be concerned about adjusting to a new role.^{1,19–22} The need to acquire and use new skills when caring for a newborn might exacerbate their anxiety. Anxiety is more than just a negative emotion; it is also a technique of coping with and adjusting to new and stressful conditions.^{14,19} Although the amount of worry that begins with pregnancy lessens as more information becomes available, it returns as the birth date draws near (due to the uncertainty of birth and the health status of the baby). Although worry reduces with the initial interaction with the infant after birth, adapting to parenthood introduces new concerns.¹⁴ The WPL scale enables parents, particularly mothers, to assess their own parenting abilities and to reflect on their parenting experiences with their new child. Evaluation of the motherhood sub-dimension, while showing the satisfaction with having a baby, also includes the degree of knowledge meeting expectations from parenting.¹⁰ We determined that the scores of the mothers in the total score and sub-dimensions of the scale were above average. Parenting self-efficacy and parenting satisfaction were evaluated with the WPL scale in the postpartum period in 250 women, and it was reported in the study that the conditions of age, marital status, education level, and mode of delivery were not associated with self-efficacy and satisfaction. On the other hand, it was reported that good income, having more than one child, successful first breastfeeding, and calm temperament of the baby increased self-efficacy and satisfaction.¹⁴ Another research, which included 3006 women who had just given birth, found that delivery method influenced maternal self-efficacy, with cesarean section having a decreasing effect.²⁵ According to a study that looked at the anxiety levels of mothers with 1193 newborns, their adjustment to the new baby was mild.²⁰ Based on this circumstance and other information gathered, it is assumed that mothers tend to plan pregnancy, that they adjust to the baby and the new situation, and that they understand the significance of the education/knowledge offered.

5. Conclusion

As a result of the findings of this current study, it was concluded that while the women were satisfied with motherhood, they were worried about the responsibilities brought by the new baby and needed support including baby care in the postpartum period. Of the mothers, 78.6% said they required support during postpartum breastfeeding despite pregnancy education. We observed that although the education level of the mothers was high, they preferred to use pacifiers even if they had received baby care education. This will help standardize education for all postpartum mothers and guide outpatient physicians on how to educate new/repeat mothers. In addition, education is important in the adaptation to the new baby and motherhood, and it is necessary to begin the education during pregnancy and that it continue after the birth. For this reason, it is recommended that health professionals should give care and education to women beginning from the moment that they decide to have a baby.

Declaration of competing interest

The authors have no conflicts of interest relevant to this article.

References

- Barenji NS. *Pregnancy and baby image* (Master's thesis). 2016. Turkey. Available at <http://www.yoktez.gov.tr> Accessed Oct 26, 2021. [Article in Turkish].
- Gulesen A, Yildiz D. Investigation of maternal-infant attachment in early postpartum period with evidence-based practices. *TAF Prev Med Bull* 2013;12:177–82.
- Beydağ KD. Adaptation to motherhood in the postpartum period and the nurse's role. *Turkish Armed Forces Preventive Med Bull* 2007;6:479–84.
- Erdeve Ö, Atasay B, Arsan S, Türmen T. Effects of hospitalization experience in the neonatal intensive care unit on the family and the premature infant. *Journal of Child Health and Diseases* 2008;51:104–9.
- Çalışır H. *Examination of the factors affecting the motherhood role performance of women who are mothers for the first time* (Doctoral dissertation). 2003. Turkey. Available at <http://www.yoktez.gov.tr>. Accessed Oct 26, 2021.
- Pakisi I, Koç S. Perinatal and neonatal infant mortality. *Clinical Development* 2009;22:60.
- Yildiz D. Counselling needs and approaches of mothers about infant care in the postpartum period. *Gulhane Med J* 2008;50:294–8.
- Moran CF, Holt VL, Martin DP. What do women want to know after childbirth? *Birth* 1997;24:27–34.
- Tas Arslan F, Turgut R. Premature baby's mothers' perceptions of home care needs and caregiving competencies. *DEUNHS EJ* 2013;6:119–24.
- Yildiz D. *Evaluation of planned nursing education and counseling services of the nurse in the intact baby unit of the Child Health and Diseases Polyclinic* (Doctoral dissertation). 2003. Available at <http://www.yoktez.gov.tr> Accessed Oct 26, 2021. [Article in Turkish].
- Cabeza de Baca T, Wojcicki JM, Epel ES, Adler NE. Lack of partner impacts newborn health through maternal depression: a pilot study of low-income immigrant Latina women. *Midwifery* 2018;64:63–8.
- Beraki GG, Tesfamariam EH, Gebremichael A, Yohannes B, Haile K, Tewelde S, et al. Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara: a cross-sectional study. *BMC Pregnancy Childbirth* 2020;20:17.
- Horoscope PE. *Popular culture and motherhood: different views of motherhood*. (Doctoral dissertation). 2015. Turkey Available at <http://www.yoktez.gov.tr> Accessed Oct 26, 2021.
- Huang P, Yao J, Liu X, Luo B. Individualized intervention to improve rates of exclusive breastfeeding: a randomised controlled trial. *Medicine (Baltimore)* 2019;98:e17822.
- Barimani M, Forslund Frykedal K, Rosander M, Berlin A. Childbirth and parenting preparation in antenatal classes. *Midwifery* 2018;57:1–7.
- Maimburg RD, Væth M, Hvidman L, Dürr J, Olsen J. Women's worries in first pregnancy: results from a randomised controlled trial. *Sex Reprod Healthc* 2013;4:129–31.
- Franzen J, Cornet I, Vendittelli F, Guittier MJ. First-time fathers' experience of childbirth: a cross-sectional study. *Midwifery* 2021;103:103153.
- Ngai F, Xiao X. Perceptions of paternal involvement and labour pain management in Chinese couples during childbirth: a qualitative study. *Women Birth* 2021;34:288–95.
- Hermanson Å, Åstrand LL. The effects of early pacifier use on breastfeeding: a randomised controlled trial. *Women Birth* 2020;33:e473–82.
- Guzel A, Uçan Yavas S, Kara F. Evaluation of the applications used by first-time mothers in baby care. *Balikesir Journal of Health Sciences* 2017;6:108–17.
- Zhang K, Rigo P, Su X, Wang M, Chen Z, Esposito G, et al. Brain responses to emotional infant faces in new mothers and nulliparous women. *Sci Rep* 2020;10:9560.
- Shorey S, Ying L, Yobas P. Parenting outcomes and predictors of parenting satisfaction in the early postpartum period. *West J Nurs Res* 2020;43:13–24.
- Botha E, Helminen M, Kaunonen M, Lubbe W, Joronen K. Mothers' parenting self-efficacy, satisfaction, and perceptions of their infants during the first days postpartum. *Midwifery* 2020;88:102760.
- Malata A, Chirwa E. Childbirth information needs for first time Malawian mothers who attended antenatal clinics. *Malawi Med J* 2011;23:43–7.
- Tosun Güleröglü F, Mucuk S, Özgürlük I. The effect of mother-infant skin-to-skin contact on the involution process and maternal postpartum fatigue during the early postpartum period. *Women Health* 2020;60:707–18.