

ORIGINAL RESEARCH ARTICLE

Assessment of postnatal sense of security of primipara mothers and associated factors in Turkey

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Abstract

Sense of safety is defined as one of the basic needs for primipara mothers in the postpartum period. Descriptive and correlational design was conducted to determine sense of postpartum safety in primipara mothers and relevant factors. This study comprised 260 primipara mothers. We found the total Sense of Postpartum Safety Monitoring Scale (SPSMS) score to be 50.80 ± 8.44 . We determined that there was a statistically significant difference between primipara mothers' educational level, employment, partner's age, partner's educational level, mother's intention of pregnancy, routine pregnancy control, hospitalization during pregnancy, family support during pregnancy, mode of delivery, postpartum partner and family support, diet and the mean SPSMS score ($p < 0.05$). We found that sociodemographic, obstetrical, infant-related, and postpartum characteristics affect sense of postpartum safety in primipara mothers. We can recommend that relevant factors affecting sense of postpartum safety be identified in the early period and that healthcare professionals develop sense of safety. (*Afr J Reprod Health* 2023; 27 [5]: 41-49).

Keywords: Postpartum period, primipara mothers, sense of safety, Turkey

Résumé

Le sentiment de sécurité est défini comme l'un des besoins fondamentaux des mères primipares pendant la période post-partum. Une conception descriptive et corrélationnelle a été menée pour déterminer le sentiment de sécurité post-partum chez les mères primipares et les facteurs pertinents. Cette étude a porté sur 260 mères primipares. Nous avons trouvé que le score SPSMS total était de $50,80 \pm 8,44$. Nous avons déterminé qu'il existait une différence statistiquement significative entre le niveau d'instruction des mères primipares, l'emploi, l'âge du partenaire, le niveau d'éducation du partenaire, l'intention de grossesse de la mère, le contrôle de routine de la grossesse, l'hospitalisation pendant la grossesse, le soutien familial pendant la grossesse, le mode d'accouchement, le partenaire post-partum et la famille. Le soutien, le régime alimentaire et le score SPSMS moyen ($p < 0,05$). Nous avons constaté que les caractéristiques sociodémographiques, obstétricales, liées au nourrisson et post-partum affectent le sentiment de sécurité post-partum chez les mères primipares. Nous pouvons recommander que les facteurs pertinents affectant le sentiment de sécurité post-partum soient identifiés dès le début et que les professionnels de la santé développent un sentiment de sécurité. (*Afr J Reprod Health* 2023; 27 [5]: 41-49).

Mots-clés: Période post-partum, mères primipares, sentiment de sécurité, Turquie

Introduction

Giving birth is a joyful event for parents, their families, and friends. However, the postpartum period is associated with many physical, emotional, and social noteworthy changes¹. Such changes in the transition to parenthood are often associated with increased stress and anxiety levels^{2,3}. The whole family requires an increased care level during this period for parents to adapt to their new role and provide efficient care for their infant⁴. Mothers may feel safer when they become skillful in postpartum

period management. They can establish healthy communication with their partner, infants, relatives, and even strangers. The mother who receives family-oriented support from healthcare professionals may feel happy, peaceful, and safe⁵.

Persson *et al.* aimed to develop the Parents' Postnatal Sense of Security (PPSS) instrument and defined the postnatal sense of security in the first week of the postpartum period as a sense of midwife empowering behavior, a sense of family coherence, a feeling of autonomy, and a sense of well-being, including manageable breastfeeding⁶. Needs, such

as basic psychological needs, value, success, a sense of respect and love, and self-realization, should be met to feel safe in the postpartum period. The sense of safety will be negatively affected if any of these factors is lacking⁷.

The sense of safety, which all people need, affects almost all aspects of life. It should be among the basic needs for mothers in the postpartum period, and it plays an important role in normal breastfeeding^{8,9}. A systematic literature review by Entsieh *et al.* criticized most parental education classes for providing labor process training with little or no parental preparation for the postpartum period. This deficiency caused a parental lack of confidence in managing the postpartum period¹⁰.

In her review of terms used to describe the transformation to parenthood, Mercer suggested that parents who experienced positive parenthood felt safer with the new infant and more competent and confident in taking their new parenthood responsibility. Conversely, parents who experienced negative parenthood did not feel safe with subsequent parenthood episodes¹¹. The factors affecting the sense of safety can be categorized into pregnancy-related factors, social support, and prenatal healthcare service¹².

Midwives' support and provision of information to both parents will promote a parental sense of safety during the postpartum period¹³. Targeted support and education of mothers at risk of postnatal depression by healthcare professionals were suggested to improve parental skills and postpartum mental health¹⁴.

This study aims to evaluate the sense of postpartum safety in primipara mothers and explore its relevant factors.

Methods

Design and participants

This is a descriptive and correlational study-aiming to evaluate the sense of postpartum safety in a randomly selected group of Turkish primipara mothers and to explore the factors that may influence it. The study was conducted in the Obstetrics department of NU Hospital, Konya, Turkey. It included females aged 18 years or older, in the first week of their postpartum period who had a healthy newborn and no postpartum complications. Participants were selected by

random sampling method from expecting mothers who volunteered to take part in the study between April 2019 and June 2019.

The effect of the independent variables on the mothers' Sense of Postpartum Safety Scale (SPSMS) (Geçkil *et al.* 2016) score was predicted to be at the level of R^2 : 0.10 (small effect) following the multiple regression analysis, and 260 mothers were included in the sample using the G*Power (3.1.9.2) program with 5% alpha margin of error (bilateral) and 90% power.

Instruments

Data were collected using a structured interview completing a printed form of the SPSMS by the same researcher for all participants.

The sense of postpartum safety in mothers scale (SPSMS)

Persson *et al.*⁶ developed the SPSMS and Geçkil *et al.*¹⁵ conducted the Turkish validity and reliability study. The four-point likert scale (1 Strongly Disagree, 2 Disagree, 3 Agree, 4 Strongly Agree) has 18 items. The scale measured the first week sense of postpartum safety in mothers. When grading the scale, the items 7, 8, 9 and 11 are reversed. The instrument has four subscales: 1) empowerment which refers to the empowering and caring attitude of midwives and nurses towards the mother.; 2) general well-being which has to do with the general feeling of wellbeing perceived by mothers during the first week of postpartum; 3) affinity within the family which corresponds to the presence and emotional support received from partner and relatives; 4) breastfeeding which relates to the feeling that breastfeeding is manageable. Scores range from 18-72. A higher score denotes higher sense of security. The total Cronbach's alpha coefficient of the scale was 0.84. In this study the total Cronbach's alpha reliability coefficient of the scale was 0.89.

Data analysis

Data tabulation and analysis was completed using SPSS 23.0 for Windows statistical package. Skewness and Kurtosis were used to determine the distribution of variables. In the normally distributed variables, we used the independent samples one-way analysis of variance (advanced analysis Tukey

HSD) and the Kruskal Wallis analysis (advanced analysis Bonferroni correction Mann-Whitney U test). We evaluated independent variables having an impact on the SPSMS and subscale scores in primary analyses via the multiple linear regression (backward method) analysis. We expressed statistical parameters via mean, median, number and proportion. We tested the results obtained at the significance level of $p < 0.05$.

Results

Table 1 shows the distribution of the mothers following their sociodemographic obstetric

Table 1: Distribution of the mothers according to their sociodemographic and obstetric characteristics (n=260)

Characteristics	n	%
Age		
< 25 years	163	62.7
≥ 25 years	97	37.3
Educational level		
Literate/primary school	116	44.6
High school	64	24.6
≥ University	80	30.8
Employment		
Employed	77	29.6
Unemployed	183	70.4
Age of marriage		
< 19 years	45	17.3
≥ 19 years	215	82.7
Duration of marriage		
1-2 year(s)	194	74.6
3 years and above	66	25.4
Partner's Age		
< 25 years	92	35.4
≥ 25 years	168	64.6
Partner's Educational level		
Literate/primary school	98	37.7
High school	73	28.1
≥ University	89	34.2
Routine antenatal care		
Yes	14	5.4
No	246	94.6
Mother's Training during pregnancy		
Yes	164	63.1
No	96	36.9
Partner's training during pregnancy		
Yes	9	3.5
No	251	96.5
Partner support during pregnancy		
Yes	12	4.6
No	248	95.4
Family support during pregnancy		
Yes	20	7.7
No	240	92.3

characteristics. This study revealed that 62.7% of the mothers were <25 years old, and 44.6% were literate/primary school graduates. Additionally,

64.6% of the spouses were ≥25 years old and 37.7% were literate/primary school graduates.

The mean total SPSMS score of study participants was 50.80 ± 8.44 . The mean SPSMS subscales of strengthening behavior, general well-being, family bonds, and breastfeeding behavior were scored 15.41 ± 4.12 , 15.03 ± 3.19 , 12.81 ± 2.58 , and 7.55 ± 1.88 , respectively (Table 2).

The mean SPSMS scores according to specific variables were compared (Table 3). This study revealed significantly higher mean SPSMS scores in mothers who underwent a Cesarean section (C-section) than those who underwent a vaginal delivery ($p < 0.001$).

Additionally, staying in the hospital during the postpartum period made mothers feel safer ($p < 0.001$). Data analysis revealed a considerably higher SPSMS score in mothers receiving postpartum partner support. Similarly, mothers receiving family support had significantly higher mean total SPSMS scores compared with those who did not enjoy such family support ($p < 0.001$).

Examining the SPSMS scores of the mothers following the infant's method of feeding revealed a significant difference between the mean total SPSMS scores of the groups ($p < 0.001$). Further analysis was conducted to compare SPSMS scores following the breastfeeding method, revealing significantly higher mean total SPSMS scores in mothers whose infants had breast milk than in those whose infants had mixed feeding (breast milk + formula) ($p < 0.05$). Conversely, no significant difference was found in SPSMS scores in mothers whose infants had mixed feeding (breast milk + formula) and those whose infants received formula only ($p > 0.05$). The influence of independent variables on the SPSMS scores was explored with multiple regression analysis (Table 4).

Table 2: The sense of postpartum safety in mothers' scale scores of the mothers (n=260)

Scale and Subscales	Minimum-maximum	$\bar{X} \pm SD$
Total SPSMS Score	31-70	50.80 ± 8.44
Subscales		
Confident behaviour	6-24	15.41 ± 4.12
General wellbeing	6-20	15.03 ± 3.19
Family bonds	4-16	12.81 ± 2.58
Breastfeeding behaviour	4-12	7.55 ± 1.88

Table 3: Comparison of the mean sense of postpartum safety in mother's scale scores of the mothers according to postpartum characteristics (n=260)

Characteristics	n	Total SPSMS $\bar{X} \pm SD$	Test	p
Educational level				
Literate/primary school ^a	116	52.34 ± 8.46	F: 4.067	0.018 (a, c > b)
High school ^b	64	48.77 ± 8.67		
≥ University ^c	80	50.21 ± 7.90		
Employment				
Employed	77	49.12 ± 9.35	t: 2.104	0.036
Unemployed	183	51.51 ± 7.95		
Partner's educational level				
Literate/primary school ^a	98	51.55 ± 8.44	F: 11.798	< 0.001 (a, b > c)
High school ^b	73	53.67 ± 6.66		
≥ University ^c	89	47.63 ± 8.79		
Intention of pregnancy				
Yes	241	50.32 ± 8.44	Z: 3.546	< 0.001
No	19	57.00 ± 5.68		
Family support during pregnancy				
Yes	240	51.78±7.76	Z:5.467	< 0.001
No	20	39.15±7.66		
Hospitalization during pregnancy				
Yes	89	54.18±7.20	t: 4.850	< 0.001
No	171	49.05±8.52		
Mode of delivery				
Vaginal	75	45.39±8.19	t: 7.208	< 0.001
C-section	185	53.00±7.52		
Postpartum mother's training				
Yes	155	50.79±8.23	t: 0.39	0.314
No	105	50.83±8.79		
Postpartum partner support				
Yes	247	51.47±7.83	Z: 4.282	< 0.001
No	13	38.08±9.81		
Way of feeding				
Breast milk ^a	135	52.81±7.31	KW: 20.048	< 0.001 (a > b, c)
Breast milk + formula ^b	102	48.51±8.98		
Formula ^c	23	49.22±9.57		

Z: Mann-Whitney U test

t: Independent samples t-test, sd: 258

KW: Kruskal Wallis test, sd: 2 (post hoc analysis: Bonferroni correction Mann-Whitney U test)

F: Analysis of variance in independent groups, between group/in group/total sd: 2/257/259

The total SPSMS was higher in mothers whose infants had breast milk (52.81 ± 7.31 points) than in those whose infants had breast milk + formula or only formula. The total SPSMS of the mothers who underwent a C-section increased by 4.72 points compared with those who underwent vaginal delivery. The scores of mothers who were hospitalized during pregnancy increased by 4.01 points compared with those who were not.

The total SPSMS of mothers who had postpartum partner support increased by 7.65 points

compared with those who did not. The scores of mothers who had family support during pregnancy increased by 6.15 points compared with those who did not. The total SPSMS of mothers whose educational level was primary school/lower and university levels increased by 3.52 points compared with those whose educational level was high school. The total SPSMS of unemployed mothers decreased by -3.05 points compared with those who were employed. The total SPSMS of mothers who had an unintended pregnancy decreased by -4.76 points

Table 4: Impact of independent variables on the total postpartum safety in mother's scale scores of the mothers: results of the multiple regression analysis (n=260)

Independent Variables	B	S. Error	β	t	p	Confidence Interval for B		Collinearity Statistics	
								Tolerance	VIF
(Constant)	14.59	5.10		2.862	.005	4.55	24.63		
Infant's way of feeding	-4.33	.81	-.26	5.365	.000	-5.92	-2.74	.951	1.051
Mode of delivery	4.72	1.06	.25	4.466	.000	2.64	6.81	.674	1.483
Hospitalization during pregnancy	4.01	.91	.23	4.419	.000	2.22	5.79	.836	1.196
Postpartum partner support	7.65	1.98	.20	3.852	.000	3.74	11.56	.828	1.208
Family support during pregnancy	6.15	1.71	.19	3.597	.000	2.78	9.52	.746	1.340
Educational level	3.52	.94	.18	3.729	.000	1.66	5.38	.938	1.066
Employment	-3.05	1.06	-.17	2.864	.005	-5.14	-.95	.657	1.523
Intention of pregnancy	4.76	1.55	.15	3.074	.002	1.71	7.81	.954	1.049
Partner's educational level	-2.73	.99	-.15	2.761	.006	-4.67	-.78	.705	1.418
R: .67 Adjusted R ² : .43 F: 23.14 p: .000 Durbin Watson: 1.75 Influence Quantity: .75									

compared with those who were willing to get pregnant. The total SPSMS of the mothers with partners having university educational levels decreased by -2.73 points compared with those whose partners have high school and lower educational levels.

Discussion

The first week of the postpartum period is crucial for the sense of safety of new mothers¹³. Becoming a mother for the first time is a profound physical and emotional event in a woman's life. The ability to share thoughts and emotions and conduct open conversations with a partner and the relevant healthcare professional will significantly positively affect the new mother's postpartum sense of safety^{16,17}.

In 2007, while developing the PPSS scale, Persson *et al.*⁶ calculated a mean SPSMS total score of 56.3 ± 9.63 in 130 mothers and 99 fathers in southern Sweden. Later, in 2009, Persson *et al.*¹³ reported that multiparous mothers are more prepared for the postpartum period due to their previous experience and therefore have a better sense of safety in the postpartum period compared to their primiparous counterparts. A study was conducted by Aksoy Derya *et al.*¹⁸ in 2019, exploring the effect of birth perception on the sense of postpartum safety in 317 Turkish mothers. They reported a mean SPSMS total score of 55.03 ± 7.93 . Pelagic *et al.*¹⁹ revealed that the PPSS in 395

mothers was 49.61 ± 7.6 on average. Our study estimated a moderate sense of postpartum safety in primiparous mothers (50.80 ± 8.44). Whether anthropological or cultural factors play a significant role in the lower SPSMS scores shown in this study requires further investigation.

Multiple regression analysis revealed that a variety of sociodemographic and obstetrical characteristics exert a significant influence on the mean total SPSMS. These included methods of newborn feeding, mode of delivery, hospitalization during pregnancy, postpartum partner support, family support during pregnancy, educational level, employment, intention of pregnancy, and partner's educational level. We determined a significant difference between the mean total scores of the groups by examining the SPSMS scores of the mothers following the infant's feeding method (Table 2). Multiple regression analysis revealed significantly higher mean total SPSMS ($p < 0.05$) in mothers whose infants had breastfeeding compared with those who were fed by alternative methods. Our study results are in contrast with other studies within the literature. Kronborg²⁰ reported that nipple pains and fatigue, thinking that the baby does not have enough milk, and stopping breastfeeding because the baby does not like to suck causes a feeling of insecurity in the mother. Cultural differences may play a role in such contrast.

Previous authors have suggested that parents' sense of safety may be associated with the

mode of delivery²¹ and that a positive birth experience is associated with a better sense of postpartum safety¹⁸. Studies conducted in Turkey revealed a higher sense of security and a higher rate of parents' satisfaction in women who gave birth by vaginal delivery compared with those who gave birth via C-section^{22,23}. Various authors have suggested that the lower sense of safety following a C-section may be explained by postoperative pain and breastfeeding problems²⁴⁻²⁶. This study determined a statistically significant difference between the mode of delivery and the mean score of SPSMS ($p < 0.05$). Our sample constituted 71.2% and 28.8% of participants giving birth via C-section and vaginal delivery, respectively. Data revealed a better sense of postpartum safety in participants who gave birth via a C-section compared to those who gave birth by vaginal delivery. These findings are contrary to previous reports although participants were from similar cultural backgrounds to this study's population. However, methodological and sample characteristic differences may account for such discrepancies. Additionally, participants in this study thought that C-section was less protracted and less painful than vaginal delivery, leading to a quicker and more comfortable birth experience.

A mother's sense of security is greatly dependent on her own and on her child's health status and can be negatively impacted in case of complications²⁷. Early postnatal discharge can be a factor of insecurity for mothers as they lose the close attention and face-to-face support they had from midwives at the maternity ward¹. Askelsdottir *et al.*²⁸ investigated the effect of an early postpartum discharge from a hospital with home care on the sense of security of 96 mothers in a labor ward in Stockholm, Sweden. They concluded that mothers who were discharged from the hospital within 12–24 h after delivery with postpartum home care had a better sense of security compared to mothers who received standard postpartum hospital care. However, they had more negative emotions toward breastfeeding. Feelings of insecurity in the early postnatal period may also negatively affect mothers' adaptation to their new parental role and the bonding process with their children.

Our study revealed significantly higher SPSMS scores in mothers who stayed in the hospital in the early postpartum period compared with mothers who were discharged early, in contrast to

the findings of Akelsdottir *et al.*²⁸ Additionally, postpartum hospitalization was identified as one of the independent variables that increased the postpartum sense of safety (+4.01). However, postpartum home care examination is outside the scope of this work and therefore comparing the results of the two studies is difficult. In our experience, Turkish mothers generally feel safer being under professional medical care within a hospital environment, particularly with the dwindling family close contact associated with the changing family and social support networks. Early discharge from the maternity ward can be a time of insecurity but can also provide security for parents and foster family bonding, depending on the support they receive.

One of the factors increasing the sense of postpartum safety, especially in primipara mothers, is the postpartum training of parents during pregnancy²⁹. Gao *et al.*³⁰ Suggested that pregnancy and becoming a mother for the first time are joyful experiences although they may be associated with difficulties in the postpartum period. A randomized controlled study conducted in Australia reported higher perceived mother self-efficacy and parenthood knowledge in the intervention group compared with the control group who received no intervention³¹. Additionally, the study reported that giving realistic and consistent information to mothers about parenthood and the postpartum period before and after labor increases the postpartum sense of safety^{1,32,33}. Different studies have reported a weaker sense of safety in the postpartum period in parents who were satisfied with birth process training but did not have adequate information about parenthood^{31,34-37}. Conversely, our study revealed that providing postpartum training for mothers and their partners exerted no significant effect on the SPSMS scores ($p > 0.05$). Whether this discrepancy is related to the type of postpartum training or other demographic influences requires further investigation. The mother is the principal carer of the newborn in Turkish culture, and only mothers usually attend although fathers are supposed to attend postpartum training. Including fathers in postpartum training may positively affect the parental sense of postpartum safety. Hjalmut and Lomborg³⁸ emphasized that the special feeling of being together as a family in the first days after childbirth could also give parents a sense of security.

The mother's perception of security is closely related to her partner's perception of security. Our study revealed a mean postpartum spousal support score of 51.47 ± 7.83 . A study in Denmark reported that partners taking part in prenatal training programs and mothers who have good and positive communication with their partners have a higher sense of safety, and mothers with partners who took part in a prenatal training program in Denmark have increased sense of safety³⁹. Nasreen *et al.*⁴⁰ reported a decreased depression risk in women receiving support from their partner and mother-in-law. In agreement with existing studies, our data analysis revealed significantly higher total SPSMSs in mothers receiving partner support compared with those who did not ($t = 3.852$; $p < 0.000$). Similarly, a significantly higher sense of postpartum safety was found in mothers receiving family support during pregnancy compared with those who did not ($t = 3.597$; $p < 0.000$). Receiving support from family members is a noteworthy factor for overcoming postpartum anxieties. The help coming from family members may enable mothers to better cope with stress, increase their self-confidence, and possibly increase their sense of postpartum safety.

A study conducted in Western Australia by Fenwick *et al.*⁴¹ reported a higher postpartum sense of safety in mothers with higher educational levels compared with those with lower educational levels. Our study revealed the highest sense of safety in primary school graduate mothers followed by University graduate mothers with the lowest SPSMS shown by mothers educated to high school level ($t = 3.729$; $p < 0.000$). Explaining this paradox in terms of a lower number of high school graduates in our sample is difficult. One explanation may be that opposing educational levels provide less knowledge to worry about at one end and a reassuring explanation for the more provided knowledge at the other end, leaving the intermediate sector with more knowledge and fewer explanations. However, this is pure speculation, and a proper method of investigating this explanation is required before such an explanation is accepted.

A study of 481 pregnant women in Finland reported that a partner's higher educational level is associated with a higher sense of safety¹². Conversely, our study revealed significantly higher total maternal SPSMS in mothers whose partners were educated up to the high school level compared

with mothers whose partners were educated to the university level. Whether higher partners' educational level necessitates higher parental expectations in this context, is a matter for debate and further investigation.

Fenwick *et al.*⁴¹ suggested a higher sense of postpartum safety in employed mothers compared to unemployed mothers. They explained this in terms of employed mothers' better finances and better conditions in urban areas compared with unemployed mothers living in rural areas.

We revealed significantly higher total SPSMSs in unemployed mothers compared with employed mothers ($t = 2.864$; $p < 0.005$). In contrast, our study suggests higher anxiety levels and a negative sense of safety in employed mothers, possibly due to work commitments requiring time away from the baby and recruitment of alternative childcare arrangements. Curiously, our study revealed higher mean total scores in mothers who had an unintended pregnancy compared with mothers who had an intended pregnancy ($t = 3.074$; $p < 0.001$). One would expect parents with intended pregnancy to be more prepared for the expected pregnancy and are therefore expected to have a higher sense of postpartum safety compared to mothers who have not intended to become pregnant. However, this study revealed a small number of unintended pregnancies,¹⁹ and therefore, the analysis need to be cautiously interpreted. We determined that sociodemographic, obstetrical, infant-related, and postpartum characteristics affect the sense of postpartum safety in primipara mothers. Mothers' educational level and employment, partner's educational level, the intention of pregnancy, hospitalization during pregnancy, mode of delivery, infant's way of feeding, family support during pregnancy, and postpartum partner support are among the factors affecting the sense of postpartum safety. The study results demonstrated the necessity of making specific changes in birth and postpartum applications for mothers to feel safe in the postpartum period, including evidence-based information exchange, empathy, support, and continuous care. Relevant factors affecting the sense of postpartum safety in the early period should be identified and healthcare professionals should be encouraged to develop a sense of safety. Qualitative and quantitative studies should be conducted in larger groups, including partners.

Ethical approval

The study protocol was designed in compliance with the principles of the Declaration of Helsinki. Ethical approval was obtained from Necmettin Erbakan University, Ethic Committee for Non-pharmaceuticals and Medical Devices (Approval number: 2019/543) Ethics Committee, and from the Necmettin Erbakan University, Meram Medical Faculty Hospital. All participants were assured of strict confidentiality. Both verbal and written consent was provided by all participants.

Competing of interest

The authors have no conflicts of interest.

Authors' contributions

Conception and design: BS and KA. Acquisition of data: BS and KA. Analysis and interpretation of data: BS and KA. Drafting the article: BS and KA. Revising article for intellectual content: BS and KA. Final approval of the completed article: BS and KA.

References

1. Nilsson I, Danbjorg DB, Aagard H, Stranberg-Larsen K, Clemensen JI and Kronborg H. Parental experiences of early postnatal discharge: A meta-synthesis. *Midwifery* 2015; 31: 926–934.
2. Solmeyer AR and Feinberg ME. Mother and father adjustment during early Parenthood: The roles of infant temperament and coparenting relationship quality. *Infant Behav Dev* 2011; 34:504-14.
3. Skreden M, Skari H, Malt UF, Pripp AH, Björk MD, Faugli A and Emblem R. Parenting stress and emotional wellbeing in mothers and fathers of preschool children. *Scand J Public Health* 2012; 40:596-604.
4. Saisto T, Salmela-Aro K, Nurmi JE and Halmesmaki E. Longitudinal study on the predictors of parental stress in mothers and fathers of toddlers. *J Psychosom Obstet Gynaecol* 2008; 29:213–22.
5. Kvist LJ and Persson EK. Evaluation of changes in postnatal care using the 'Parents' postnatal sense of security' instrument and an assessment of the instrument's reliability and validity. *BMC Pregnancy Childbirth* 2009; 9: 35.
6. Persson EK, Fridlund B and Dykes AK. Parents' postnatal sense of security (PPSS): development of the PPSS instrument. *Scandinavian Journal of Caring Sciences* 2007; 21: 118-125.
7. Maslow AH. Un motivated behavior. In: Carr L. Hibbard J (Ed.) *Motivation and Personality*. 3rd ed. New York. Longman, 1970, 66.
8. Dencker A, Taft C, Bergqvist L, Lilja H and Berg M. Child birth experience questionnaire (CEQ): development and evaluation of a multi-dimensional instrument. *BMC Pregnancy Childbirth*. 2010;10(81).
9. Gartner FR, Freeman LM, Rijnders ME, Middeldarp JM, Bloemenkamp KWM, Stiggelbout AM and van den Akker-van Marle ME. A comprehensive representation of the birth experience: identification and prioritization of birth-specific do mains based on a mixed method design. *BMC Pregnancy Childbirth* 2014; 14: 147.
10. Entsieh A and Hallström K. First-time parents' prenatal needs for early parenthood preparation a systematic review and meta-synthesis of qualitative literature. *Midwifery* 2016; 39: 1 11.
11. Mercer RT. Becoming a mother versus maternal role attainment. *J. Nurs. Scholarsh.* 2004 36:226-232.
12. Melender HL and Lauri S. Experiences of security associated with pregnancy and childbirth: a study of pregnant women. *International Journal of Nursing Practice* 2002; 8(6): 289-96.
13. Persson EK and Dykes AK. Important variables for parents' postnatal sense of security: evaluating a new Swedish instrument (the PPSS instrument). *Midwifery* 2009; 25: 449- 60.
14. Shaw E and Kaczorowski J. Postpartum care- What's new? *Curr Opin Obstet Gynecol* 2007; 19:561- 567.
15. Geçkil E, Koçak V, Altuntuğ K and Ege E. Annelerin doğum sonu güvenlik hisleri ölçeği: geçerlilik ve güvenilirlik ölçeği. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi* 2016; 19: 4.
16. Yelland J, Krastev A and Brown S. Enhancing early postnatal care: findings from a major reform of maternity care in three Australian hospitals. *Midwifery* 2009; 25: 392- 402.
17. Forster D, McLachlan H, Rayner J, Yelland J, Gold L and Rayner S. The early postnatal period: exploring women's views, expectations and experiences of care using focus groups in Victoria Australia. *BMC Pregnancy Childbirth* 2008; 8: 27.
18. Aksoy Derya Y, Erdemoğlu Ç, Özşahin Z and Karakayalı Ç. Annenin Doğumu Algılamasının Doğum Sonu Güvenlik Hissine Etkisi. *Ebelik ve Sağlık Bilimleri Dergisi* 2019;2(3):88 95.
19. Velagic M, Mahmutovic J, Brankovic S. Development of mother's postnatal sense of security mater. *Sociomed* 2019; 31(4): 277-281.
20. Kronborg H. First time mothers' experiences of breastfeeding their newborn. *Sexual & Reproductive Healthcare* 2015; 6: 82–87.
21. Werner-Bierwisch T, Pinkert C, Niessen K, Metzger S and Hellmers C. Mothers' and fathers' sense of security in the context of pregnancy, childbirth and the postnatal period: An integrative literature review. *BMC Pregnancy and Childbirth* 2018; 18: 473.
22. Çapık A, Sakar T, Yıldırım N, Karabacak K and Korkut M. Annelerin doğum şekline göre doğumdan memnuniyet durumlarının belirlenmesi. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi* 2016;19(2):92-9.
23. Koçak V, Persson EK, Svalenius EC, Altuntuğ K and Ege E. What are the factors affecting parents postnatal sense of security? *Eur J Midwifery* 2021;5(September): 38; 1-9.

24. Karlström A, Engström Olofsson R, Norbergh KG, Sjöling M and Hildingsson I. Postoperative pain after cesarean birth affects breastfeeding and infant care. *J Obstet Gynecol Neonatal Nurs* 2007; 36: 430-40.
25. Hauck Y, Fenwick J, Dhaliwal S and Butt J. A Western Australian survey of breastfeeding initiation, prevalence and early cessation patterns. *Matern Child Health J* 2011; 15: 260;8.
26. Haggkvist AP, Brantsæter AL, Grjibovski AM, Helsing Prevalence of breastfeeding in the Norwegian mother and child cohort study and health-service related correlates of cessation of full breastfeeding. *Public Health Nutr* 2010; 13: 2076-86.
27. Escribano S, Oliver-Roig A, Cano-Climent A, Richart-Martínez M, Juliá- Sanchis R. Factors Related to the Intra-Partner Postnatal Sense of Security in a Spanish Sample. *J. Pediatr. Nurs* 2020; 51, 85–91.
28. Askelsdóttir B, Lam-de Jonge W, Edman G and Wiklund I. Home care after early discharge: impact on healthy mothers and newborns. *Midwifery* 2013; 29(8): 927-934.
29. Dykes F. A critical ethnographic study of encounters between midwives and breast-feeding women in postnatal wards in England. *Midwifery* 2005; 21(3): 241—52.
30. Gao LL, Chan SWC and Sun K. Effects of an interpersonal-psychotherapy- oriented childbirth education programme for Chinese first-time childbearing women at 3 month follow up: Randomised controlled trial. *International Journal of Nursing Studies*. 2012; 49: 274-281.
31. Svensson J, Barclay L, Cooke M. Randomised-controlled trial of two antenatal education programmes. *Midwifery*. 2009; 25: 114-125.
32. McQueen A and Mander R. Tiredness and fatigue in the postnatal period. *Journal of Advanced Nursing* 2003; 42: 463-469.
33. Tammentie T, Paavilainen E, Astedt- Kurki P and Tarkka MT. Family dynamics of postnatally depressed mothers – discrepancy between expectations and reality. *Journal of Clinical Nursing* 2004; 13: 65-74.
34. Homer CS, Davis GK, Cooke M and Barclay LM. Women's experiences of continuity of midwifery care in a randomised controlled trial in Australia. *Midwifery* 2002; 18: 102-112.
35. Waldenstrom U, Rudman A and Hildingsson I. Intrapartum and postpartum care in Sweden: women's opinions and risk factors for not being satisfied. *Acta Obstetrica et Gynecologica Scandinavica* 2006; 85: 551-560.
36. Rowe HJ, Holton S and Fisher JRW. Postpartum emotional support: a qualitative study of women's and men's anticipated needs and preferred sources. *Australian Journal of Primary Health* 2013; 19: 46-52.
37. McFadden A, Gavine A, Renfrew MJ, Wade A, Buchanan P, Taylor JL, Veitch E, Rennie AM, Crowther SA, Neiman S and MacGillivray S. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database Syst Rev* 2017; 28: 2.
38. Hjälmhult E, Lomborg K. Managing the first period at home with a newborn: a grounded theory study of mothers' experiences. *Scand. J. Caring Sci.* 2012; 26 (4), 654–662.
39. Brown LD, Feinberg M and Kan ML. Predicting engagement in a transition to parenthood program for couples. *Evaluation and Program Planning* 2012; 35: 1-8.
40. Nasreen HE, Kabir ZN, Forsell Y and Edhborg M. Prevalence and associated factors of depressive and anxiety symptoms during pregnancy: a population-based study in rural Bangladesh. *BMC Womens Health* 2011; 11: 22.
41. Fenwick J, Butt J, Dhaliwal S, Hauck Y and Schmied V. Western Australian women's perceptions of the style and quality of midwifery postnatal care in hospital and at home 2010; 23(1): 10-21.