

MATERNAL SATISFACTION IN THE EARLY PERIOD AFTER BIRTH

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Abstract:

Aim: This study was determined the maternal satisfaction in the early postpartum period after birth.

Methods: This analytical and cross-sectional study was performed with 300 mothers who had a vaginal delivery in postpartum clinic and first day after delivery. „Mother Assessment Form” and „Scale for Measuring Maternal Satisfaction-normal birth” were used to collect the data of the study. During evaluation of study data, descriptive, comparative statistical methods and correlation analysis were used.

Results: When total scores of the Scale for Measuring Maternal Satisfaction-normal birth of the mothers were evaluated, they were determined to have quite low scores than 150.5 which was the cut-off point of the scale (93.25±25.83) and their satisfaction levels were found to be low. In consequences of statistical analyses performed in the study, it was determined that oxytocin, enema, amniotomy, continuous electronic fetal monitoring, episiotomy, fundal pressure reduced the satisfaction levels of the mothers regarding the nursing services received in the hospital ($p<0.05$).

Conclusion: The satisfaction levels of the mothers regarding the nursing services received in the hospital in the early postpartum period after a vaginal delivery were found to be low. Applications performed during delivery influenced the satisfaction levels of the mothers

Key-words: *Postpartum, maternal satisfaction, factors, midwifery*

Introduction

Patient satisfaction is perception of the nursing care by the patient designed specifically for herself to cope with the problems. It also includes the evaluation of presentation of the care, interaction of the patient and caregivers, presence and continuity of the care, sufficiency and communication features of the caregivers. Evaluation of patient satisfaction will be guiding for assessment of the quality of healthcare and determination of deficits in healthcare field and to overcome these deficiencies [4, 14]. The studies performed state that there is a positive correlation between patients' satisfactions with the nursing care and satisfaction regarding the hospital services [4-15].

Childbirth which is regarded as an important experience in woman's life and satisfaction of the woman in this period is important for herself and her baby's life and also for positive relations between the woman and her family. A negative childbirth experience may cause some conditions such as postpartum depression, post-traumatic stress disorder, and no desire for the next pregnancy, desire for a cesarean section, sexual dysfunction, mother-infant attachment problems, breastfeeding problems and infant neglect [3-19].

Since advances in obstetrics and gynecology made birth process safer for both

mother and baby, focus of care during birth process tended also towards to make a positive and satisfying birth experience not only provide a safer birth for mother and baby [7]. It has been reported that support provided by midwives to the woman in birth process increased positive feelings and coping efforts of the woman regarding birth experience and also accordingly satisfaction [13].

Women's positive and negative evaluations of their own birth experiences are connected with many personal and institutional factors and provision of expected support. A good midwifery care initiated before delivery, maintained during birth process and after delivery is needed to have this period in the best way. Midwives may evaluate the conditions of sufficient and efficient assistance during birth process and determine the requirements by identifying the maternal satisfaction in the early period after delivery. This study was determined the important factors in maternal satisfaction in the early postpartum period after birth.

Materials and methods

This study was performed as an analytical and cross-sectional study between July 2014 and January 2015. The study protocol was approved by Turkish Republic Ministry of Health Public Hospitals Administration.

This study was performed in the mothers who had a vaginal delivery and followed-up in postpartum clinic of Denizli State Hospital. Sample size was calculated based on this data and power analysis was used for determination of the sample size. The NCSS-PASS 2008 (Statistics, Power Analysis & Sample Size Program) was used to employ power analysis in determining the size of the sample. Prior to the research, power analysis results demonstrated the effect size=0.30 at a power of 0.80 and $\alpha=0.05$, the sample size was calculated to be 271. The research was ultimately completed with 300 mothers. Considering the possibilities such as unreachable, rejecting the study, three hundred mothers were selected into the study sample by using convenience sampling. Criteria for including a patient in the study were: a) to have a good comprehension of Turkish language; b) to be literate; c) to be in the postpartum first day after vaginal delivery; d) to be a mother who have a single healthy term newborn infant. Patients who met the entry criteria were informed by the researchers verbally about the purposes of the study, then, the researcher asked for patients' written consent for participation.

There are 28 beds and a total of eight midwives and nurses are working in the clinic where the study is performed. Puerperants stay in the hospital for 24 hours after a vaginal delivery. Electronic fetal monitoring can be performed in the labor room with eight rooms in the delivery room and the pregnant women give births at three obstetric tables present in the delivery room. Nine midwives and three gynecologists are working in the delivery room. Most of these births were delivered by midwives and the forceps were never used. Families and the other relatives of the pregnant are not generally allowed being in the delivery room.

During the collection of the study data, "Mother Assessment Form" developed by the researchers and "The Scale for Measuring Maternal Satisfaction-normal birth (SMMS score in normal birth)" were used. Mother Assessment Form was filled out by the researcher by using face-to-face interview technique. SMMS score in normal birth was filled out themselves by the mothers. The information about interventions used during delivery was obtained from the woman's medical file. Data collection process took approximately 30

minutes per each mother.

Mother Assessment Form is composed of 24 questions created by reviewing the literature. This form consists of the questions including sociodemographic and obstetrical characteristics of the mothers and their husbands and the questions including interventions performed during the delivery.

SMMS score in normal birth was developed to evaluate the experiences of the mothers during childbirth and in the early postpartum period in the hospital. Güngör & Beji (2012) developed the this scale is a 5 point Likert-type scale with total 43 items prepared for normal delivery. Scale is composed of 10 subscales and it can be filled out themselves by the mothers. Items are scored according to the condition of agreeing with the statement or not on the scale (1-Disagree, 2-Partially agree, 3-Not sure, 4-Agree and 5-Definitely agree). Thirteen items (7, 8, 9, 10, 19, 20, 21, 22, 35, 36, 38, 41, 42) are graded inversely. After conversion of items graded inversely, the sum of the scores in all items in the scale gives "total scale score". The sum of the scores in each subscale items can be used as "total subscale score". Total raw score changes between 43 and 215. As total score obtained from the scale increases satisfaction levels of the mothers regarding the nursing services received in the hospital during vaginal delivery increases. The cut-off point calculated for SMMS score in normal birth was determined to be 150.5 (≥ 150.5 is high level of satisfaction and < 150.5 is low level of satisfaction). Cronbach's alpha value of the scale was found to be 0.91 [9]. Internal consistency of the scale was determined to be 0.93 in the study.

During the evaluation of the data obtained from the study, NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used for the statistical analysis. During the evaluation of the study data, Mann-Whitney U test, Kruskal Wallis was used for the comparisons of descriptive statistical methods (mean, standard deviation, median, frequency, percentage, minimum and maximum) as well as comparisons of data without normal distribution was tested by the Kolmogorov-Smirnov test. Spearman's correlation coefficient was used to determine the correlation between some characteristics of the mothers and the SMMS

score in normal birth. During statistical evaluation, statistical significance was evaluated at the levels of $p < 0.01$ and $p < 0.05$.

Results

Mean age of the mothers and their husbands were determined to be 26.41 ± 5.53 years and 31.27 ± 6.23 years, respectively. Thirty-eight point seven percent of the mothers were determined to be graduated from secondary school and 93.3% of them to be housewives. Sixty-two point three percent of the mothers perceived their family income level as incomes and expenditures were balanced and 53.7% of them were determined not to have social security (namely taking care by paying for the full cost). Thirty-five point seven percent of the mothers stated that they had their first pregnancies. It was determined that the average age of first marriage, the average age of first pregnancy, the number of total pregnancy and the total number of live birth were 19.38 ± 2.05 years; 20.45 ± 2.52 years, 2.26 ± 1.24 and 2.02 ± 1.02 ; respectively.

The mean gestational week of the mothers was determined to be 38.40 ± 0.85 weeks. It was determined that 61.3% of the study participants had a planned pregnancy and 95.7% of them had an uneventful pregnancy. Only 10.3% of the mothers stated that their babies were not born with anticipated gender. It was determined that 63.1% of the mothers participated in the study went to the hospital due to onset of labor pain, their mean cervical dilation was 4.74 ± 2.27 cm and their effacement mean was 54.40 ± 20.18 percent. First stage of the labor of the mothers lasted 5.72 ± 4.62 hours on average.

It was determined that oxytocin infusion was given in 87.7% of the mothers and

episiotomy was performed in 73.3% of them. Epidural anesthesia was not performed and analgesic agent was not given in any mother during labor. It has been understood that enema was performed in 83.0% of the mothers and perineal shaving was performed in 5.7% of the mothers. It was determined that amniotomy was performed in 47.7% of the mothers and intrapartum uterine fundal pressure application in 86.3% of them. It was determined that vaginal examination was performed 11.99 ± 6.68 times in the mothers during the time interval until delivery. It was found that intermittent electronic fetal monitoring was performed in 69.7% of the mothers and continuous electronic fetal monitoring in 24.6% of them. Sixty-two point zero percent of them were not allowed to move freely (walking, changing position etc.). It was determined that the mothers were not given any liquid and solid food products during the first and second stages of the labor. Ninety-one point seven percent of the mothers reported that they did not receive psychological support during the labor. It was determined that 96.7% of the mothers were not informed about labor process by the healthcare professionals. When the condition which made them well pleasing was asked, they answered as "the cessation of the pains/the cessation of the labor" (54.6%). When the unwanted condition during the labor was asked them, 31.1% of them stated as "examinations performed".

Distributions of total scores of SMMS score in normal birth and subscales are seen in Table 1. When the scores were investigated, satisfaction scores were found to be low. Cronbach's alpha values of SMMS scores in normal birth.

Factors	Number of the questions	Min-Max	Median	Mean ± SD
1. Perception of health professionals	4	4-20	10	9.98 ± 4.66
2. Nursing care in labor	2	2-10	4	4.70 ± 2.44
3. Feeling herself comfortable	4	4-20	8	8.99 ± 3.57
4. Information about the decision and agree with the decision	8	8-40	8	10.99 ± 5.93
5. Meeting baby for the first time	3	3-15	6	7.38 ± 3.72
6. Postpartum care	6	6-26	12	12.95 ± 5.51
7. Hospital room	4	4-20	8	8.53 ± 4.78
8. Possibilities offered by hospital	3	3-15	6	6.44 ± 3.63
9. Respect the privacy	4	4-19	12	12.15 ± 3.27
10. Satisfying the expectations	5	5-22	11	11.15 ± 4.26
Total Scale	43	46-163	90	93.25 ± 25.83

Tab. 1. Distributions of total scores of SMMS score in normal birth and subscales (n: 300)

The relationship between some characteristics of the mothers and SMMS scores in normal birth are shown in Table 2.

Characteristics	SMMS-normal birth Scores	
	^c r	P
Age (year)	0.186	0.001
Spouse age (year)	0.211	0.001
Number of pregnancy	0.230	0.001
Number of live birth	0.300	0.001
The age of first marriage	0.050	0.384
The age of first pregnancy	0.008	0.892
Gestational week	0.147	0.011
Dilation at the time of admission to the hospital	0.329	0.001
Effacement at the time of admission to the hospital	0.348	0.001
Frequency of vaginal examination	-0.322	0.001
Duration of first stage of the labor	-0.390	0.001
^c r: Spearman's Correlation Coefficient		

Tab. 2. The relationship between some characteristics of the mothers and SMMS score in normal birth (n: 300)

It is observed that satisfactions of the mothers having a planned pregnancy are less. There was no statistically significant difference between conditions of experiencing a problem during pregnancy of the mother and having a

baby born with anticipated gender and SMMS score in normal birth (p>0.05).

Comparisons of SMMS scores in normal birth according to interventions performed in the mothers during delivery are shown in Table 3.

Interventions		SMMS score in normal birth		Test value	p
		Median	25 th -75 th Percentiles		
Oxytocin	Not performed	115.0	93.00-136.00	Z:-4.969	^b 0.001
	Performed	87.0	73.00-105.00		
Enema	Not performed	122.0	79.00-136.00	χ^2 :32.673	^a 0.001
	Performed	86.0	73.00-103.00		
	Unknown	116.5	104.00-130.00		
Shaving for Cleaning of Perineal Area	Not performed	90.0	73.00-111.00	Z:-1.286	^b 0.199
	Performed	106.0	83.00-119.00		
Amniotomy	Not performed	92.0	75.50-112.50	χ^2 :12.392	^a 0.002**
	Performed	85.0	65.00-103.00		
	Unknown	96.5	86.50-117.00		
Episiotomy	Not performed	99.5	79.00-126.75	Z:-3.750	^b 0.001
	Performed	86.0	72.25-104.00		
Electronic Fetal Monitoring	Not performed	126.0	100.50-138.00	χ^2 :13.135	^a 0.001
	Intermittent	88.0	73.00-104.50		
	Continuous	88.0	72.00-118.25		
Moving freely (Walking, getting desired position etc.)	Not performed	87.0	72.00-119.25	Z:0.344	^b 0.731
	Performed	91.0	78.75-104.25		
Intrapartum Uterine Fundal Pressure	Not performed	106.0	86.00-132.00	Z:-3.714	^b 0.001
	Performed	88.0	73.00-107.00		
Psychological Support from the Healthcare Professionals	Not received	90.0	73.00-112.00	Z:-0.571	^b 0.118
	Received	87.0	73.50-122.40		

^aKruskal Wallis Test

^bMann-Whitney U Test

Tab. 3. Comparisons of SMMS scores in normal birth according to interventions performed in the mothers during delivery (n: 300)

Discussion

This study was performed to determine maternal satisfaction by using SMMS score in normal birth scale with 300 mothers who were in the postpartum first day after a vaginal delivery in the hospital. In the study, maternal satisfaction levels of the mothers were determined to be low in the early postpartum period after a vaginal delivery according to SMMS score in normal birth. Satisfaction levels of the mothers regarding normal birth were also found to be low (114.70 ± 12.21) in the study performed by Ozcan and Aslan in our country. In a study performed in Jordan, 75.6% of the mothers reported that they were not satisfied with the nursing services they received during the delivery [12]. In the studies performed, satisfaction levels of the mothers after delivery were observed to be low.

In our study, according to the scores of the mothers they received from the subscales of SMMS score in normal birth, it was determined that the mothers perceived the health team negatively and found nursery/midwifery care to be insufficient. Additionally, it was concluded that the scores they received from subscales of the scale such as feeling herself comfortable, agreeing with the decision and being informed, meeting baby for the first time, postpartum care, hospital room, possibilities offered by the hospital, respect the privacy and satisfying the expectations were quite low and they were not satisfied. In the study performed by Ozcan and Aslan in our country, it was determined that the scores of perception of the health team (14.29), nursery/midwifery care (7.10), agreeing with the decision and being informed about the decision (12.87), postpartum care (18.18), hospital room (10.30), respect the privacy (15.99) and satisfying the expectations (14.35) were higher and score of meeting baby for the first time was low than our scores. It was observed that scores of feeling herself comfortable (8.57), possibilities offered by the hospital were very close to the scores of the mothers participated in our study. Differences between satisfaction levels of the mothers during the delivery may result from differences between hospitals and nursing care received.

It was determined in our study that as the ages of the mothers and their spouses, gestational week, the number of live birth and the number of alive children increased

satisfaction levels also increased. This condition might have resulted from decreased expectations of the mothers as their delivery experiences increased.

When it was considered that the following conditions such as not provision of pharmacological pain management, not allowing them to move freely and to intake food, not taking information and psychological support from the healthcare professionals and performed examinations caused disturbance, low satisfaction levels of the mothers who had a planned pregnancy might have resulted from higher expectations of them during delivery.

The possibility of positive evaluation of the experience during the delivery by the woman who adapted herself to labor is also increasing [7,13]. It was determined that as the dilation and effacement duration of the cervix at the time of admission to the hospital increased the satisfaction levels of the women in our study and as the labor duration and the number of vaginal examination increased the satisfaction levels of them decreased. It is considered that increase in the number of interventions together with increase of delivery period and decrease of adaptation of the mother to the labor influence the satisfaction level.

Unless it becomes a serious problem for mother and baby, interventions such as induction of labor, enema, and amniotomy etc. are performed. This condition is frequently a sign of difficult and prolonged labor. These interventions are usually unexpected events for the women and these influence the satisfaction level regarding labor experience negatively [7, 10, 17, 19]. In our study, it was determined that SMMS scores in normal birth of the mothers who had an induction were less than the mothers who did not have an induction. Ashalatha et al. investigated whether there was a difference between the satisfaction levels of the mothers who had an induction and spontaneous delivery regarding labor experience or not, and the authors concluded that the mothers who had a spontaneous delivery (79.5%) were happier than the mothers who had an induction (70.4%) [1]. In the study performed by Ezeanochie et al., satisfaction levels of the mothers who had an induction were found to be negatively influenced during the delivery [8]. Our results show similarity with the results of the studies performed.

In the systematic reviews performed to evaluate the maternal and neonatal results of enema routinely performed during the first stage of the labor, no significant difference was found regarding satisfaction levels of the mothers. Enema is an unpleasant procedure that causes pain in the woman and therefore it is not recommended in routine practice [16]. In our study, satisfaction levels of the mothers who were given an enema before delivery were determined to be less than the mothers who were not given an enema before delivery.

Perineal shaving is performed to lessen the risk of infection if there is a spontaneous perineal tear or if an episiotomy is performed, but no clinical benefit has been shown. As a matter of fact, side effects such as irritation, redness, burning, itching can be observed in the vulva region after perineal shaving and sense of shame, pain and discomfort may develop in the woman. Accordingly, routine perineal shaving is an unnecessary procedure with some risks. No study supporting the benefit of perineal shaving was found in the literature [2, 13]. In the study, it was determined that shaving procedure to clean the perineal area did not influence the satisfaction levels of the mothers.

In our study, satisfaction levels of the mothers who had amniotomy, episiotomies regarding normal birth were determined to be low. It is considered that the following conditions influence the mothers negatively: not being mother-friendly hospital of the research hospital; not being informed about the procedures performed in the mothers; pain, difficulty in sitting in the bed and standing up and insufficiency in infant care resulting from these conditions.

In our study, it was determined that SMMS scores in normal birth of the mothers who did not have electronic fetal monitoring before delivery to follow the heart rate of the infant were higher than the mothers who had intermittent and continuous electronic fetal monitoring before delivery. It is considered that continuous EFM causes immobilization together with prolonged labor and instrumental delivery [10] and this condition influences the satisfaction levels of the mothers.

In our study, the satisfaction levels of the mothers regarding delivery who had intrapartum uterine fundal pressure to accelerate the birth

were found to be low. In the study performed by Cox et al. including 500 women, the satisfaction levels of the mothers regarding vaginal delivery who had intrapartum uterine fundal pressure by using an inflatable obstetric belt were found to be less than the mothers who had no intrapartum uterine fundal pressure [6]. The results of the study show similarity with the results of our study.

Limitation of study

The research was carried out using the convenience sampling method. Because of this, the data obtained are representative only of the women participating in the study.

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None.

Conflicts of interest

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

Conclusion

In this study, it was determined that the maternal satisfaction in the early postpartum period after a vaginal delivery was low. It was determined that some sociodemographic and obstetric characteristics of the mothers were associated with the satisfaction. It is considered that it is necessary to avoid from interventions in order to increase the satisfaction during delivery and performing interventions by informing the mothers under control of them.

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