

## ORIGINAL RESEARCH ARTICLE

# Investigation of factors affecting mothers' satisfaction with childbirth and the supportive care given to them during labor

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### Abstract

The aim of this study was to investigate the factors affecting mothers' satisfaction with birth and the supportive care given to them during labor. The tools used to collect the data were the Scale for Measuring Maternal Satisfaction in Birth and Bryanton Adaptation of the Nursing Support in Labor Questionnaire. The study sample consisted of 352 mothers. In this study, it was determined that 64.2% of mothers were satisfied with the support given during their birth. There is a significant relationship between age, number of pregnancies, number of births and Nursing Support Scale total score and mothers' satisfaction with birth. Mothers' satisfaction levels with birth are affected by these variables. It has been determined that as the birth support mothers receive during labor increases, their satisfaction level with birth increases. For this reason, it is recommended to increase care and support during labor and conduct other studies to determine other factors affecting satisfaction at birth. (*Afr J Reprod Health* 2024; 28 [2]: 96-106).

**Keywords:** Birth, supportive care in labor, midwifery, birth satisfaction

### Résumé

Le but de cette étude était d'étudier les facteurs affectant la satisfaction des mères à l'égard de l'accouchement et les soins de soutien qui leur sont prodigués pendant le travail. Les outils utilisés pour collecter les données étaient l'échelle de mesure de la satisfaction maternelle à la naissance et l'adaptation de Bryanton du questionnaire sur le soutien infirmier au travail. L'échantillon de l'étude était composé de 352 mères. Dans cette étude, il a été déterminé que 64,2% des mères étaient satisfaites du soutien apporté lors de leur accouchement. Il existe une relation significative entre l'âge, le nombre de grossesses, le nombre de naissances, le score total de l'échelle de soutien infirmier et la satisfaction des mères à l'égard de l'accouchement. Les niveaux de satisfaction des mères à l'égard de la naissance sont affectés par ces variables. Il a été déterminé qu'à mesure que le soutien à l'accouchement que les mères reçoivent pendant le travail augmente, leur niveau de satisfaction à l'égard de l'accouchement augmente. Pour cette raison, il est recommandé d'augmenter les soins et le soutien pendant le travail et de mener d'autres études pour déterminer d'autres facteurs affectant la satisfaction à la naissance. (*Afr J Reprod Health* 2024; 28 [2]: 96-106).

**Mots-clés:** Naissance, soins de soutien pendant le travail, sage-femme, satisfaction à l'accouchement

### Introduction

Pregnancy and childbirth, described as a developmental crisis, has an important place in women's life due to physiological, psychological and social changes it causes<sup>1-3</sup>. According to the International Philosophy of Midwifery, childbirth is a normal physiological process and an outstanding experience that has significant meanings for the woman, her family and society<sup>4-6</sup>. Labor support is a term used to describe the supportive care provided to the mother during labor. Among the purposes of labor support are to actively help the woman who has given birth, to meet her emotional needs and desires, to provide comfort for her, to improve birth

outcomes, to improve herself-esteem, to ensure that she has a positive childbirth experience and to facilitate her transition to the maternal role. The idea of providing women with help in labor is not new. Throughout history, women have received care and support given by other women during labor. Labor support constitutes a significant part of the care in labor and is regarded as an important task of midwives<sup>7-11</sup>. The World Health Organization (WHO)<sup>12</sup> states that women desire to have a positive childbirth experience that meets their personal and sociocultural beliefs and expectations. For a woman to have a positive childbirth experience, it is recommended that she should be provided support during labor<sup>12</sup>.

If a woman is not adequately supported during labor, the rate of cesarean section increases. The WHO states that the cesarean section rate should not exceed 10-15%<sup>13</sup>. As is reported in the literature, the supportive care given during labor plays a significant role in reducing the cesarean section rate. The aim of care given during labor is not only to reduce the cesarean section rate but also to ensure mother's and baby's safety and health with as few interventions as possible, to encourage the mother to actively participate in birthing process, to ensure that the mother's needs are met, to ensure that she has a positive childbirth experience, to meet her information needs, and to evaluate the mother and baby<sup>7-11,14</sup>.

In order for women to cope with labor and undergo a healthy birth process, they need to receive support and to feel that they are deemed important<sup>9</sup> because they try to cope with the birth process, the unfamiliar environment they are in during childbirth and the idea that they cannot appropriately protect their privacy during this process. Women in labor experience fear, worry and anxiety because they do not know and understand what they are going through and what is happening<sup>14-18</sup>. Professional support a mother receives during labor can improve her sense of control and coping with labor pain and prevent her from undergoing negative experiences<sup>8,11,14</sup>. It has been determined that the support given by the midwives to the mother during labor enhances the mother's positive feelings about the childbirth experience and coping efforts.

Each mother's physical and emotional needs may be different from each other<sup>19-21</sup>. Labor and birth care experience, and maternal satisfaction in the intrapartum period are related issues<sup>16,22,23</sup>. Satisfaction is a multidimensional concept and it is determined by taking various factors such as personal preferences, values, expectations and care received into account<sup>24</sup>.

Of the professionals in the health system, midwives are perceived as the ones providing care most and they play a determining role in the satisfaction of pregnant women. Because the mother's childbirth experience and satisfaction with the care she receives are interrelated concepts, it is not possible to distinguish one from the other<sup>24-27</sup>. Due to their profession, midwives establish relationship with couples during the birth process at the highest level, and they have the responsibility to

improve couples' ability to cope with birth stress<sup>9,17,28</sup>. In their Cochrane review including 51 studies, Bohren *et al.*<sup>26</sup> reported that supportive care given by health professionals during labor improves outcomes for women and babies<sup>26</sup>. All interventions performed during labor should be supportive. Supportive care given during labor is classified into four groups: physical support, emotional support, informational/educational support and advocacy<sup>21,26,10</sup>. In studies carried out on the provision of supportive care during labor, mostly physical support provided to relieve labor pain is addressed<sup>7,26,29</sup>. However, there are also studies in which informational support<sup>26</sup> and social support are addressed<sup>19,20,29-32</sup>.

The number of studies conducted on the issue in Turkey is very few and in those studies, only one midwifery care model was implemented. In Turkey, 91.1% of childbirths are carried out in hospitals and 99.2% by health personnel. According to the data released by the Turkish Ministry of Health, one out of every two childbirths in Turkey is given through cesarean section<sup>33</sup>. Turkey is the country with the highest cesarean section rate among the member states of the United Nations<sup>34</sup>. Given all these data, in the present study, supportive midwifery care given to those who gave birth in hospital and their satisfaction of birth were investigated.

### **Study hypotheses**

1. Mothers' age, education level, number of childbirths they have given, and the time elapsed between their last two childbirths affect their level of satisfaction with birth.
2. Fear of childbirth, support received during labor and the length of hospitalization affect mothers' level of satisfaction with birth.

Mothers' age, education level, number of childbirths, time elapsed between the last two childbirths, fear of childbirth and the length of hospitalization affect the support they receive during labor.

## **Methods**

### **Research type**

The present study is a retrospective, analytical and cross-sectional study conducted to investigate the

factors affecting mothers' satisfaction with birth and supportive care they receive during labor.

### **Data collection, sampling and recruitment**

The study data were collected in the Postpartum Service of a University Training and Research Hospital. In the hospital where the data were collected, midwives take an active role in labor, newborn care and labor follow-up. The data were collected between October 10, 2016 and February 10, 2017 until the sample size was reached. The population of the study comprised 2516 women who gave live vaginal deliveries in 2015 in the hospital where the data were collected. Of the mothers, those who gave birth through spontaneous vaginal delivery (delivery without anesthetic analgesia or epidural anesthesia), did not develop any risk in labor, did not have a systemic disease, were followed up during labor for at least 2 hours and volunteered to participate in the study were included in the study.

The smallest sample size to be taken in the study was determined as 333 mothers, using the Statcalc (Epi Info Version 6) (confidence interval: 95%, unknown incidence: 50.0%, margin of error: 5%). The study data were collected using the following tools: the Descriptive Information Questionnaire prepared by the researcher and administered using the face-to-face interview method, the Scale for Measuring Maternal Satisfaction in Birth (SMMS), and Bryanton Adaptation of the Nursing Support in Labor Questionnaire (BANSILQ).

*Descriptive Information Questionnaire:* The 38-item questionnaire prepared by the researcher based on the review of the pertinent literature and previous studies has four sections on mothers' socio-demographic characteristics, obstetric characteristics, views on childbirth, and supportive care-taking characteristics<sup>14,32-34</sup>.

*The Scale for Measuring Maternal Satisfaction in Birth (SMMS-normal birth):* The Scale developed by Gungor and Beji in 2009 to assess maternal satisfaction in childbirth consists of 43 items and 10 sub-dimensions<sup>24</sup>.

*Bryanton Adaptation of the Nursing Support in Labor Questionnaire- BANSILQ:* The 25-item Questionnaire developed by Bryanton *et al.* in 1994 to assess the nursing support given at birth was adapted into Turkish by Kizilkaya in 1997<sup>37</sup>. Four

items related to the presence of the spouse or partner during childbirth were excluded when the Turkish validity and reliability study of the questionnaire was conducted, because there was no such practice in the institutions where the study was conducted<sup>35,37</sup>. The data were collected by the researcher in the mothers' rooms using the face-to-face interview technique before they were discharged after they gave birth. Before the data were collected, the mothers were informed about the purpose of the study and their written consent was obtained. Each interview lasted 8-10 minutes.

### **Data analysis**

The data obtained in the present study was analyzed in the SPSS 16.0 package program. In order to analyze the data collected in accordance with the purpose of the study, the One-Way Analysis of Variance (ANOVA) was used to determine the correlation between the mean scores obtained from the BANSILQ and SMMS and variables such as the number-percentage distribution, age groups and educational status. The independent sample t-test was used to determine the number of pregnancies, the number of childbirths, the time elapsed between the last two deliveries, and the length of stay in the hospital. Correlation and Regression were used to determine the relationship between the variables and the mean SMMS score.

### **Ethical approval**

Approval was obtained from the authors who performed the validity and reliability studies of the Turkish versions of the measurement tools we used in the study. Before the study was conducted, approvals were obtained from the Institute of Health Sciences of Ege University (decision date September 17, 2014, decision number: 33/3), Ataturk Training and Research Hospital Ethics Committee of Katip Celebi University affiliated with the Secretariat of Southern Izmir Public Hospitals Association, the Ministry of Health – Turkey (decision number: 250, decision date December 11, 2014), and the Training and Research Hospital where the study was to be conducted (decision date: November 07, 2016 and decision number: 65357). Written informed consent of the mothers to participate in the study was obtained after they were informed about the purpose and scope of the study.

## Results

Findings were given in accordance with the hypotheses of the present study conducted to evaluate the factors affecting the mothers' satisfaction of birth and supportive care they received during labor. The mean age of the mothers participating in the study was  $25.1 \pm 6.1$  (Min.: 14.0; Max.: 41.0) years. The mean duration of their marriage was  $6.75 \pm 5.31$  (Min.: 0.4; Max.: 23) years. The mean numbers of pregnancies and childbirths of the mothers were  $2.3 \pm 1.3$  (Min.: 1.0; Max.: 9.0) and  $2.2 \pm 1.2$  (Min.: 1.0; Max.: 9.0) respectively.

**Table 1:** Mothers' request for supportive care

| CHARACTERISTICS   | Number | %     |
|---|--------|-------|
| Needing support   | 242    | 41.3  |
| Requesting support  | 174    | 29.7  |
| Receiving support   | 170    | 29.0  |
| Total   | 586    | 100.0 |
| <b>The type of supportive care requested from the midwife</b>         |        |       |
| Educational or Informational Support                                  | 224    | 32.5  |
| Encouraging   | 195    | 28.3  |
| Emotional   | 184    | 26.7  |
| Physical  | 87     | 12.5  |
| Total   | 690*   | 100.0 |
| <b>The topic of the supportive care requested</b>                     |        |       |
| About how to facilitate childbirth                                    | 142    | 32.6  |
| About the baby's condition  | 114    | 26.1  |
| About overcoming fear of childbirth, and stress-related interventions | 89     | 20.4  |
| About the procedures and the progress of the labor                    | 87     | 20.0  |
| About relatives   | 4      | 0.9   |
| Total   | 436*   | 100.0 |
| <b>Type of support received</b>                                       |        |       |
| Massage and breathing exercise  | 60     | 35.0  |
| Breathing exercise  | 46     | 27.1  |
| Breathing exercise and emotional support                              | 26     | 15.0  |
| Emotional support   | 18     | 11.0  |
| Massage   | 16     | 9.5   |
| Massage, breathing exercise and emotional support                     | 4      | 2.4   |
| Total   | 170    | 100.0 |

\*More than one response was given.

While the mean duration of labor for mothers was  $6.01 \pm 3.2$  (Min.: 2.0; Max.: 20.1) hours, the mean time elapsed between two labor was  $18.6 \pm 5.88$

(Min.: 10.0; Max.: 132.0) months. The rate of mothers who stayed in the hospital 0-12 hours after giving birth was 94.9%. Of the mothers participating in the present study, 41.3% needed supportive care during labor, 29.7% wanted childbirth support, 29.0% received support, 32.6% wanted to receive supportive care to facilitate birth, and 35.0% were massaged during labor and were taught how to do breathing exercises (Table 1). As for the type of the supportive care expected from midwives, while 32.5% of the mothers wanted to get educational or informational support, 12.5% wanted to receive physical support (Table 1).

The findings regarding the sub-dimensions of the SMMS (Normal Birth) and BANSILQ are given in Table 2. The mean scores the mothers who gave vaginal birth obtained from the SMMS and BANSILQ were  $153.15 \pm 15.29$  and  $65.69 \pm 8.66$  respectively.

Given the cut-off point for the overall SMMS was 150.5, the satisfaction level at birth was high in 64.2% of the mothers but low in 35.8% of the mothers (Figure 1).

According to Table 3 in which the correlation between the variables and the participants' SMMS and BANSILQ scores is given, there were significant differences between the mean scores they obtained from the SMMS in terms of the variables such as the mean age of the mothers, the number of childbirths they gave, the time between the last two childbirth, the fear of childbirth and the length of hospitalization ( $p < 0.05$ ). However, while there was a statistical difference between the mothers' mean BANSILQ scores in terms of age groups ( $p < 0.05$ ), there was no statistical difference between their mean BANSILQ scores in terms of other variables.

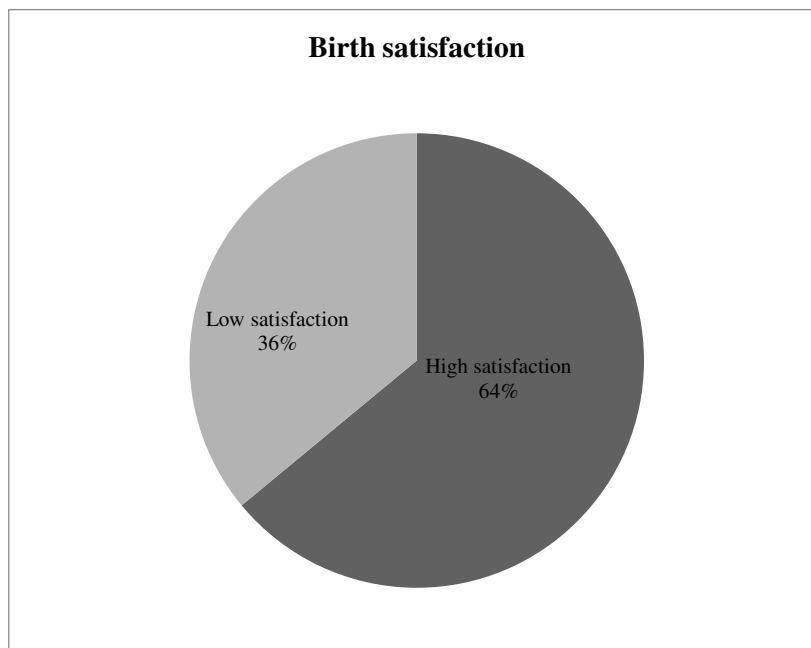
According to Table 4, a significant positive correlation was determined between variables such as the mean age of the mothers, the number of childbirths they gave, the mean score obtained from the BANSILQ the fear of childbirth and the mean score obtained from the SMMS. On the other hand, the correlation between the length of the hospitalization of the mothers and their mean score for the overall SMMS was negative ( $p < 0.05$ ).

However, no correlation was determined between the time elapsed between the last two childbirth variable and the mean score the mothers obtained from the overall SMMS ( $p > 0.05$ ).

**Table 2:** Findings regarding to the subscales of the Scale for Measuring Maternal Satisfaction in Birth (SMMS-Normal birth), and Bryanton Adaptation of the Nursing Support in Labor Questionnaire (BANSILQ)

|  | Mean±SD      | Min.   | Max.   |
|--|--------------|--------|--------|
| <b>SMMS-Normal birth and its subscales</b>             |              |        |        |
| Perception of the healthcare team                      | 15.37±2.57   | 7.00   | 20.00  |
| Nursing care during labor                              | 6.92±2.07    | 2.00   | 10.00  |
| Comforting   | 9.23±2.59    | 4.00   | 17.00  |
| Participation in decision-making and informing         | 30.70±4.20   | 8.00   | 40.00  |
| Postpartum care  | 4.84±1.70    | 3.00   | 15.00  |
| Hospital Room  | 21.03±3.50   | 11.00  | 30.00  |
| Meeting the Baby                                       | 17.09±1.99   | 7.00   | 20.00  |
| Hospital Facilities                                    | 12.17±1.45   | 9.00   | 15.00  |
| Respect for Privacy                                    | 14.09±3.67   | 4.00   | 20.00  |
| Meeting Expectations                                   | 17.91±4.81   | 5.00   | 25.00  |
| The mean score for the overall SMMS                    | 153.15±15.29 | 107.00 | 199.00 |
| <b>Findings regarding the subscales of the BANSILQ</b> |              |        |        |
| Emotional Support                                      | 23.16±3.26   | 13.00  | 28.00  |
| Informational Support /Emotional Support               | 10.16±1.58   | 5.00   | 12.00  |
| Tangible Support /Emotional Support                    | 15.59±2.34   | 8.00   | 20.00  |
| Tangible Support                                       | 8.06±1.93    | 3.00   | 12.00  |
| Informational Support                                  | 8.69±1.52    | 6.00   | 12.00  |
| The mean score for the overall BANSILQ                 | 65.69±8.66   | 41.00  | 84.00  |

\*One-way analysis of variance (ANOVA); \*\*The independent samples t-test was administered

**Figure 1:** Satisfaction rates of the participating mothers with birth

While a significant and positive correlation was determined between the mean age variable and the mean score the mothers obtained from the BANSILQ ( $p < 0.05$ ), no correlation was determined

between the other variables and their mean BANSILQ score ( $p > 0.05$ ) (Table 4).

The results of the regression analysis given in Table 4 demonstrated that the variables such as

**Table 3:** Comparison of the mean scores for the SMMS and BANSILQ by variables

| Variables   | SMMS Total score<br>Mean±SD | BANSILQ Total score<br>Mean±SD |
|---|-----------------------------|--------------------------------|
| <b>Age groups (years)</b>                                 |                             |                                |
| ≤19   | 140.80±15.0                 | 62.4±10.1                      |
| 20-34   | 155.66±14.1                 | 66.3±8.1                       |
| ≥35   | 159.06±11.4                 | 67.1±7.9                       |
| *F  | 31,925                      | 6,089                          |
| p   | 0.000                       | 0.03                           |
| <b>The number of childbirths</b>                          |                             |                                |
| 1   | 142.51±14.7                 | 64.7±9.6                       |
| ≥2  | 159.16±12.0                 | 66.2±8.0                       |
| **t   | -11.488                     | -1.549                         |
| p   | 0.000                       | 0.143                          |
| <b>Interval between the last two childbirths (months)</b> |                             |                                |
| ≤2  | 156.62±12.9                 | 66.2±7.9                       |
| ≥3  | 161.21±10.8                 | 66.0±7.9                       |
| **t   | 2.882                       | 0.212                          |
| p   | 0.005                       | 0.833                          |
| <b>Fear of childbirth</b>                                 |                             |                                |
| Yes   | 152.51±15.57                | 65.76±8.79                     |
| No  | 157.20±12.84                | 65.22±7.86                     |
| **t   | -2,279                      | ,396                           |
| p   | ,026                        | ,692                           |
| <b>Length of hospitalization hours</b>                    |                             |                                |
| 0-12  | 153.95±14.9                 | 65.8±8.6                       |
| ≥13   | 138.44±15.0                 | 62.5±8.5                       |
| **t   | 4.292                       | 1.600                          |
| p   | 0.000                       | 0.126                          |

the time elapsed between the last two childbirths, the number of childbirths, the length of hospitalization and the fear of childbirth were the factors affecting maternal satisfaction significantly ( $p < 0.05$ ). On the other hand, age was a factor significantly affecting the childbirth support the women received ( $p < 0.05$ ).

## Discussion

Most of the mothers (71.9%) were in the age group of 20-34 years. According to 2018 Turkey Demographic and Health Surveys<sup>33</sup>. Data, the highest age-specific fertility rate is in the 25-29 age group, followed by the 20-24 age group. The age-specific fertility rate is 372 per 1000 women for the 20-34 age group<sup>33</sup>. The findings of the present study are consistent with the findings obtained throughout Turkey. Of the mothers participating in the present study, 68.8% needed support and 49.4% wanted to receive supportive care. Of the types of the

supportive care that mothers wanted to receive, 'facilitating childbirth' took the first place (32.6%) whereas 26.1% of the mothers wanted to receive supportive care for the baby and 20.0% for the procedures and the progress of the labor. In Daglar's study<sup>39</sup>, 83% of the mothers wanted to receive supportive care from midwives for the baby and 88.9% during the progress of the labor<sup>39</sup>. There are differences between the results of Daglar's study and those of the present study. This is probably because while the mothers in Daglar's study<sup>39</sup> received supportive care only from midwives, the rate of the mothers receiving supportive care from midwives in the present study was very low. This low rate is due to the fact that in the area where the research data were collected, follow-up of labor was performed by the midwives and that the mean duration of labor of the pregnant women was 6.01±3.2 hours. In Bohren *et al.*'s study<sup>8</sup>, the mothers received supportive care from midwives in four different ways: pain-reducing non-pharmacological intervention, information, communication and advocacy<sup>8</sup>. In the present study, the types of support the mothers received from midwives were emotional support, and massage and breathing exercises which are non-pharmacological methods that reduce pain (35.0%) (Table 1). The findings of the present study are consistent with those of Bohren *et al.*'s study. However, unlike the present study, in Bohren *et al.* study<sup>8</sup>, the mothers also received advocacy support from the midwives. In the present study, the participants were asked open-ended questions. Even if they received advocacy support, they may not have been able to express it.

The analysis of the mothers' satisfaction levels revealed that 64.2% of them had a high level of satisfaction (Figure 1) (Table 2). In seven studies in which mothers' birth satisfaction was investigated, the rates of the mothers who were satisfied with birth varied between 67.3% and 95.0%<sup>23,40-42</sup>. However, there are also studies in the literature indicating that mothers who gave birth vaginally were less satisfied at birth<sup>43</sup>. In those studies, a measurement tool different from the SMMS was used to determine the satisfaction level. In addition, if maternal satisfaction at birth is considered as the meeting of expectations, it can be said that research findings do not show similarity because these expectations vary from one culture to another.

**Table 4:** Correlation between the variables, and total SMMS and BANSILQ scores

| VARIABLES AND REGRESSION                  |     | SMMS   | BANSILQ |
|---|-----|--------|---------|
| Age                                       | *r  | 0.386  | 0.105   |
|   | p   | 0.000  | 0.048   |
|   | **β | 0.146  | 0.008   |
| The number of childbirths                 | p   | 0.000  | 0.048   |
|   | *r  | 0.440  | 0.055   |
|   | p   | 0.000  | 0.307   |
| Interval between the two last childbirths | **β | 0.191  |         |
|   | p   | 0.000  |         |
|   | *r  | 0.123  | -0.013  |
| Length of hospitalization hours           | p   | 0.067  | 0.852   |
|   | *r  | -0.224 | -0.084  |
|   | p   | 0.000  | 0.115   |
| Fear of childbirth                        | **β | 0.047  |         |
|   | p   | 0.000  |         |
|   | *r  | 0.105  | -0.21   |
| Mean score for the overall BANSILQ        | p   | 0.048  | 0.692   |
|   | **β | 0.008  |         |
|   | *r  | 0.331  |         |
|   | p   | 0.000  |         |

\*Correlation, \*\*Regression analysis was conducted.

The mean score the participating mothers obtained from the overall BANSILQ was  $65.69 \pm 8.66$  (Table 3). In their study (2007), in which Abushaikha *et al.*<sup>44</sup> investigated methods used to cope with labor pain, the mean score the participants obtained from the BANSILQ was  $104.9 \pm 18.3$ . In Nikula *et al.*'s study<sup>29</sup> on perception of birth, the mean score the participants obtained from the BANSILQ was  $109.2 \pm 13.9$ . The scores obtained in these two studies are not consistent with and above the mean score obtained in the present study. The difference is thought to stem from the fact that the number of the items of the BANSILQ used in the present study was different from that in Abushaikha *et al.*'s<sup>44</sup>, Nikula *et al.*'s<sup>29</sup> studies. While the number of the items of the BANSILQ used in the present study was 21 because in the validity and reliability study of the Turkish version of the BANSILQ, 4 items were removed from the BANSILQ, it was 25 in Abushaikha *et al.*'s<sup>44</sup>, and Nikula *et al.*'s<sup>29</sup> studies. The other factor leading to the difference was that our study and those studies were conducted in different countries.

The analysis of the mean scores obtained from the SMMS and BANSILQ by the mothers in terms of the age variable indicated that there were significant differences between the participants'

scores by their age groups ( $p < 0.05$ ). In studies in which maternal satisfaction in the early postpartum period after vaginal birth was investigated, a positive significant difference was observed between the participants' total satisfaction scores by their age groups ( $p < 0.01$ )<sup>27,45,46</sup>. The findings of the present study are consistent with those of the aforementioned studies. As the mothers' age increased, so did their level of satisfaction of childbirth. On the other hand, in Bilgin *et al.*<sup>41</sup>, and Ozkan and Bal's studies<sup>47</sup> conducted with mothers who gave birth by cesarean section, the age variable did not affect the participants' total satisfaction score ( $p > 0.05$ )<sup>41,47</sup>. Satisfaction is a concept associated with the meeting of expectations. Therefore, it can be said that the difference between the results of the studies may have stemmed from the differences between the participants' expectations in each age group.

In the present study, the age variable did not affect the participants' total BANSILQ score ( $p > 0.05$ ). Similarly, in Kanig and Eroglu's study<sup>19</sup>, the difference between the participants' perceived support levels in terms of the age variable was not significant ( $p > 0.05$ )<sup>19</sup>. In Mermer *et al.*'s<sup>31</sup>, Wang *et al.*'s<sup>23</sup> and Lunda *et al.*'s<sup>17</sup> studies, the difference between the participants' perceived support levels in terms of their age during pregnancy was significant

( $p < 0.01$ ); however, the difference was not significant during the postpartum period ( $p > 0.05$ )<sup>31,23,17</sup>. In present study, the BANSILQ was administered to the mothers after the 12<sup>th</sup> hour postpartum, just before discharge. The difference between our findings and findings of other studies may have been due to the fact that in those studies, the BANSILQ was administered in different periods namely prenatal, intrapartum and postnatal periods.

The comparison of the total SMMS scores in terms of the number of childbirths the mothers gave revealed a positive significant difference between the participating mothers ( $p < 0.05$ ). Of the participating mothers, those having given two or more childbirths obtained higher scores from the SMMS (Table 3). In Yaldir and Coban's study conducted with 300 mothers who gave birth via vaginal birth<sup>46</sup>, the comparison of the total SMMS scores in terms of the number of pregnancies of the participating mothers revealed a significant difference between them ( $p < 0.05$ )<sup>46</sup>. Similarly, in their study conducted with 260 mothers who gave birth via vaginal birth (2015), Nikula, *et al.*<sup>29</sup> found a significant difference between the mothers' level of perceived support in terms of the number of pregnancies they had ( $p < 0.05$ ). In Nikula *et al.*'s study<sup>29</sup>, they also determined that the primiparous pregnant women perceived the support provided more beneficial than did the multiparous pregnant women. According to the results of the study, although the results seem similar in terms of significance, in Nikula *et al.*'s study<sup>29</sup>, the satisfaction level of the primiparous pregnant women was lower than that of the multiparous pregnant women. As for the present study, the comparison of the number of childbirths the mothers gave and their mean score for the BANSILQ demonstrated that there was no statistically significant difference between their scores ( $p > 0.05$ ).

The comparison of the total SMMS scores in terms of the time elapsed between two childbirths revealed a positive significant difference between the participating mothers ( $p < 0.05$ ). As the time elapsed between two childbirths increased, so did their level of satisfaction in birth. In Ezeanochie's study<sup>45</sup>, the difference between the participants' satisfaction levels in terms of the length of the interval between two births was determined significant ( $p < 0.05$ )<sup>45</sup>. The results of the present study are consistent with those in the literature. The

short interval between two childbirths is thought to cause risks such as pregnancy and birth complications and, thus, to cause the mother to have a negative childbirth experience and to be dissatisfied with the birth. There was no statistically significant difference between the scores obtained by the participating mothers from the overall BANSILQ in terms of the time elapsed between two childbirths ( $p > 0.05$ ). In Kanig and Eroglu's study<sup>19</sup>, no significant difference was determined between the participants' perceived support levels in terms of the time elapsed between two childbirths ( $p > 0.05$ ). The results of the present study are consistent with those of Kanig and Eroglu's study because every woman may need adequate care and support during the birth process.

The analysis of the mothers' SMMS scores in terms of their fear of childbirth demonstrated a negative significant difference between their SMMS total scores ( $p < 0.05$ ). According to the analysis, the satisfaction levels of the mothers with fear of childbirth were lower (Table 3). In Rohue *et al.*'s study<sup>48</sup>, a significant difference was determined between the participants' perceived satisfaction levels in terms of the 'fear of childbirth' variable ( $p < 0.05$ ). The results of the present study are consistent with those in the literature. Since the primiparous pregnant women were inexperienced, they could not predict the events they would experience during delivery, which increased their levels of fear and thus may have affected their birth satisfaction. On the other hand, positive/negative childbirth experiences of the multiparous pregnant women in their previous birth may have affected their satisfaction levels. There was no statistically significant difference between the scores the participating mothers obtained from the overall BANSILQ in terms of their levels of fear of childbirth ( $p > 0.05$ ). In the present study, the perceived support levels of the mothers with fear of childbirth were very close to those of the mothers without fear of childbirth. In Lukasse *et al.*'s study<sup>49</sup>, the women with fear of childbirth had lower levels of perception of support.<sup>49</sup> Similarly, in Gulec *et al.*'s<sup>30</sup>, and Sezen and Unsalver's<sup>32</sup> studies, a significant difference was reported between the participants' perceived support levels in terms of fear of childbirth ( $p < 0.05$ )<sup>30,32</sup>. This difference between our results and those of the afore mentioned studies is thought to have stemmed from the

differences between the sizes of samples included in the studies, the places where the participants gave birth, and cultural factors.

The analysis of the SMMS scores in terms of the variable 'length of stay in the hospital' demonstrated that the variable 'length of stay in the hospital' affected the participants' SMMS scores. The rate of mothers who stayed in the hospital 0-12 hours after giving birth was 94.9% (Table 3). In Yaldir's study<sup>46</sup>, the difference between the mothers' satisfaction levels in terms of the length of their stay in the hospital was significant<sup>46</sup>. According to the result of Babure et al.'s study<sup>50</sup>, of the mothers, those who stayed in the hospital for less than 12 hours were 3 times more satisfied with the care than were those who stayed longer than 12 hours<sup>50</sup>. Prolongation of the hospitalization and the decrease in the mothers' adaptation to birth due to the increase in the interventions they underwent may have affected their satisfaction levels. However, WHO (2018) recommends that the mother and newborn should be given at least 24 hours of postpartum care in a healthcare facility after an uncomplicated vaginal birth<sup>12</sup>. In our study, no statistically significant difference was determined between the participants' BANSILQ total scores in terms of the length of their hospitalization ( $p > 0.05$ ). The length of hospitalization did not affect the supportive care received.

The comparison of the relationship between the mean scores obtained from the SMMS and BANSILQ by the participating mothers indicated a significant correlation between both scales (SMMS;  $p < 0.05$ , BANSILQ;  $p < 0.05$ ). The result of Yilmaz and Baser's study<sup>51</sup> is consistent with our result. As the level of supportive care given to mothers increased, so did their birth satisfaction level<sup>51</sup>. Thanks to the care provided, the mothers' perception of supportive care and thus their satisfaction levels may have increased (Table 4).

## Conclusion

It was determined that as the childbirth support received by the mothers during labor increased, so did their level of birth satisfaction. Therefore, it is recommended that other studies aimed at increasing care and support during labor and determining other factors affecting satisfaction at birth should be carried out.

## Author contributions

Concept – İ.Ü., H.Ö.C.; Design – İ.Ü., H.Ö.C.; Supervision – İ.Ü., H.Ö.C.; Resources – İ.Ü., H.Ö.C.; Materials – İ.Ü., H.Ö.C.; Data Collection and/or Processing – İ.Ü., Analysis and/or Interpretation – H.Ö.C.; Literature Search – İ.Ü., H.Ö.C.; Writing Manuscript – İ.Ü., H.Ö.C.; Critical Review – H.Ö.C.; Other – İ.Ü., H.Ö.C.

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## Conflict of interest

The authors declare that there is no conflict of interest involved in this endeavor.

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