JOURNAL OF
CONTEMPORARY MEDICINE

DOI:10.16899/jcm.995529
J Contemp Med 2022;12(2):289-293

Orijinal Araştırma / Original Article

The Relationship of the Number of Pregnant in the Labor Room to Perception of Support, Fear of Childbirth and Satisfaction

Travay Odasındaki Gebe Sayısının Doğumdaki Destek ve Kontrol Algısı, Doğum Korkusu ve Anne Memnuniyeti ile İlişkisi

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Abstract

Aim: This descriptive study aimed to determine the relationship of the number of pregnant women in the labor room to mothers' perception of support and control during labor and their postnatal fear and satisfaction levels.

Material and Method: The research is descriptive type. The study was carried out at the postnatal care clinics of two public hospital in Turkey. The sample consisted of a total of 686 women. The data were analyzed using the SPSS 23.0 program. The level of spread was accepted to be 0.05.

Results: The postnatal women who had stayed at single labor rooms, had spontaneous delivery, had delivery standing up, did not have intervention during delivery had higher perceptions of support/control at labor and care satisfaction levels and lower fear of childbirth levels. It was found that high perceptions of support and control at labor reduced fear of childbirth, while increasing satisfaction with the care in normal delivery ($p<0.05$).

Conclusion: It was determined that pregnant women having their deliveries in single rooms had high levels of support/control perceptions at labor and care-related satisfaction, as well as low levels of fear of childbirth.

Keywords: Fear of childbirth, labor room, mother satisfaction, perception of support and control, pregnancy

Öz

Amaç: Bu çalışma travay odasındaki gebe sayısının doğumdaki destek ve kontrol algısı, doğum korkusu ve anne memnuniyeti ile ilişkisini belirlemek amacıyla planlanmıştır.

Gereç ve Yöntem: Araştırma tanımlayıcı tiptedir. Çalışma Türkiye'de iki devlet hastanesinin doğum sonu servislerinde yapılmıştır. Araştırmaya toplam 686 kadın dahil edilmiştir. Veriler SPSS 23.0 programı kullanılarak analiz edilmiştir. Yanılma düzeyi 0,05 olarak alınmıştır.

Bulgular: Tek kişilik travay odasında kalan, doğumu spontan gerçekleşen, ayakta doğum yapan, doğum sırasında müdahalede bulunulmayan lohusaların doğumda destek / kontrol algısının ve bakıma ilişkin memnuniyet düzeylerinin yüksek, doğum korkusunun düşük olduğu belirlenmiştir. Doğumda destek ve kontrol algısının yüksek olmasının doğum korkusunu azalttığı bununla birlikte normal doğumda bakıma ilişkin memnuniyet duyma düzeylerini de arttırdığı belirlenmiştir ($p<0,05$).

Sonuç: Tek kişilik odada doğum eylemi gerçekleştirilen gebelerin doğumda destek / kontrol algısının ve bakıma ilişkin memnuniyet düzeylerinin yüksek; doğum korkusunun düşük olduğu belirlenmiştir.

Anahtar Kelimeler: Doğum korkusu, travay, anne memnuniyeti, destek ve kontrol algısı, gebelik

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Received *(Geliş Tarihi)*: 14.09.2021 **Accepted *(Kabul Tarihi)*:** 22.01.2022

INTRODUCTION

The mothers who receive quality care before and during childbirth and whose physiological, psychological and social needs are met have reduced fear of childbirth.[1] Low levels of fear of childbirth lead mothers to have a positive labor experience and increase the mother's satisfaction.[2,3] A high level of mother satisfaction is also highly important in the start and maintenance of the mother-infant interaction after birth and in terms of the mother's healthy satisfaction of her own and her baby's needs.[3]

Today, the necessity for pregnant women to be in single rooms for the process of labor and have labor in such rooms is among the important factors that increase mothers' satisfaction, reduce fear of childbirth and provide a supportive approach in care.[4] Still, at some hospitals, prenatal monitoring and labor do not take place in single rooms, and the delivery process takes place not in the room of monitoring but in a separate room. On the other hand, it was reported that mothers experience a positive delivery experience, and interventions with delivery are reduced at hospital and home births where one-person monitoring is carried out, and labor takes place in the same room.[5] As a result of the comprehensive literature review, no study was encountered to have investigated the effects of the number of pregnant women in the labor room on mothers' perception of support and control during labor and their postnatal fear and satisfaction levels.

MATERIAL AND METHOD

Study design

This descriptive study was planned to examine the relationship of the number of pregnant women in the labor room to mothers' perception of support and control during labor and their postnatal fear and satisfaction levels. The study was carried out at the postnatal care service of two public hospitals in Turkey. In one of the hospitals prenatal monitoring is carried out in double rooms, and delivery takes place in a separate room. In other hospital prenatal monitoring is carried out in single rooms, and delivery takes place in the same room. The population of the study consisted of 5069 women who gave vaginal birth at the postnatal care service of two public hospitals in 2018. The sample size was calculated by power analysis. The p ratio was taken as 0.50 to keep the sample size on the maximum level. The sample size to represent the population was determined as 686 with a significance level of α=0.05, confidence interval of 1-α=0.95, error rate of β=0.20 and power of 1-β=0.80.

Data collection tools

The data were collected by the researchers in line with the literature by using a "Puerperal women information form", "The perception of support and control in birth scale", "The Wijma delivery expectancy / experience questionnaire – version b", and "The scale for measuring maternal satisfaction in vaginal birth".

Puerperal women information form: This form included 18 questions in order to determine the puerperal women's ages, educational, and past and present obstetric information.[1-3]

The perception of support and control in birth scale (SCIB): The lowest one can score on the scale[6] is 33, and the highest score is 165. A high score on the scale indicates that the perception of support and control during delivery is strong. In this study, the Alpha coefficient of the SCIB was 0.95.

The Wijma delivery expectancy / experience questionnaire – version b (W-DEQ B): The minimum score on the scale[7] is 33, while the maximum score is 198. High scores show that women have strong fear of childbirth.[8] In the present study, the Alpha coefficient of the W-DEQ B was 0.94.

The scale for measuring maternal satisfaction in vaginal birth (SMMS-VB): The overall raw score varies between 43 and 215. As the overall score one scores on the scale increases, the levels of satisfaction from the care that mothers receive in the hospital during normal delivery increase. The cut-off score of the scale was set at 150.5 (≥150.5=high satisfaction, <150.5=low satisfaction).[8] In the present study, the Cronbach alpha coefficient of the SSMMS-VB was 0.95.

Research application and ethical approval

Prior to the study, written permission was obtained from authors's university ethics review board (Decision No: 2019-05/37). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki. Written permission has been obtained from two public hospitals to conduct the study. People who met the criteria of the study (those with no psychiatric and physical diseases, and so forth) were informed about the purpose and scope of the study, and written consent forms were obtained for their participation. The forms were administered at the hospital by the researcher using the face-to-face interview technique to the women who gave written consent indicating that they participated in the study voluntarily (approximately within 24 hours for vaginal delivery).

Statistical analysis

The data obtained from the study were analyzed using the SPSS 23.0 program. Data providing parametric conditions were analyzed by carrying out independent-samples t-tests for pairs of independent groups and Pearson correlation analyses for evaluating relationships, as well as descriptive statistical analyses. The level of spread was accepted to be 0.05.

RESULTS

Of the puerperal women participating in our study, 82.9% were between 19 to 35 years old, and they were 30.10±6.29 years old on average; 42.1% had a pregnancy history. Among the postnatal women, 34.4% stayed in single rooms during labor, 85.3% gave vaginal births that started spontaneously, only 5.8% used the "standing" position during delivery, and

55% received interventions (episiotomy / sutured delivery, fundal pressure, vacuum application). Perineal trauma occurred in 46.9%. The puerperal women's mean overall scores on SCIB, W-DEQ B B, and SMMS-NB were found to be 112.84±23.68; 97.31±29.55 and 151.47±25.04, respectively.

There was moderate fear of childbirth in 16.3% of the puerperal women severe fear of childbirth in 25.5%, and fear of childbirth at a clinical level in 58.2% (**Table 1**).

Table 1. Experiencing fear of childbirth according to W-DEQ B (n=686).

W-DEQ B*	Mild (≤37) n(%)	Middle (38-65) n(%)	Serious (66-84) n(%)	Clinic (≥85) n(%)
Fear level of childbirth	0 (0)	112 (16.3)	175 (25.5)	399 (58.2)

* W-DEQ B: The Wijma Delivery Expectancy / Experience Questionnaire Versiyon B

The postnatal women who had stayed at single labor rooms, had spontaneous delivery, had delivery standing up, did not have intervention during delivery and did not have perineal trauma had higher perceptions of support/control at labor and care satisfaction levels and lower fear of childbirth levels ($p<0.05$), (**Table 2**).

There were a negative significant relationship between the mean SCIB and W-DEQ B scores of the participants and a positive significant relationship between their mean SCIB and SSMS-NB scores ($p<0.05$). It was determined that high perceptions of support and control at labor reduced fear of childbirth, while increasing satisfaction with the care in normal delivery (**Table 3**).

Table 3. The correlation of scale total scores.

Scales**	SCIB	
	r*	p
W-DEQB	-0.883	0.000
SSMS-NB	0.696	0.000

*Pearson'sKorelasyonAnalysis;**SCIBScale:ThePerceivedSupportandControlinBirthScale;W-DEQB:TheWijmaDeliveryExpectancy/ExperienceQuestionnaireVersiyonB;SSMS-NB:ScalesforMeasuringMaternalSatisfactioninNormalBirth;SSMS-NB

DISCUSSION

Whatever their form of delivery may be, the delivery experience they have has an important place in women's lives.[9] An important factor that affects women's experience of a positive delivery is the characteristics of the labor room in the intrapartum period. The positive experiences of mothers increase in hospital deliveries where a single person is monitored in a room, and the delivery is performed in the same room.[4,5,10] In our study, 34.4% of the women stayed in single rooms at labor. Single rooms where labor is monitored increase the autonomy and privacy feelings of women the most.

The process of delivery is a highly stressful event for all women, and women need increased levels of support in this period. This support is usually provided by midwives and doctors.[11] While the mean total SSMS-NB score in our study was moderate (112.84±23.68), Colley et al.[12] found the perceptions of labor support and control of women to be on a low level. A study has determined that women who are supported at delivery by receiving quality care and whose physiological, psychological

Table 2. Distribution of scale total score means according to some features of puerperal women.

Characteristics	SCALES***		
	SCIB $\bar{x}$±sd	W-DEQB $\bar{x}$±sd	SMMS-NB $\bar{x}$±sd
Labor room			
Single room (n=236)	139.61±5.33	66.40±5.14	177.91±7.53
≥ Double room (n=450)	98.80±16.32	113.52±23.51	137.62±19.17
t / p*	37.372/0.000	30.387/0.000	31.038/0.000
Type of childbirth			
Vaginal delivery (n=585)	115.66±23.52	94.58±29.83	154.32±25.02
Induction vaginal delivery (n=101)	96.49±17.10	113.13±22.09	135.02±17.89
t / p*	7.837/0.000	5.970/0.000	7.429/0.000
Birth position			
Lithotomy (n=474)	103.77±20.58	107.96±26.78	142.12±22.22
Squatting (n=172)	131.59±17.77	75.19±21.82	171.05±18.48
Standing (n=40)	139.75±5.40	66.20±4.68	178.28±6.38
F / p**	171.587/0.000	143.058/0.000	158.275/0.000
Intervention in birth			
Yes (n=377)	104.93±19.69	107.69±26.72	142.14±22.67
No (n=309)	122.50±24.56	84.64±27.88	162.87±23.04
t / p*	10.393/0.000	11.021/0.000	11.830/0.000
Perineal trauma			
Yes (n=377)	106.31±20.44	104.63±26.25	143.95±22.99
No (n=309)	118.62±24.84	90.84±30.80	158.14±24.92
t / p*	7.027/0.000	6.265/0.000	7.714/0.000

* Independent sample t test; ** ANOVA; *** SCIB Scale: The Perceived Support and Control in Birth Scale; W-DEQ B: The Wijma Delivery Expectancy / Experience Questionnaire Versiyon B; SSMS-NB: Scales for Measuring Maternal Satisfaction in Normal Birth

and social necessities are met have reduced fear of childbirth.[1] In our study, 58.2% of the women were found to have clinical levels of fear of childbirth. According to a meta-analysis by Deliktas and Kukulu[13] on fear of childbirth, 21 in every 100 women experience tokophobia. High mother's satisfaction levels are dependent on women to have a positive delivery experience.[3] The mothers' satisfaction levels in normal delivery in our study were high (151.47±25.04).

Delivery environments are important especially in reducing fear of childbirth, providing a positive delivery experience and in increasing mother's satisfaction levels.[14] In our study, the women who stayed in single rooms and double rooms received care from midwives. The ones who stayed in single rooms had higher labor support and control perceptions and satisfaction levels and lower fears of childbirth. Single rooms where privacy increases, and better attention is paid to women may explain the differences among the women's perceived support and control levels, fear of childbirth levels and satisfaction levels.

Interventions that are made unnecessarily during delivery (induction, episiotomy, etc.) reduce the control perceptions[15], satisfaction levels[15,16] and increase the fear of childbirth levels of women.[17] Similar results were also obtained in our study. The labor support and control perceptions were high, fears of childbirth were low, and satisfaction levels were high among the women who were not intervened with and had spontaneous vaginal deliveries.

The physical characteristics of labor rooms must be in a structure that will support the position (support a vertical position, etc.) needed by the mother.[11] Thies-Lagergren et al.[18] reported that women who gave birth in a sitting position had increased control feelings and reduced pain levels. Usage of the crouching position from among vertical positions at labor is associated with less perineal injury.[19] In our study, the women who gave birth standing up or in a crouching position and did not have perineal or cervical tearing had higher labor support and control feelings and lower fear of childbirth levels. Previous studies and our study appear to support the usage of vertical positions for delivery at labor rooms and the idea that this situation reduces the rate of perineal trauma.

The significant predictors of perceptions of control at labor, delivery experience and satisfaction are the delivery environment, the healthcare personnel monitoring the delivery and providing care and their levels of informing the woman. A study determined a positive relationship between labor control perceptions and satisfaction. In women with high labor control feelings, delivery satisfaction levels are also high.[15] A study have shown that the control feelings perceived by women during labor affect the delivery experience of women and their satisfaction with the delivery.[20] In similarity to other studies, in our study, it was determined that a high perception of support and control at labor reduced fear of childbirth, and in addition to this, it increased the levels of satisfaction with care in normal delivery.

CONCLUSION

It was determined that the pregnant women staying in single rooms and having their deliveries in the same rooms had high levels of support / control perceptions at labor and care-related satisfaction, as well as low levels of fear of childbirth. In line with these results, it may be recommended to monitor all pregnant women in single rooms and perform delivery procedures in these same rooms.

ETHICAL DECLARATIONS

Ethics Committee Approval: Ethical approval has been provided by the Ethics Committee from the Faculty of Medicine, Cumhuriyet University (2019-05/37).

Informed Consent: Because the study was designed retrospectively, no written informed consent form was obtained from patients.

Referee Evaluation Process: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

Author Contributions: All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

Acknowledgments: The authors would like to thank to pregnant women for their involvement in this research. This study was presented as a oral presentation at the 4th International Koru Pregnancy, Birth and Postpartum Congress event held in Bolu on 20-23 February, 2020.

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