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Evaluation of Pregnancy Information Classes Trainings on Birth Fear and Birth Method Selection

Abstract

Aim: This study aimed to reveal the effect of antenatal education class trainings on the fear of birth and the choice of method of birth.

Methods: The study was carried out on 53 pregnant women who met the research criteria and participated in the antenatal education class established in a hospital affiliated to the Isparta Provincial Health Directorate between December 2017 and July 2018. The data were collected with the questionnaire form, Pregnancy and Birth Fear scale before the training and after all the trainings. In the evaluation of the data obtained, the number, percentage, and independent Mann–Whitney *U* test were used to test for differences between groups, and Kruskal–Wallis H test was used for comparisons among more than 2 groups. Wilcoxon signed-rank test and dependent *t* test were applied for the comparison of 2 pairwise samples.

Results: The mean age of the participants was determined to be 26.9 ± 4.3 years and the mean gestational age was 25.1 ± 6.3 weeks. The mean total score was 5.88 ± 1.39 before the training; it was found to be 4.48 ± 1.44 after the training and the difference between them was found to be statistically significant ($P < .001$). A statistically significant relationship was found between pregnant women considering cesarean birth before training and pregnant women considering normal birth after training ($P < .05$).

Conclusion: In the current study, it was found that antenatal education class training decreased the fear of birth and affected the choice of method of birth.

Keywords: Education, birth, cesarean section

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Introduction

Pregnancy is a significant process that women experience in their lives. During this period, expectant mothers who experience many physical, emotional, and psychological changes may experience fear and anxiety in addition to joy and excitement. Especially the anxiety of giving childbirth is a feeling that many women experience intensely toward the end of their pregnancy, and it affects women's choice of childbirth method. This fear disrupts the ease of childbirth, prolongs its duration, and causes the development of some undesirable situations.[1-3] Biological, psychological, and social factors may affect the formation of fear of childbirth.[4] While labor pain is among biological causes, the personality characteristics of the pregnant woman, previous traumatic events, and social causes are among the psychological causes; there are situations such as insufficient social support of the pregnant woman.[4-6] Pregnant women, who are at an early age, have low education and income levels, and do not have social aid are more afraid of childbirth.[7,8] The cause of secondary childbirth fear is the negative previous childbirth experiences.[9,10] Negative thoughts, due to the fear of birth, during pregnancy can cause birth to turn into a negative experience, and because of this fear, it can cause many pregnant women to choose to cesarean section delivery.[11] Exception for medical necessity, cesarean section delivery is preferred mostly. The factors affecting the preference of the elective cesarean section delivery include fear of vaginal delivery, late marriage and pregnancy status, mother's level of education, socioeconomic status, surgeries being more comfortable, worrying about their own and baby's health, and finding cesarean delivery more reliable, negative experiences with previous childbirth, cesarean section planned and it takes a short time.[12-14]

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The rate of cesarean section in Turkey is 37%, according to the 2008 data of the Turkey Population Health Survey (TPHS); this rate is significantly higher than TPHS 2003 (21%).[15] Although most women in our society are conscious that childbirth is a natural process, there is a significant increase in cesarean delivery rates. The pregnancy process should be evaluated biologically, physiologically, and socially, and pregnant women should be encouraged about vaginal delivery during this period. In order to prevent these situations, especially in women with their first pregnancy, it is of great importance to providing prenatal education to expectant mothers. In the studies examining the impact of prenatal education on childbirth experience, it has been found that trainings reduce the fear of birth, increase women's knowledge about giving birth, experience a better to give birth than they expect, positively affect them to give birth, and adaptation process to give birth is better than others. [12,13,16] In Turkey, the "Health Promotion and Improvement Program" was initiated by the Ministry of Health within the scope of the Health Transformation Project, and for this purpose, general instruction on the "Pregnant Information Classes" (PIC) was published in 2014. The aim of the pregnancy information class program is to ensure that all pregnant women have knowledge about prenatal, birth, and postpartum periods and give birth consciously, as well as gain knowledge and skills on normal labor and pain management.

The study aimed to evaluate the effect of pregnancy information class training on the fear of childbirth and the preference for childbirth methods.

Material and Methods

In this study, 53 volunteer pregnant women who met the criteria of inclusion in the study, especially those with the first pregnancy, no previous miscarriage, no abortion history, no known contraindications for a natural delivery, and pregnant who were participated in all of the training, were included in the study. Enumeration of the sample not made in the study, but all pregnant who were participated, volunteered to participate, and filled out the questionnaires on the fixed dates were included in it.

Data Collection Tools

The data were obtained, with the personal information form prepared by the researcher by scanning the literature, the evaluation questionnaire before and after the training, and the “Fear of Birth Scale (FOBS).”

The first section, where personal information is found, includes age, education level, occupation, place of residence, income status, presence of chronic disease, drug use, spouse's age, education level, and occupation. In the section on obstetric characteristics were questioned, there were questions about the week of pregnancy, height and weight, how much weight she gained until that week, whether she was on a diet or not, and pregnancy follow-ups. The evaluation questionnaire was applied pre/post-training; knowledge of childbirth methods and opinions-preferences about childbirth were questioned. The questionnaire form consists of 38 questions in total.

Fear of Pregnancy and Childbirth Scale (anxiety scale about childbirth and postpartum period) is a questionnaire developed by Kitapçıoğlu et al[14] in 2007 for Turkish society and it consists of 61 statements. The scale consists of 10 sub-dimensions that can determine the concerns experienced by women in the childbirth and postpartum period and is of 5-point Likert type. In every statement, the minimum value is 1 (strongly disagree) and the maximum value is 5 (totally agree). Participants were asked to mark one of these options for each statement. There are no reverse-scored statements on the scale, and the scores obtained after standardization range from 1 to 10 (0.00-2.00: very low, 2.01-4.00: low, 4.01-6.00: medium, 6.01-8.00: high, 8.01-10.00: very high). As the score increases, the level of fear increases. In the validity and reliability study of the scale, the Cronbach Alpha value was calculated as 0.955.[17]

Trainings in the pregnant school consist of 4 sessions. They are in the form of 2 lessons of 45 minutes per week and are completed in 2 weeks. The training is taken place where they can be presented in practical training specially created for this purpose. In the sessions, topics such as general information, pregnancy and health during pregnancy, normal birth, methods of enduring birth waves without medication, applied training of breathing exercises, applied training of breastfeeding techniques and baby and puerperal care, family planning, delivery, and water delivery rooms are included. All trainings are given by the same experienced health personnel.

The Pre-Training Evaluation Questionnaire and the Fear of Pregnancy and Childbirth Scale were administered to the pregnant women in an average of 20 minutes shared 2 times and were collected before the beginning of the training and after the end of the classes.

Statistical Analysis

The data were evaluated using the Statistical Program for Social Sciences 25 (IBM SPSS Corp.; Armonk, NY, USA) package program. The Shapiro–Wilk test was used to check whether the data showed a normal distribution. Since the data did not show normal distribution, non-parametric tests were used in the analysis. Descriptive information of the pregnant women is given in the tables in the form of numbers, percentage distributions, mean, and standard deviation. In the evaluation of the obtained data, the independent Mann–Whitney *U* test was used to test the difference between groups, and the Kruskal–Wallis H test was used for comparisons between more than 2 groups. Wilcoxon signed-rank test was used to compare 2 dependent (pairwise) samples. Bonferroni α correction was made for comparisons of more than 2 groups. The α was taken as 0.05 in all comparisons.

Ethics Committee Approval and Permissions

Ethics committee approval was obtained from the Faculty of Medicine Clinical Research Ethics Committee at Süleyman Demirel University, with number 72867572.050.01-148592-136; dated August 16, 2017. Permission was obtained from the Chief Physician of the hospital where the study was conducted and the General Secretariat of the Public Hospitals Association. Written and verbal consents were obtained from the pregnant women who were enrolled in the Pregnant School and were eligible for the sample. Ethics Committee at Süleyman Demirel University, by e-mail the Fear of Pregnancy and Birth Scale, which was used in the study.

Results

The mean age of the pregnant women was 26.9 ± 4.3 years, and 20.8% (n=11) of the women were secondary school graduates and 79.2% (n=42) of them were university graduates. It was found that 58.5% (n=31) of the pregnant women were housewives, 28.3%

Table 1. Distribution of Pregnant Women by Socio-Demographic Characteristics (n=53)

Characteristics	n	%
Mean age (Mean ± Sd)	26.9 ± 4.3	
Level of education		
Secondary education	11	20.8
University	42	79.2
Occupation		
Housewife	31	58.5
Civil servant	15	28.3
Casual laborer	7	13.2
Residence		
Rural	3	5.7
Urban	50	94.3
Status of living with an elderly family member		
No	48	90.6
Yes	5	9.4
Income		
≤2000 TL	20	37.7
>2000 TL	33	62.3

(n=15) were civil servants, and their income levels were above 2000 TL. It was determined that 94.3% (n=50) of the participants lived in the city center and 9.4% (n=5) lived with an elderly family member. The evaluation of pregnant women concerning socio-demographic characteristics is given in Table 1.

The pre/post-training of the pregnant women and fear of childbirth scale mean scores and their comparison are given in Table 2.

It was found that the total FOBS mean score of the pregnant women was 5.88 ± 1.39 pre-training and 4.48 ± 1.44 post-training, and the difference between the mean scores was statistically significant ($P < .001$). The highest scale scores before training and concern about the behavior of medical staff during delivery, postpartum, breastfeeding, and labor belonged to sub-dimensions. After the training, no significant decrease was observed in the cesarean section anxiety sub-dimension of the scale, while a significant decrease was observed in the other sub-dimensions ($P \geq .05$, $P < .0001$, and $P < .0001$).

The views and preferences of pregnant women about delivery methods before and after the training are given in Table 3.

Although the rate of requesting natural delivery of pregnant women increased after the training, this increase was not found to be statistically significant ($P=.25$). The desire for cesarean delivery and fear of natural delivery decreased significantly after the training ($P = .02$ and $P < .0001$, respectively).

The pre/post-training of the pregnant women, fear of delivery, and comparison of their preferences are given in Table 4.

The difference between those who would do cesarean delivery before training and those who would do natural delivery after training was found statistically significant, and an increase was observed in the desire for natural delivery ($P < .05$).

Discussion

In this study, which was carried out to determine the effect of PIC training on the fear of birth and preference of childbirth method in pregnant women in the pre/post-training, it was found that the total FOBS mean score decreased significantly after the training.

There are many reasons which trigger women's fears during pregnancy. Childbirth fear includes the anxiety of the baby, the person's fear, and the behavior of the medical staff.[17] In this study, the

Table 2. Pregnancy and Postpartum Fear of Childbirth Scale Mean Scores and Comparisons Pre/Post-training

	Pre-training	Post-training	
	FOBS (Ort ± SS)	FOBS (Ort ± SS)	P^a
Total score of scale	5.88 ± 1.39	4.48 ± 1.44	***<.0001***
Factor 1: worries about the baby	5.31 ± 2.01	4.49 ± 1.82	*<.05*
Factor 2: worries about the birth activity	6.48 ± 1.71	4.78 ± 1.80	***<.0001***
Factor 3: worries about breast feeding after the childbirth	6.70 ± 2.05	4.60 ± 1.99	***<.0001***
Factor 4: worries to fail down on baby care after the childbirth	5.73 ± 1.95	3.75 ± 1.66	***<.0001***
Factor 5: worries about the social life after childbirth	5.23 ± 1.76	4.34 ± 1.88	*<.05*
Factor 6: worries about health of the baby and mother after childbirth	5.75 ± 1.68	4.35 ± 1.98	***<.0001***
Factor 7: worries about non-supporting husband	4.59 ± 1.56	3.50 ± 1.19	***<.0001***
Factor 8: worries before the prenatal period	6.21 ± 2.10	4.13 ± 1.69	***<.0001***
Factor 9: worries about the behavior of the medical staff at childbirth	6.94 ± 1.94	4.58 ± 2.14	**<.0001**
Factor 10: worries about the cesarean section risk	6.35 ± 2.45	6.56 ± 2.67	*≥.05*

$P < .005$ are statistically significant. [a]Wilcoxon signed-rank test; *FOBS, Fear of Birth Scale.

Table 3. Opinions and Preferences of Pregnant Women on Delivery Methods Pre/Post-training (n=53)

Opinions and Preferences	Pre-education, n %		Post-education, %		Statistical Scores
Vaginal birth	7	13.2	0	0	***0.25***
No	17	32.1	3	5.7	
Not Sure	29	54.7	50	94.3	
Yes					
Cesarean section	24	45.3	46	86.8	***0.02***
No	17	32.1	6	11.3	
Not Sure	12	22.6	1	1.9	
Yes					
Fear of vaginal	3	5.7	39	73.6	***<0.0001***
birth	20	37.7	8	15.1	
No	30	56.6	6	11.3	
Not Sure					
Yes					
Fear of cesarean	1	1.9	20	37.7	***1.0***
section	24	45.3	14	26.5	
No	28	52.8	19	35.8	
Not Sure					
Yes					

P < .005 are statistically significant.

anxiety level of the pregnant women was moderate, and the level of anxiety after the training was found to be lower than before training. In the study by Köse and Pasinlioğlu,[18] wherein the effect of birth and postpartum training is given to pregnant women to reduce anxiety about these periods, a decrease in the mean score of the scale after the training was observed. In the study conducted by Üstün and Pasinlioğlu[19], it was observed that the total FOBS mean score was 5.80 ± 1.41 in person with the first pregnancy, which is similar to our research. Higher fear of childbirth in people with first pregnancy; inexperience, lack of knowledge, fear of uncertainties of how to give birth, the belief of experiencing severe pain at birth, negative birth experiences which are heard, and distrust for the medical staff.

After the training, when we re-evaluated, we found that the level of fear was moderate yet, was statistically decreased. Melennder's study[20] also shows that prenatal education can reduce some types of fear and anxiety. In the research by Subaşı et al[21], it was determined that prenatal training has a reducing effect on childbirth fear, negative feelings, and thoughts about birth in pregnant women. The study by Geissbuehler et al[22] stated that fears and worries about labor, and baby's care, can be reduced by providing prenatal training to pregnant women.

In the results, we have obtained that training is adequate and, it was noticed, the knowledge level of pregnant women who receive training on pregnancy, birth, puerperium, and baby care increases. By this means, health awareness in pregnant women increases, adaptation to motherhood becomes easier, their self-confidence at birth, and its positive effect on the relationship between spouses increases.

When the mean scores of the pregnant women were compared, according to the sub-dimensions of FOBS pre/post-training, the highest level of anxiety in the study belongs to the sub-dimension "Concerns About the Behaviour of Health Personnel During Birth." In the study by Küçükkaya et al[23], fear, which was for the attitude of medical staff found to be, is the second-highest cause of fear. The reasons such as medical staff shouting, making mistakes, and lack of support to patients also increase fear in pregnant women. In the studies, it is also stated that women are afraid that medical staff will make mistakes.[20,21]

Fear of natural birth causes pregnant women to consider cesarean section. In a study conducted in our country, pregnant women who were preferred cesarean section asked about the reason for their preferences; they mostly remarked that it was painless. In the same study, 71.4% of the 63 pregnant women who did not prefer natural delivery stated that they did not favor it because of finding it difficult, painful, a pang of childbirth, and 14.2% because of the fear of delivery.[24] In the study of Bülbül et al[25], it was determined that as the fear levels of pregnant women increased, their decision-making styles changed, and they have more panicked, avoidant, and procrastinating decision-making ways. In another study, nearly half of the pregnant women who preferred cesarean delivery stated that they thought about cesarean section delivery because of the fear of natural birth.[26]

In the study, a significant association was found between those who favored cesarean delivery in pre-training and those who favored natural delivery post-training. Most pregnant women who favored cesarean delivery before the training started to consider natural delivery after it. In this, it may have been effective that the accurate information received in the training of natural childbirth cleared up the questions in pregnant women and the awareness of the necessity of performing a cesarean section.

The limitations of the current study were missing data, some participants attended the first training and did not participate in other

Table 4. Comparison of Birth Fear and Preferences of Pregnants Pre/Post-training

Matching	Mean Rank	*P*[a]
The state of thinking about cesarean delivery before education and the state of thinking about normal delivery after training	8.54	*<.05*
The state of fear of normal birth before education and the state of thinking about cesarean delivery before training	**9.01**	*<.05*
Fear of pre-training cesarean birth and pre-training normal birth thinking state	**8.92**	***1.00***
The fear of normal birth before training and the state of not thinking of normal birth before training	**9.01**	***<.0001***

P < .005 are statistically significant. [a]Wilcoxon signed-rank test.

educations, some pregnant women did not do the final test, so they have not been included in the evaluation and, for all those reasons, the participants' numbers were less than desired.

Conclusion

It should be ensured that every pregnant woman receives training in pregnant information classes in the antenatal period so encouraging activities should be carried out to improve participation in these educations. Counseling should be given to pregnant women at each follow-up in family practice centers to reduce their fears and concerns about prenatal, postpartum, and postnatal periods, and pregnant women should be encouraged to enroll in prenatal preparation classes. It should be assured that the people working in the delivery room are composed of professionals who have received communication and birth preparation training.

Ethics Committee Approval: Ethical committee approval was received from Süleyman Demirel University Faculty of Medicine Clinical Research Ethics Committee (Date :16/08.2017 ve No: 72867572.050.01-148592-136).

Informed Consent: Written and verbal informed consent was obtained from all participants who participated in this study.

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