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The Effect of Childbirth Education Classes Pregnant Women's Childbirth Attitudes and Happiness

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ABSTRACT

Objective: This study aims to identify the effect of childbirth education classes on pregnant women's childbirth attitudes and happiness. **Materials and Methods:** This study is a quasi-experimental research with a control group. Thirty-four participants were included in the control and the experimental groups (N = 68). Data were collected through the Personal Information Form, the Oxford Happiness Questionnaire (OHQ), and the Childbirth Attitudes Questionnaire (CAQ). **Results:** In the 1st, 2nd, and 3rd interviews, the difference between the total mean scores of the pregnant women's OHQ was insignificant in the experimental and control groups ($p>0.05$). In the 1st and 2nd interviews, the difference between the total mean scores of the pregnant women's CAQ was insignificant in the experimental and control groups ($p > 0.05$). In the 3rd interview, the CAQ total mean score of the pregnant women in the experimental group was found to be 26.85 ± 8.5 while that of the control group was 38.14 ± 10.18 ; the difference between the groups was found to be statistically significant ($p < 0.05$). **Conclusion:** The primipara women who participated in the childbirth class were found to have developed positive childbirth attitudes. Participation in the childbirth class was found to affect intra-group happiness. This result indicates that pregnancy is a pleasing process for women.

Keywords: Childbirth Education, Classes, Pregnant Women, Childbirth Attitudes, Happiness.

Doğuma Hazırlık Sınıflarında Verilen Eğitimin Gebelerde Doğum Tutumu ve Mutluluğa Etkisi

ÖZ

Amaç: Araştırma, doğuma hazırlık sınıflarında verilen eğitimin gebelerin doğum tutumu ve mutluluğa etkisini belirlemek amacıyla yapılmıştır. **Materyal ve Metod:** Bu çalışma yarı deneysel bir tipte yapılmıştır. Kontrol ve deney grubuna 34 kişi alınmıştır (n=68). **Bulgular:** 1.,2 ve 3. görüşmelerde deney ve kontrol grubundaki gebelerin OHQ'den aldıkları toplam puan ortalamaları arasındaki farkın istatistiksel olarak anlamlı olmadığı saptanmıştır ($p>0.05$). 1. ve 2. görüşmede görüşmelerde deney ve kontrol grubundaki gebelerin CAQ'den aldıkları toplam puan ortalamaları arasındaki farkın istatistiksel olarak anlamlı olmadığı saptanmıştır ($p>0.05$). 3.görüşmede deney grubundaki gebelerin CAQ'den aldıkları toplam puan ortalamasının 26.85 ± 8.50 , kontrol grubundaki gebelerin 38.14 ± 10.18 olduğu belirlenmiş ve gruplar arasındaki farkın istatistiksel olarak anlamlı olduğu saptanmıştır ($p<0.05$). **Sonuç:** Doğuma hazırlık sınıfına katılan primipar kadınların doğuma ilişkin olumlu tutum geliştirdiği görülmektedir.

Anahtar Kelimeler: Doğum Eğitimi, Dersler, Hamile Kadınlar, Doğum Tutumları, Mutluluk.

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INTRODUCTION

Despite being a physiological phenomenon to be experienced by any woman at reproductive age, pregnancy is a transition period that causes anxiety and stress in the woman's life. As to childbirth, although it is natural, it is a painful process whose outcomes cannot be predicted, and it carries severe morbidity and even mortality risks for both the mother and the baby (Korukcu et al., 2017). During the pregnancy period, pregnant women try to adapt to the physiological and psychological changes caused by pregnancy while they also develop childbirth attitudes by preparing themselves for labor. Attitudes of pregnant women towards childbirth are affected by many factors. Pregnant women's childbirth attitudes may vary depending on the effects of these factors (Gencer & Ejder Apay, 2020).

Pregnancy and having children are approved by society; however, the changes experienced in the process could be a source of happiness for some women while they may cause unhappiness for some other women. Happiness is "well-being and satisfaction; satisfying or pleasurable experiences". Aristoteles, who presented a systematic view of happiness, defined happiness as "the appropriate behavior of the soul to the logic" and "appropriate activity of the soul to virtue" (Gencer & Ejder Apay, 2020). Body and pregnancy perceptions are affected positively in women who feel ready for pregnancy, see pregnancy as a unique period, and experience the happiness of giving birth to a baby shortly after accepting the pregnancy. Happiness during pregnancy is also associated with decreased pain and increased pain tolerance (Coskun et al., 2020).

Childbirth classes date back to the 1930s; they have recently become more popular and gained momentum. In this regard, pregnant women, their partners, and family members are provided with education for pregnancy, childbirth, and preparation for the postpartum period and parenthood. Childbirth education topics such as practices enhancing childbirth, breathing exercises, appropriate physical activities, procedures during labor, informing about the interventions, pain, informing about the course of actions, providing a safe environment, presence of a companion who could comfort the pregnant woman, massage practices, distraction methods, etc. could enable effective pain management by decreasing fear that might develop during labor (Arslan et al., 2019). Turgut et al. investigated the effect of the education received by pregnant women who participated in childbirth classes and found that the post-test mean scores were higher than the pre-test mean scores, and the difference between them was statistically significant (Turgut et al., 2017).

This study aims to identify the effect of childbirth education classes on pregnant women's childbirth attitudes and happiness. The findings are believed to contribute to the presentation of the education and

consultancy services provided to pregnant women and their families.

MATERIALS AND METHODS

Study type

This study was designed as a quasi-experimental study with a control group to identify the effects of the education given in childbirth classes on pregnant women's childbirth attitudes and happiness. The study was conducted in Adana City Hospital, affiliated with the Ministry of Health in the Republic of Turkey, between September 2019 and February 2020.

Study Population

While the pregnant women participating in the childbirth education classes formed the experimental group, the group receiving the standard prenatal care constituted the control group. The criteria for participating in the study were:

- Being 18 years or older,
- Pregnancy at 20 weeks or more
- Not having a diagnosis for risk pregnancy
- Being primigravida
- Having a living and only one fetus
- Being open to communication and cooperation
- Understanding and speaking Turkish

The sample size calculation was performed using the GPower 3.1 program; when the power was taken at 80% and $\alpha=0.05$, the total sample size calculated using a student t-test was 68. The study was conducted with 68 women (34 in the experimental group and 34 in the control group).

Data Collection

The Personal Information Form: The form comprises 11 questions that include pregnant women's socio-demographics (age, education level, working or not, economic condition, family type, etc.) and obstetric features (Gencer & Ejder Apay, 2020).

The Oxford Happiness Questionnaire (OHQ): The Oxford Happiness Questionnaire was developed by Hills and Argyle, and it was adapted to Turkish by Dogan and Akinci Cotok (Dogan and Akinci Cotok, 2011). The one-factor scale comprises 29 items rated on a 6-point Likert scale (1-I strongly disagree, 2-I moderately disagree, 3-I slightly disagree, 4-I slightly agree, 5-I moderately agree, 6-I strongly agree). Items 1, 6, 10, 13, 14, 19, 23, 24, 27, 28, 29 and 18 are coded reversely in the OHQ. The scores obtained from the scale range from 29 to 174. Higher scores indicate higher happiness levels. Reliability and validity analyses indicated Cronbach's Alpha coefficient to be 0.84. Cronbach's alpha coefficient was found to be 0.84 in this study.

The Childbirth Attitudes Questionnaire (CAQ): The Childbirth Attitudes Questionnaire was developed by Nancy K. Lowe in 2000 to measure the fear of childbirth (Lowe, 2000). The reliability and validity of the Turkish form were tested by Donmez et al. in 2014 (Donmez et al., 2014). The Childbirth Attitudes Questionnaire is composed of 16 items. The scale score is calculated by averaging the 16 items. The

responses on the scale are scored between 1 and 4, indicating "1-no anxiety", "2-low anxiety", "3-moderate anxiety", and "4-high anxiety"—the scores to be obtained from the scale range between 16 and 64. Higher total scale scores indicate higher anxiety. Cronbach's alpha of the Turkish adaptation of the scale was 0.83. This study found Cronbach's alpha coefficient to be 0.91.

Collection of the data

The education in the childbirth class was given to the health personnel working in this unit by the midwife, who is also one of the researchers of this study. The pregnant women's childbirth attitudes and happiness levels were identified through three interviews conducted within one-week intervals. The childbirth class was composed of three sessions. The sessions conducted every week were completed in three weeks.

Experimental group

1st Interview: The experimental group comprised pregnant women who attended the childbirth class. The pregnant women who attended the class were administered the Personal Information Form, the Oxford Happiness Scale, and the Childbirth Attitudes Questionnaire before the education. Then, they were taught the education topics in the first session.

2nd interview: The second interview was conducted one week after the first interview. Before the education, the pregnant women were administered the Oxford Happiness Scale and the Childbirth Attitudes Questionnaire. Then, they were taught the education topics in the second session.

3rd interview: The third interview was conducted one week after the second. The pregnant women were first taught the education topics in the third session. They were then administered the Oxford Happiness Scale and the Childbirth Attitudes Questionnaire.

Control group

The control group comprised pregnant women who had routine prenatal care. Three interviews were conducted in one-week intervals. The first interview included the introduction and the administration of the Personal Information Form, the Oxford Happiness Scale, and the Childbirth Attitudes Questionnaire. For the second and third interviews, the participants were called by phone and asked to fill in the Oxford Happiness Scale and the Childbirth Attitudes Questionnaire.

Statistical analyses

The statistical analyses were performed using SPSS for Windows version 22.0. Percentage, arithmetic mean, standard deviation, chi-square test, Mann-Whitney U test, and Wilcoxon test were used to analyze the data. The level of significance was accepted as $p < 0.05$.

Ethical considerations

Before conducting the research, approval from the Ethics Board of the School of Medicine, Cukurova

University (01.06.2018/78-1), written approvals from the institutions where the study was to be performed, and verbal consent from the participants was obtained.

RESULTS

Findings regarding sociodemographic and obstetric variables of the pregnant women. The sociodemographic and obstetric characteristics of the experimental and control groups were generally homogeneous, and the difference between the groups was not statistically significant ($p > 0.05$) in the study.

When the OHQ mean scores of the women in the first interview were compared, the mean score of the experimental group was found to be 99.67 ± 14.76 , and that of the control group was found to be 98 ± 20.54 ; the difference between the groups was not statistically significant ($p > 0.05$) (Table 1).

When the pregnant women's OHQ mean scores in the second interview were compared, the mean score of the experimental group was found to be 100.94 ± 10.87 , and the mean score of the control group was found to be 100.97 ± 14.00 ; the difference between the groups was not statistically significant ($p > 0.05$).

When the pregnant women's CAQ mean scores were compared, the intra-group difference in the experimental and control groups was statistically significant ($p < 0.05$). When the pregnant women's OHQ mean scores in the third interview were compared, the mean score of the experimental group was found to be 100.29 ± 12.27 , and the mean score of the control group was found to be 99.58 ± 11.43 ; the difference between the groups was not statistically significant ($p > 0.05$) (Table 1).

When the pregnant women's CAQ mean scores in the first interview were compared, the mean score of the experimental group was found to be 39.00 ± 9.98 , and the mean score of the control group was found to be 35.67 ± 10.61 ; the difference between the groups was not statistically significant ($p > 0.05$) (Table 2).

When the pregnant women's CAQ mean scores in the second interview were compared, the mean score of the experimental group was found to be 31.91 ± 7.27 , and that of the control group was found to be 33.38 ± 11.92 ; the difference between the groups was not statistically significant ($p > 0.05$). The intra-group difference in the CAQ mean scores of the pregnant women in the experimental group was found to be statistically significant ($p < 0.05$) (Table 2).

The pregnant women's CAQ mean scores in the third interview were compared; the mean score of the experimental group was found to be 26.85 ± 8.59 , and the mean score of the control group was found to be 38.14 ± 10.18 ; the difference within and between the groups was found to be statistically significant ($p < 0.05$) (Table 2).

Table 1. Comparison of the OHQ mean scores of the pregnant women in the experimental and control groups.

Interview	Experimental group		Control group		p*
	Mean±s.s	Medyan	Mean±s.s	Medyan	
1 st Interview	99.67±14.76	97.5	98±20.54	96.5	0.589 m
2 nd interview In Group Change p**	100.94± 10.87	98.5 0.001 ^w	100.97±14.00	103.0 0.036 ^w	0.811 m
3 rd interview In Group Change p**	100.29±12.27	98.0 0.442 ^w	99.58±11.43	101.5 0.150 ^w	0.878 m

^m:Mann-Whitney, you test, ^w:Wilcoxon Test, *Between groups, **Within groups

Table 2. Comparison of the CAQ mean scores of the pregnant women in the experimental and control groups.

Interview	Experimental group		Control group		p*
	Mean±s.s	Medyan	Mean±s.s	Medyan	
1 st Interview	39.00±9.98	38.5	35.67±10.61	37.0	0.155 m
2 nd interview In Group Change p**	31.91±7.27	32.5 0.001 ^w	33.38±11.92 0.149 ^w	32.0	0.830 m
3 rd interview In Group Change p**	26.85±8.59	24.5 0.001 ^w	38.14±10.18 0.002 ^w	30.5	0.000 m

^m: Mann-Whitney you test, ^w: Wilcoxon Test, *Between groups, **Within groups

DISCUSSION

This study aims to identify the effect of childbirth education classes on pregnant women's childbirth attitudes and happiness. Sociodemographic and obstetric features of the pregnant women in the experimental and control groups were distributed homogeneously.

When the OHQ total mean scores of the pregnant women in the experimental and control groups were compared, a significant difference was found between the intra-group scale mean scores of the experimental group in the second and third interviews ($p < 0.05$). OHQ total mean scores of the pregnant women in the experimental and control groups showed no statistically significant inter-group differences ($p > 0.05$). A review of the related literature showed that no studies investigated the effects of education in childbirth classes on mothers' happiness levels. Their study that utilized the Oxford Happiness Questionnaire-Short Form reported that the pregnant women's scale total mean score was 24.74 ± 4.34 , and they were happy about their pregnancy (Turk et al., 2017). Pakseresht, Mahboobi, Bostani Khalesi, and Atrkar Roshan (2019) reported the OHQ scale total mean score as 131.62 ± 28.57 . Tesfa (2020) followed the pregnant women for six months, reporting that the OHQ total mean scores increased with advancing pregnancy. In this study, most of the pregnant women in both groups were found to have a planned pregnancy, which could be considered to explain the non-significant differences between the groups. In

addition, since the participating women were primigravida, pregnancy is considered to make them feel happy as they would experience the sense of motherhood for the first time. The significant intra-group difference found in the second interview is considered to have been affected by the adaptation to pregnancy with advancing stages.

An analysis of the CAQ total mean scores of the pregnant women in the experimental and control groups indicated statistically significant differences between the second and third interviews ($p < 0.05$). An analysis of the intra-group CAQ scale total mean scores of the experimental and control groups indicated statistically significant differences ($p < 0.05$). The significant differences in the third interview are considered to result from the education topics given in the second session, which included the benefits of vaginal delivery, risks of cesarean section, signs, and stages of labor, labor contractions, and non-pharmacological methods in coping with pain, strain techniques, breathing exercises, labor positions, comforting massage techniques, and relaxation exercises. The topics in the session are considered to have affected pregnant women's childbirth attitudes more. In addition, successive education sessions might have positively affected the attitudes of pregnant women toward childbirth. In their meta-analysis, Sheen and Slade (2018) reported that one of the reasons for women's fear of childbirth was a lack of adequate knowledge about childbirth. Ucar and Golbasi and Akin, Yesil, Yucel, and Boyaci found that the fear of childbirth

decreased in women who received an education. Mete, Cicek, Akin, Alus Tokat, Camlibel, and Uludag et al. reported that readiness to labor was higher and fear of childbirth was lower in pregnant women who received education in a childbirth class. Bektaş Pardes (2017) also reported that the fear of childbirth decreased in women who received education. Duncan, Cohn, Chao, Cook, Riccobono, and Bardacke (2017) and Alanya Tosun, Sahin, Ozkaya, Bulut, Bilen, and Sipahi (2021) reported that the fear of childbirth decreased in women who participated in childbirth classes, and they experienced less pain during labor. Ricchil, La Corte, Molinazzi, Messina, Banchelli, and Neri (2020) found that pregnant women who received education preferred cesarean section less. In their qualitative study investigating pregnant women's desires to participate in childbirth classes, Ben Merav Ben Natan, Maayan Ashkenazi, and Masarwe (2016) reported that they wanted to participate and thought they would have a more comforting process in the labor and postpartum period. Kacperczyk-Bartnik, Bartnik, Symonides, Sroka-Ostrowska, Dobrowolska-Redo, and Romejko-Wolniewicz (2019) reported that the pregnant women who participated in childbirth classes had less fear of birth and remained calmer during labor. Hatamleh, Abujilban, Shaker Abdelmahdi Abuabeda, and Abuhammada (2019) reported that the labor duration was shorter in those who received education, and they started breastfeeding earlier.

Limitations and Strengths of the Study

A limitation of this study was that it was conducted in a single center. It is recommended that the research be conducted in larger sample groups. The study's strength is that it is essential in determining the effectiveness of the education given in determining pregnant women's happiness and birth attitude.

CONCLUSION

Women's childbirth attitudes could change positively by disseminating the childbirth classes and forming supportive and encouraging education content in these classes to decrease the fear of childbirth and increase self-confidence. Pregnant women's knowledge could be increased by providing them with regular education, and they could demonstrate positive childbirth attitudes. Pregnancy is a pleasing phenomenon for most future mothers. Although it is a pleasing experience, it may sometimes cause stress. In this regard, it is self-evident that pregnant women who spend this particular period more positively in a childbirth class could be happier.

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Conflict of Interest

The author declares no potential conflicts of interest concerning this article's research, authorship, and/or publication.

Author Contributions

Plan, design: SKY, EV, EN; **Material, methods, and data collection:** SKY, EV; **Data analysis and comments:** SKY, EV; **Writing and corrections:** SKY, EV, EN

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Ethical considerations

Before conducting the research, approval from the Ethics Board of the School of Medicine, Cukurova University (01.06.2018/78-1), written approvals from the institutions where the study was to be performed, and verbal consent from the participants was obtained.

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