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Original Article

Evaluatıon of Obstetrıc Results of Pregnancy Who Applıed Ankara Educatıon and Research Hospıtal Gynecology and Obstetrıcs Clınıc Pregnancy School (Mode of Delıvery)

Ankara Eğitim ve Araştırma Hastanesi Kadın Hastalıkları ve Doğum Kliniği Gebe Okulunda Eğitim Alan Gebelerin Obstetrik Sonuçlarının Değerlendirilmesi (Doğum Şekli)

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Abstract

Aim: Recently cesarean section rate has increased significantly all over the world. The information provided by the healthcare provider during pregnancy follow-up is important for the pregnant women to decide on the delivery method. In particular, information about normal birth; may help reduce rising cesarean rates by curbing fears of obscurity and widespread public rhetoric. The aim of this study is to investigate the effect of the education given by the prenatal school on the delivery method preferred by the pregnant women.

Material and Methods: This descriptive study includes equal number of nulliparous pregnant women who applied to Ankara Training and Research Hospital Gynecology and Obstetrics outpatient clinic, who attended or did not attend the prenatal school between January 2020 and November 2022. The effect of education on decision making was investigated by comparing delivery methods according to the status of being educated in the pregnancy school and the primary cesarean section rate of the same number of nulliparous pregnant selected from among the uneducated pregnant women who gave birth in the same period in our clinic were compared.

Results: In our study, 44 (81.5%) of the 54 nulliparous pregnant women who received education gave normal birth, while 33 (61.1%) of 54 those who did not receive education gave birth normally. A statistically significant difference was found between the two groups in terms of delivery mode ($p<0.05$).

Conclusion: It was thought that the education given in the pregnancy school may be a factor in reducing the primary cesarean section rates.

Keywords: Prenatal School, Cesarean, Normal Birth, Education

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Öz

Amaç: Son yıllarda sezaryen oranı tüm dünya genelinde önemli ölçüde artış göstermektedir. Gebelerin doğum yöntemine karar vermesinde gebelik izlemleri sırasında sağlık personeli tarafından yapılan bilgilendirmeler önem taşır. Özellikle normal doğumla ilgili olan bilgilendirmeler; bilinmezlikten ve halk arasındaki yaygın söylemlerden kaynaklanan korkuları engelleyerek artan sezaryen oranlarını azaltmaya yardımcı olabilir. Bu çalışmanın amacı gebe kadınlarda gebe okulu ile verilen eğitimin gebenin tercih etmiş olduğu doğum yöntemine etkisini araştırmaktır.

Gereç ve Yöntemler: Tanımlayıcı tipteki bu araştırma, Ankara Eğitim ve Araştırma Hastanesi Kadın Hastalıkları ve Doğum polikliniğine başvuran nullipar gebelerden Haziran 2020 ve Kasım 2022 tarihleri arasında gebe okuluna katılım sağlayan ve katılmayan eşit sayıdaki gebeyi içermektedir.

Gebe okulunda eğitim alma durumu ve aynı dönemde kliniğimizde eğitim almamış gebe kadınlar arasından aynı sayıda nulipar gebelerde primer sezeryan oranı karşılaştırılarak doğum metoduna karar vermede eğitimin etkisi araştırıldı.

Bulgular: Çalışmamızda 54 nulipar eğitim alan gebeden 44'ü (%81.5) normal doğum yaptı, 54 nulipar eğitim almayan gebeden 33'ü (%61.1) normal doğum yaptı. Doğum metodu açısından istatistisel olarak iki grup arasında anlamlı fark tespit edildi ($p<0.05$).

Gebe okulunda Ocak 2020 - Kasım 2022 arasında eğitim almış toplam 54 nullipar gebenin primer sezaryen oranı ile kliniğimizde aynı dönemde doğum yapan eğitim almamış gebeler içerisinden seçilen aynı sayıda nullipar gebenin primer sezaryen oranı karşılaştırıldı.

Sonuç: Çalışmamızda değerlendirilen eğitim alan 54 nullipar gebenin 44'ü (%81,5) normal doğum yaparken eğitim almayanların ise 33'ü (%61,1) normal doğum yapmıştır. İki grup arasında doğum şekli açısından istatistiksel olarak anlamlı bir fark bulunmuştur. Bu verilerden yola çıkarak gebe okulunda verilen eğitimin primer sezaryen oranlarını azaltmada bir etken olabileceği düşünülmüştür.

Anahtar Kelimeler: Gebe Okulu, Sezeryan, Normal Doğum, Eğitim

Introduction

Pregnancy and childbirth; even if there are physiological conditions, they cause anxiety in pregnant women due to the risks they pose. Information provided by medical personnel during pregnancy follow-up is important for pregnant women to decide on the mode of delivery. Information, especially related to normal vaginal birth, can help reduce the increasing cesarean section rates by preventing fears caused by the decency and widespread discourse among the public. Information, especially related to normal childbirth, can help reduce the increasing cesarean section rates by preventing fears caused by the decency and widespread discourse among the public. According to World Health Organization (WHO) data, education and follow-up during pregnancy is determined as 68%, while this rate is 98% in developed countries (1).

With the trainings received during pregnancy, it is ensured that women are healthy both in the birth process and in the postpartum period. In the field of medical indications, the preference of women for cesarean section with social indication is increasing rapidly. WHO / World Health Organization recommends keeping cesarean section rates below 15% (2).

In our country, the Ministry of Health has started to establish prenatal schools in hospitals in order to reduce the rate of cesarean section in the field of medical indication and to prepare pregnant women for birth more consciously and to act consciously in newborn care. In this context, prenatal schools provide training in a certain period and certificates are issued to those who attend (3).

It was determined that among the factors affecting the cesarean section preferences of women, social, psychological and environmental factors other than fear were under the influence (4). Childbirth preparation and support trainings aim to reduce the rate of cesarean section except for medical indications (5). The aim of our study is to investigate whether there is an effect in the form of birth with the trainings given in the prenatal school established in our hospital.

Material and Methods

The research was planned as a retrospective observational

study. It was designed in Ankara Training and Research Hospital Gynecology and Obstetrics Clinic to cover the period of January 2020-November 2022. The study included nulliparous pregnant women aged 20-49 who were educated at the prenatal school of Ankara Training and Research Hospital Gynecology and Obstetrics clinic. The same number of nulliparous patients who did not receive education in the prenatal school at the same time were randomized and designed as the control group. Ages, education levels, working status, type of delivery, cesarean rate, indications of cesarean were recorded using hospital archive files and hospital automation system retrospectively. The delivery mode of pregnant women who gave birth in Ankara EAH Gynecology and Obstetrics Service, who received education in a prenatal school and who did not receive any education were compared.

The study was carried out with the permission of – University/ Training and Research Hospital, Noninvasive Clinical Ethics Committee (Date: 23.11.2022, Decision No: E-93471371-514.99). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

SPSS for Windows, version 23.0 (SPSS Inc., Chicago, IL, USA) was used for statistical analysis. Whether the assumption of homogeneity of variances is provided with the Kolmogorov-Smirnov test will be investigated with the Levene test. Descriptive statistics expressed as mean ± standard deviation or median (25th percentile-75th percentile) for continuous and discrete numerical variables, and as number of cases and (%) for categorical variables. Student-t test will be used in parametric tests and Mann-Whitney U test will be used in non-parametric tests. Categorical variables will be evaluated with Pearson's χ 2 or Fisher Freeman Halton tests. For p≥0.05, the results will be considered statistically significant.

Results

The mean age of 54 pregnant women who received training was 27.52±4.7 years, and 54 pregnant women who did not receive any education was 25.7± 5.3 years (Table 1). There was no statistically significant difference between the two groups (p>0.05). While 44 (81.5%) of the trainees gave birth normally, 10 (18.5%) gave birth by cesarean section. Of those who were not educated, 33 (61.1%) gave birth normally, while 21 (38.9%) gave birth by cesarean section (Table 2). Accordingly, a statistically significant difference was found between the group that received education and the group that did not receive education in terms of the mode of delivery (Fisher's Exact test; p=0,033<0,05) (Figure 1).

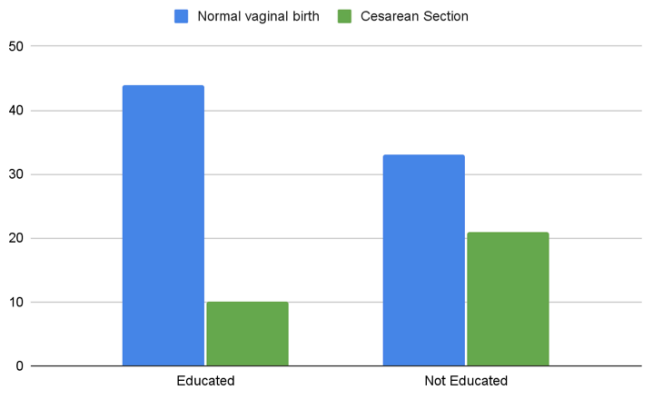

Figure 1. Comparison of the educated and non-educated groups in terms of mode of delivery

Table 1. Distribution of demographic characteristics of the participants

	Educated (n=54)		Not educated (n=54)	
Age (mean±SD)	27.52±4.7		25.7± 5.3	
Education level n % Primary education	14	25,9%	18	33,3%
High school	34	63,0%	33	61,1%
Master's degree	6	11,1%	3	5,6%
Working Status n %				
Working	32	59,3%	25	46,3%
Not Working	22	40,7%	29	53,7%

Table 2. Comparison of the educated and non-educated groups in terms of mode of delivery

	Educated (n=54)		Not educated (n=54)		P
	n	%	n	%	
Normal vaginal birth	44	81,5%	33	61,1%	0,033*
Cesarean birth	10	18,5%	21	38,9%	
*: p<0,05					

Among the pregnant women who received training, 60% of the cesarean indications are fetal distress, 30% multiple pregnancy, and 10% non-progressed labor. 45% of cesarean section indications in uneducated pregnant women are fetal distress, 33.3% non-progressive labor, and 19% social indications (Table 3). Although there was no statistically significant difference between the educated and uneducated groups in terms of cesarean section indications (Chi-square test; p=0.087>0.05), it was not seen any cesarean section with social indications in those who received education.

Table 3. Comparison of the educated and non-educated groups in terms of cesarean section indications

Cesarean indication	Educated (n=10)		Not educated (n=21)	
Failure to progress	1	10,0%	7	33,3%
Fetal distres	6	60,0%	9	42,9%
Multiple pregnancy	3	30,0%	1	4,8%
Social endication, etc	0	0,0%	4	19,0%

There was no statistically significant difference between those who received education and those who did not, in terms of educational status (Chi-square test; p=0.393>0.05) (Table 1). Similarly, there was no statistically significant difference in terms of working status between those who received education and those who did not (Chi-square test; p=0.172>0.05) (Table 1). Groups were homogeneous in terms of working status.

Discussion

According to WHO data, cesarean section rates are increasing rapidly in the world. In Turkey, this rate has reached 35% today. In previous years, cesarean section rates were seen as the lowest 21.2% in the past, and reached 48% in 2013 when it was the highest (1, 6).

Pregnancy and childbirth pose great fears for expectant mothers. It is very common today for expectant mothers to want a cesarean section due to fear of childbirth. It has been found that there is a 35% decrease in cesarean section requests in pregnant women who received prenatal school education (7). It was revealed in a study conducted in Rome that education level is an important factor in cesarean section request, and it was found that pregnant women at primary education level had a 24% higher cesarean section request than those at university level (8). In our study, the cesarean section request of the patients was not evaluated, but there was no significant difference between the two groups in terms of educational status. However, when the educational status of the patients who continue their prenatal school education is evaluated, it is seen that there are patients in every education level. Prenatal school is thought to be effective and successful not only for pregnant women with a high education level, but also for those with a low education level.

Sipahi M. compared pregnant women who received pregnancy training and those who did not, and no significant difference was found between the two groups in terms of delivery type. However, it was observed that the rate of cesarean section was higher in pregnant women who did not receive education (9). In our study, although the rate of cesarean section of pregnant women who did not receive education in prenatal school was lower than the country average, it was determined that it was higher than those who received education in a pregnant school. As the patient's knowledge about birth increased, there may have been a decrease in the cesarean section rates due to the decrease in their anxiety, increase in their resilience and increase in their compliance.

In a study investigating the effect of prenatal school education on birth anxiety, it was shown that the education received reduced birth anxiety in pregnant women (10). It has been reported that the main reason for these concerns is the lack of information about childbirth (11, 12). When cesarean section indications were evaluated in our study, although there was no significant difference between the two groups, cesarean section performed for social indications did not occur in the patients who received training. In the uneducated group, 20% of the patients who had cesarean section were performed due to social indications. It is seen that the education given in the prenatal school reduces the cesarean sections for social reasons rather than the cesarean sections for medical reasons, as expected.

The most important limitation of our study was the low number of patients, and the most important reason for this was the disruption of prenatal school studies during the Covid-19 pandemic.

In conclusion, prenatal school probably reduces the anxiety of pregnant women about childbirth by making the obscurity of birth more fearless for patients. As a result, the education given in the prenatal school is effective in reducing the cesarean section rates.

Ethics Committee Approval

The study was carried out with the permission of –University/ Training and Research Hospital, Noninvasive Clinical Ethics Committee (Date: 23.11.2022, Decision No: E-93471371-514.99)

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

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