ACU Sağlık Bil Derg
https://doi.org/10.31067/0.2018.51

ARAŞTIRMA YAZISI / ORIGINAL ARTICLE **Doğum-Kadın Sağlığı ve Hastalıkları Hemşireliği** / Obstetrics and Gynocology Nursing

Conscious Pregnancy and Healthy Baby

Dilek Şayık[2], Hatice Süpür[2], Figen Yalçın[2], Ayfer Açıkgöz[1], Ahmet Musmul[3]

[1]Eskişehir Osmangazi University, Faculty of Health Sciences, Nursing, Eskisehir, Turkey
[2]Eskişehir State Hospital, Eskisehir, Turkey
[3]Eskisehir Osmangazi University, Faculty of Medicine, Department of Biostatistics, Eskisehir, Turkey

Dilek Şayık
Hatice Süpür
Figen Yalçın
Ayfer Açıkgöz
Ahmet Musmul

Correspondence:
Ayfer Açıkgöz
Eskişehir Osmangazi University, Faculty of Health Sciences, Nursing, Eskisehir, Turkey
Phone: XXXX
E-mail: ayferacikgoz@mynet.com

Received : April 07, 2017
Revised : July 06, 2017
Accepted : July 25, 2017

ABSTRACT

Objective: The aim of this study was to determine the effect of childbirth preparation courses on labor anxiety, labor process, stay of the baby with mother, and breastfeeding of the baby in early periods.

Study Design: This study was of a semi-experimental type and included 166 pregnant mothers who accepted to participate in the study and 920 mothers who had given birth at Eskişehir State Hospital between April 2013 and September 2013. 55 mothers who accepted to participate in the course were classified as the study group while 111 mothers who did not accept to participate in the course were classified as the control group. The data were collected through data collection forms prepared by researchers. The analysis of the data was made via IBM SPSS, version 21.0.

Results: 49.1% (n=27) of the mothers who participated in the course and 23.4% (n=26) of the mothers who did not participated in the course gave birth in 1-5 hours after being admitted to the hospital. The rates of normal birth and cesarean were similar in both groups ($p = 0.810$). However, the rate of breastfeeding in the first half hour after the birth was significantly higher in the experimental group than in the control group ($p < 0.001$). In the postpartum period, the number of infants in the premature or neonatal intensive care unit was significantly higher in the control group than in the experimental group ($p < 0.001$). 100% (n=55) of the study group stated that they had known of the labor process and experienced no anxiety while only 15.3% (n=17) of the control group stated the same.

Conclusions: The women who participated in our study have expressed a positive change in their opinions about the labor process and concurrent anxiety.

Keywords: Pregnancy, birth, newborn

BILINÇLI GEBE, SAĞLIKLI BEBEK

ÖZET

Amaç: Doğuma hazırlık kursunun, gebelerin doğum kaygısına, doğum sürecine ve doğum sonrası dönemde bebeğin anne yanında kalma ve erken dönemde emzirilmesine etkisini belirlemektir.

Çalışma Planı: Yarı deneysel bir çalışmadır. Araştırma Eskişehir Devlet Hastanesi'nde Nisan ve Eylül 2013 tarihleri arasında doğum yapan 920 gebe arasından, çalışmaya katılmayı kabul eden 166 gebe ile yapılmıştır. Bu gebelerden doğuma hazırlık kursuna katılmayı kabul eden 55 kişi deney grubuna, kursa katılmayı kabul etmeyen 111 kişi ise kontrol grubuna dâhil edilmiştir. Veriler araştırmacılar tarafından hazırlanan "veri toplama formu" ile toplanmıştır. Verilerin değerlendirilmesinde SPSS paket programı (SPSS 21.0) kullanılmıştır.

Bulgular: Kursa katılan grubun %49.1 (n=27)'inin, katılmayan grubun ise sadece %23.4 (n=26)'ünün doğum odasına yatış yapıldıktan sonra 1-5 saat içinde doğum eyleminin gerçekleştiği belirlendi. Her iki grupta da normal doğum ve sezeryan oranları benzerdi ($p=0.810$). Buna karşın doğumdan sonra bebeği ilk yarım saat içinde emzirme oranı deney grubunda kontrol grubuna oranla anlamlı derecede yüksek iken ($p<0.001$), doğum sonrası prematüre veya yenidoğan yoğun bakımda bebeklerin yatma oranı kontrol grubunda deney grubuna oranla anlamlı derecede daha yüksekti ($p<0.001$). Deney grubunun %100.0 (n=55)'ü "doğumda nasıl bir süreç olduğunu bildiğim için herhangi bir korku yaşamadım" derken, bu oran kontrol grubunda %15.3 (n=17) idi.

Sonuç: Kursumuza katılan gebelerin doğuma ait düşünce ve kaygılarında olumlu yönde değişim olduğu tespit edildi ($p<0.001$).

Anahtar Kelimeler: Gebelik, doğum, yenidoğan

Pregnancy and childbirth are important milestones in a woman's life. Physiological, psychological and social changes experienced during this period can affect the coping mechanisms of the mother. Therefore, the process of pregnancy is considered as a developmental crisis period for a woman and her family. Moreover, it is well known that concerns about childbirth and the newborn particularly increase in the last trimester (1, 2). During this period, training and consultancy programs as well as interventions such as deep breathing and relaxation exercises provided by healthcare professionals such as nurses, midwives, physicians and psychologists may help a woman control her attitudes and may increase positive feelings (3). Professional support provided during the childbirth process could enable woman to have a greater feeling of control and to cope better with the pain thus preventing a negative experience (3, 4).

Prenatal classes aim to prepare both the mother and father for the labor process and to inform them about the healthy growth of the baby. These services are readily available in developed countries and have become recently available in developing countries. In our country (Turkey), this kind of a service is provided free of charge by some university hospitals, nursing departments of some universities, some private hospitals, and maternity hospitals of the Ministry of Health. The aim of prenatal education is to give information about the labor process and the procedures that will be used during the process as well as informing and training the mother about her responsibilities during the labor as a part of team. Prenatal education models differ in terms of their theoretical philosophy, purposes, goals, instructor qualifications, course time, length, and number of students. In these training classes, relaxation, breathing techniques, attention focusing and non-pharmacological methods that could be used to cope with labor pain by the helpers of woman are taught. In this way, the leading helper of a prospective mother during the prenatal period and its travails could be the prospective mother herself with sufficient preparation and education on the labor process and helpful exercises (5).

The purpose of this study was to examine the effect of the birth preparation course on the moment of birth and some postnatal factors.

Methods

Design and Population: This study was a semi-experimental type. The sample of the study included 166 pregnant women who had agreed to participate in the study and a total of 920 women with 20-36 weeks of pregnancy under follow-up by the State Hospital of Eskisehir between April and September 2013. Of these pregnant women, 55 who agreed to participate in the childbirth preparation course served as the study group and the remaining 116 served as the control group.

On the first day of the childbirth preparation course, a midwife, who had been previously involved throughout the pregnancy, was assigned as the responsible person for the pregnant women. The hospital computer system was updated to include both the pregnant women and their assigned midwives in order to assure the patient and assigned midwife were paired properly upon admission to the hospital. The scope of the childbirth preparation course included seminars (fear of birth, bone and muscular structure, signs of the birth, newborn care, etc.) given by experts (nurses, midwives, physicians and psychologists) as well as training programs about exercises (endorphins massage, warm-up exercises, the Pilates ball exercises for pregnant women, maternity exercises and Kegel exercises). Additionally, information was given on the prenatal, natal and postnatal periods.

Data collection: The data were collected by using the "Data Collection Form" prepared by the researchers. The data collection form included 31 items about sociodemographic characteristics, feelings and emotions about labor, and the knowledge level about the postnatal period.

Before starting, the study was announced to the target group of 20-week pregnant women from the Baby Project through the official web site of the hospital, brochures, newspapers and verbal presentations. A special telephone number was provided for registration to the study. The written consent of all the pregnant women agreeing to participate in the study was obtained. The education program began in the Pregnant Education Room of the hospital on April 01, 2013. The education program was given 5 workdays a week for a total of 8 weeks and between the hours of 13.30 and 16.30. The signatures of the women were obtained during each course in order to monitor the rate of attendance. The women were informed by a telephone call about any changes in the program and any questions were answered. The women agreeing to participate in the study but not in the education programs served as control and received the routine care and education program of the hospital.

Ethics: The essential consents from the administration and ethics approval were obtained before beginning the study. Informed verbal consent was received from all the participants.

Analysis of the Data: The data was analyzed by using IBM SPSS, Version 21.0. Pearson chi-square test and percentages were used for the statistical analyses. Statistical significance was set as p<0.05.

Results

This study was carried out on 166 pregnant women agreeing to participate in the study.

Table 1 shows the informative characteristics of the women and the similarities between the two groups. The age of women ranged from 17 to 40 years. The women who had previous education about childbirth obtained this information from the family or immediate relatives (control group 25.2; study group 10.9), from the internet (control group 18.0; study group 5.5), from their physician (control group 13.5, study group 3.6) and from childbirth books (control group 7.2, study group 1.8) (chi-square=26.408, Sd=4, p<0.001).

Table 2 shows the information about the pregnancy and delivery with great similarities between the two groups.

In our study, the pregnant women participated in the childbirth preparation course were found to have more positive expressions than those who did not (p<0.001) (Table 3).

Discussion

In our study, most of the pregnant women were housewives (73.9% of the control group and 70.9% of the study group), lived at the city center (90.1% of the control group and 100.0% of the study group) and were having their first child (84.7% of the control group and 94.5% of the study group) and were no significant differences between the groups. The age and education level of the women, employment status of the spouse, family income level and previous preparation courses for childbirth did not differ significantly between the two groups (p<0.05) (Table 1). The number of pregnant women under 20 years of age in the control group were more than those in the experimental group. The age range of most of the women was between 21 and 30 years in both groups (Table 1).

In our study, most of the control group (45.0%) but also 18.2% of the study group were primary school graduates. In the study group, 45.5% of the women were high school graduates and 32.7% had associate or graduate degrees (Table 1). Previous studies (4, 6- 9) have reported the rate of primary school graduates as between 22.2% and 71.6%,

Table 1. Informative characteristics of the pregnant women

	Control group (n:111)		*Study group (n:55)*		*Chi-square SD p*
	n	%	*n*	%	
Age (years)					
20 and under	19	17.1	2	3.6	6.130
21-30	78	**70.3**	44	**80.0**	2
31 and over	14	12.6	9	16.4	**0.047**
Educational status					
Illiterate	4	3.6	1	1.8	
Primary school	50	**45.0**	10	18.2	14.200
High school	33	29.7	25	**45.5**	4
Associate/graduate degree	20	18.0	18	32.7	**0.004**
Master/Doctorate	4	3.6	1	1.8	
Employment status of the women					
Unemployed (housewife)	82	**73.9**	39	**70.9**	5.801
Employed	29	26.1	16	29.1	4 0.204
Employment status of the spouse					
Unemployed	8	7.2	0	0.00	21.153
Employed	103	**92.8**	55	**100.0**	1 p<0.001
Family income level (TL)					
0-750	10	9.0	1	1.8	
751-1500	55	**49.5**	14	25.5	24.381
1501-3000	29	26.1	35	**63.6**	1
3001-5000	13	11.7	2	3.6	**p<0.001**
5001 and over	4	3.6	3	5.5	
Residence					
City center	100	**90.1**	55	**100.0**	
Town center	7	6.3	0	0.00	5.837
Small town	1	0.9	0	0.00	3 0.080
village	3	2.7	0	0.00	
Total number of pregnancies (including the current pregnancy)					
1	94	**84.7**	52	**94.5**	3.910
2	15	13.5	2	3.6	2
3	2	1.8	1	1.8	0.116
Previous educations about preparation to childbirth					
No	40	36.0	43	78.2	26.408
Yes	71	**64.0**	12	**21.8**	4 **p<0.001**
Total	111	100.0	55	100.0	

on the other hand, 76.7% and 98.0% of the pregnant women participating in preparation courses graduated from university in the studies of Seker and Sevil (10) and Isbir, Sercekus and Caker (11), respectively. Similarly, in our study, the rate of high school graduates and of associate or graduate degrees was higher among pregnant women in the study group. This may mean that the tendency to participate in the activities for the benefit of themselves and their babies such as childbirth courses increases with the increasing age of the pregnant women.

In our study, the monthly income was between 1501 and 3000 TL in 63.6% of the study group, whereas it was only 751-1500 TL in nearly half (45.9%) of the control group. Moreover, the spouses of all women in the study group were employed, while the spouses of 8 women in the control group were unemployed with a significant difference between the groups (p<0.01) (Table 1). In contrast to our results, Seker and Sevil (10) found that 73.3% and 75.7% of the study and control groups had an income sufficient to meet their: This result of our study suggests that the tendency to participate in childbirth courses increases with increased income level (Table 1).

In our study, 64.0% of the control group and 21.8% of the study group had previously had a childbirth preparation course and there was a significant difference between the two groups (p<0.01) (Table 1) in this sense. Although there are no clear conclusions in this issue, there are some previous studies (6, 8, 12, 13) reporting a rate of 51.6-96.0% for the pregnant women having had an education about prenatal care. The difference found in our study may be attributed to the fact that women who did not have any education previously is in need of the course and that they have a higher tendency to participate in the courses.

It was found in our study that the information about this issue was mainly obtained from the immediate relatives or family (25.2 in the control group and 10.9 in the study group) and from the internet (18.0 in the control group and 5.5 in the study group) (Table 1). On the other hand, in the study of Hawkins, Aber, Cannan, Coppinger and Rafferty (14), this kind of information had been given mainly by the physicians.

In our study, 98.2% of the study group and 84.7% of the control group had a pre-planned pregnancy with a significant difference between the groups (p=0.018) (Table 2). The rate of a pre-planned pregnancy was reported to range from 76.0% to 95.5% in previous studies (4, 6, 9). It is possible that women having a pre-planned pregnancy may have a tendency to participate in an education program.

Of the pregnant women participating in our study, 82.9% of the control group and 80.0% of the study group had a vaginal delivery with no significant difference between the groups (Table 2). In their study, Seker and Sevil (10) reported a vaginal delivery rate of 39.4% in the control

Table 2. Information about the current pregnancy and childbirth

	Control group (n:111)		*Study group(n:55)*		*Chi-square SD*
	n	%	*n*	%	*p*
Planned pregnancy					
Yes	94	84.7	54	98.2	6.930 1 **0.018**
No	17	15.3	1	1.8	
Current labor					
Vaginal delivery	92	82.9	44	80.0	0.058 1 0.810
Caesarian delivery	19	17.1	11	20.0	
Which delivery method will you prefer in your next labor					
Vaginal delivery	70	63.1	44	80.0	4.148 1 0.042
Caesarian delivery	41	36.9	11	20.0	
Indication for caesarian delivery					
Unprogressive labor (prolonged labor)	4	3.6	1	1.8	7.138 5 0.211
Fetal distress	7	6.3	1	1.8	
Breech delivery	3	2.7	5	9.1	
High-weight fetus	5	4.5	4	7.3	
The time from the uterine contractions (labor pain) after admission to the delivery room to the delivery time					
0-59 min	1	0.9	25	45.5	-89.024 1 **p<0.001**
60-259 min	26	23.4	27	49.1	
300-539 min	36	32.4	2	3.6	
600-779 min	20	18.0	1	1.8	
13 h or over	28	25.2	0	0.00	
First breastfeeding after the delivery					
Within the first 30 min	31	27.9	39	70.9	28.024 4 **p<0.001**
Within the first 2 hours	41	36.9	9	16.4	
Within the first 24 h because of having trouble about breastfeeding	18	16.2	3	5.5	
Within the first 1-3 days because of the need for newborn intensive care admission	14	12.6	3	5.5	
Other	7	6.3	1	1.8	
Neonatal intensive care unit or premature intensive care unit stay					
Yes	35	31.5	7	12.7	5.922 1 **0.015**
No	76	68.5	48	87.3	
Total	111	100.0	55	100.0	

Table 3. The expressions of the pregnant women about their delivery (n=111)

	AGREEMENT LEVEL (n %)					
	Completely agree	***Agree***	***No idea/ indecisive***	***Disagree***	***Completely disagree***	***Chi-square Sd P***
1. I was worried about my life and scared from death during delivery						
Control group	17 15.3	57 **51.4**	5 4.5	32 28.8	0 0.00	108.770 4
Study group	0 0.00	0 0.00	0 0.00	21 38.2	34 **61.8**	**p<0.001**
2. I was worried about being alone in the delivery room						
Control group	18 16.2	57 **51.4**	4 3.6	32 28.8	0 0.00	104.098 4
Study group	0 0.00	0 0.00	0 0.00	24 43.6	31 **56.4**	**p<0.001**
3. I felt myself psychologically comfortable during the delivery						
Control group	1 0.9	17 15.3	4 3.6	76 **68.5**	13 11.7	157.377 4
Study group	54 **98.2**	0 0.00	0 0.00	0 0.00	1 1.8	**p<0.001**
4. During the delivery, I was afraid it would hurt me a lot						
Control group	12 10.8	66 **59.5**	6 5.4	27 24.3	0 0.00	90.335 4
Study group	2 3.6	0 0.00	0 0.00	34 **61.8**	19 34.5	**p<0.001**
5. I was worried that delivery would take a long time						
Control group	12 10.8	70 **63.1**	8 7.2	21 18.9	0 0.00	111.023 4
Study group	0 0.00	0 0.00	0 0.00	29 **52.7**	26 47.3	**p<0.001**
6. I was worried about losing my baby during the delivery						
Control group	11 9.9	56 **50.5**	7 6.3	37 33.3	0 0.00	84.598 4
Study group	0 0.00	0 0.00	1 1.8	32 **58.2**	22 40.0	**p<0.001**
7. I was concerned that interventions on my baby during the delivery would be inadequate						
Control group	10 9.0	44 39.6	8 7.2	49 **44.1**	0 0.00	97.468 4
Study group	0 0.00	0 0.00	0 0.00	22 40.0	33 **60.0**	**p<0.001**
8. I was worried that something might be happened to my baby during the delivery						
Control group	10 9.0	53 **47.7**	5 4.5	43 38.7	0 0.00	98.363 4
Study group	0 0.00	0 0.00	0 0.00	23 41.8	32 **58.2**	**p<0.001**
9. I was worried about inability to breastfeed my baby						
Control group	5 4.5	62 **55.9**	5 4.5	39 35.1	0 0.00	89.464 4
Study group	0 0.00	0 0.00	0 0.00	30 **54.5**	25 45.5	**p<0.001**
10. I was concerned that healthcare personnel may make mistake during the delivery						
Control group	4 3.6	49 44.1	8 7.2	50 **45.0**	0 0.00	77.928 4
Study group	0 0.00	0 0.00	0 0.00	32 **58.2**	23 41.8	**p<0.001**
11. I was concerned that healthcare personnel may not sense me and may not realize the pain I was experiencing						
Control group	7 6.3	54 **48.6**	15 13.5	35 31.5	0 0.00	91.798 4
Study group	0 0.00	0 0.00	0 0.00	31 **56.4**	24 43.6	**p<0.001**
12. I was concerned that healthcare personnel may behave me badly during the delivery						
Control group	5 4.5	50 **45.0**	16 14.4	40 36.0	0 0.00	87.170 4
Study group	0 0.00	0 0.00	0 0.00	31 **56.4**	24 43.6	**p<0.001**
13. A midwife I have met during the pregnant education programs would decrease or decreased my concerns during the delivery						
Control group	20 18.0	61 **55.0**	20 18.0	10 9.0	0 0.00	87.896 4
Study group	52 **94.5**	3 5.5	0 0.00	0 0.00	0 0.00	**p<0.001**
14. I felt myself safe during the delivery						
Control group	0 0.00	16 14.4	9 8.1	74 **66.7**	12 10.8	125.878 4
Study group	35 **63.6**	20 36.4	0 0.00	0 0.00	0 0.00	**p<0.001**
15. I had no concerns during the delivery, because I knew and was ready for the delivery process and possible experiences						
Control group	2 1.8	15 13.5	4 3.6	80 **72.1**	10 9.0	120.505 4
Study group	37 **67.3**	18 32.7	0 0.00	0 0.00	0 0.00	**p<0.001**

group and also reported that 43.3% of women had participated in a childbirth preparation course. However, in the study of Isbir, Sercekus and Caker (11), this rate was 46.8% for the control group and 94.1% for the study group. Interestingly, in our study, all the women in the study group having had a vaginal delivery (80.0%) reported that they would again prefer vaginal delivery in their next pregnancy. On the other hand, in the control group, this rate dropped from 82.9% to 63.1%. This difference may be attributed to the fact that the vaginal delivery was less traumatic in the study group compared to the experiences of the control group.

Of the women in study group, 45.5% and 49.1% gave birth within the first 1 hour and 1-5 hours after admission to the delivery room, respectively. In the control group, only 0.9% of the women gave birth within the first 1 hour and only 23.4 % of them gave birth after 1-5 hours with a significant difference between the two groups ($p<0.001$) (Table 2). Although no studies have been found in the literature about the duration of travail, our results suggest that childbirth preparation courses significantly shortens the duration of travail.

In our study, 70.9% of the study group but only 27.9% of the control group breastfed their baby in the first 30 minutes after the delivery and there was a significant difference between the two groups ($p<0.001$) (Table 2) in this aspect. In the studies on effective breastfeeding education (15), 17.4% of the study group and 26.1% of the control group were found to have breastfed their baby within the first 30 minutes after the delivery. All these data suggest that the support given to the pregnant women to prepare them to the childbirth results in the breastfeeding of their baby earlier, which is important in terms of newborn health.

In our study, only babies of 12.7% of the study group but of 31.5% of the control group were hospitalized in the Newborn Intensive Care Unit with a significant difference between the two groups ($p=0.015$) (Table 2). There are no studies in the literature about this issue. In the meta-regression analyses, the proportion of pregnant women in groups has been linearly associated with reduction in both maternal and neonatal mortality. It is known that maternal and neonatal survival rates increase when the focal point of childbirth educators is the learning process and the participation in the labor of the pregnant women, particularly in settings with less resources (16). This result suggests that childbirth preparation courses increase the time of staying with the mother.

The expressions of women about their delivery experience were more positive in the study group compared to that of the control group with a significant difference between the groups ($p<0.001$) (Table 3). Similarly, in the study by Seker and Sevil (10), the rate of positive perception of the baby was 73.3% in the women participating in the childbirth preparation course but this rate dropped to 60.6% in the control group. Moreover, authors have found that responsibility of baby care was higher among those participating in the preparation courses (3.767 ± 0.281) (10). Isbir, Sercekus and Caker (11) also reported higher satisfaction from the childbirth experience among women participating in childbirth preparation courses (13.02 ± 3.74) ($p<0.05$). Stoll and Hall (17) found a higher rate of vaginal delivery in women having taken education compared to those not having taken ($p=0.041$) and they concluded that the education about childbirth may decrease the fear and increase the self-confidence of women for vaginal delivery. Moreover, women participating in the courses were found to be more satisfied with their childbirth experience (17). The qualitative study by Fisher, Hauck, Bayes and Byrne (18) and the study by Quine, Rutter and Gowen (19) have also shown that women participating in education programs feel themselves stronger during the delivery, do not lose their control, prepare themselves for the delivery and were more satisfied from the delivery experience.

All these data including our results suggest that childbirth preparation courses have beneficial effects on the childbirth anxiety, delivery process, and time of stay with mother after the delivery and breastfeeding in the early period.

We suggest that childbirth preparation courses should be implemented in all hospitals throughout our country.

REFERENCES

1. Kuğu N, Akyüz G. Gebelikte Ruhsal Durum. Cumhuriyet Üniversitesi Tıp Fakültesi Dergisi 2001;23:61-4.
2. Taşkın L. Doğum ve Kadın Sağlığı Hemşireliği. 9. Baskı. Ankara: Sistem Ofset Matbaacılık, 2009: 100-1.
3. Karaçam Z, Akyüz EÖ. Doğum Eyleminde Verilen Destekleyici Bakım ve Ebe/Hemşirenin Rolü: İstanbul Üniversitesi Florence Nightingale Hemşirelik Dergisi 2011;19:45-53.
4. Timur S, Hotun Şahin N. Kadınların Doğumda Sosyal Destek Tercihleri ve Deneyimleri. Hemşirelikte Araştırma Geliştirme Dergisi 2010;12:29-40.
5. Üstün M, Çapanoğlu R. Gebelik ve Sonrası Egzersizleri. İstanbul: Menteş Kitapevi, 2006.
6. Aydın M, Kaya Şenol D, Erdoğan S. Sezaryen İle Doğum Yapacak Kadınların Ameliyat Öncesi Anksiyete Düzeylerinin Belirlenmesi. Acıbadem Üniversitesi Sağlık Bilimleri Dergisi 2014;5:54-8.
7. Babacan Gümüş A, Çevik N, Hataf Hyusni S, Biçen Ş, Keskin G, Tuna Malak A. Gebelikte Benlik Saygısı ve Beden İmajı İle İlişkili Özellikler: Characterıstıcs Associated With Self-Esteem and Body Image in Pregnancy. Anatol J Clin Investig 2011;5:7-14.
8. Çetin F, Güneş G, Karaoğlu L, Üstün Y. Turgut Özal Tıp Merkezinde Doğum Yapan Annelerin Doğum Öncesi Bakım Alma ve Emzirmeye Başlama Durumları ve Etkileyen Faktörler: İnönü Üniversitesi Tıp Fakültesi Dergisi 2005;12:247-52.
9. Kutlu R, Çivi S, Marakoğlu K, Şahinli AS. Bir Çocuk ve Doğum Hastanesinde Doğan Bebeklerin Özellikleri, Kocatepe Tıp Dergisi 2008;9:58-62.
10. Şeker S, Sevil Ü. Doğuma Hazırlık Sınıflarının Annenin Doğum Sonu Fonksiyonel Durumuna ve Bebeğini Algılamasına Etkisi. Türkiye Klinikleri J Obstet Womens Health Dıs Nurs-Special Topics 2015;1:1-9.
11. İşbir GG, Serçekuş P, Çaker H. Doğuma Hazırlık Eğitiminin Doğum Deneyimi ve Doğum Memnuniyeti Üzerine Etkisinin İncelenmesi. Türkiye Klinikleri J Obstet Womens Health Dis Nurs- Special Topics 2015;1:10-5.
12. Beşer E, Ergin F. Aydın Merkezinde Doğum Öncesi Bakım ve Niteliği. TSK Koruyucu Hekimlik Bülteni 2007;6:137-41.
13. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü. 2013 Türkiye Nüfus ve Sağlık Araştırması. Ankara: Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, T.C. Kalkınma Bakanlığı ve TÜBİTAK 2014:141-43.
14. Hawkins JW, Aber CS, Cannan A, Coppinger CM, Rafferty KO. Women's Reported Self-Care Behaviors During Pregnancy. Health Care for Women International 1998;19:529–38.
15. Şentürk Erenel A, Eroğlu K. Doğum Sonrası İlk Altı Ayda Ev Ziyareti Yoluyla Desteklenen Emzirme Eğitimi Modelinin Etkili Emzirme Davranışı Üzerine Etkisi. Hemşirelik Yüksekokulu Dergisi 2005;2:43–54.
16. Prost, A, Colbourn, T, Seward, N, Azad, K, Coomarasamy, A, Capas, A, and et al. Women's Groups Practicing Participatory Learning and Action to Improve Maternal and Newborn Health in Low-Resource Settings: A Systematic Review and Meta-Analysis. The Lancet 2013;381,1736–46.
17. Stoll KH, Hall W. Childbirth Education and Obstetric Interventions Among Low-Risk Canadian Women: Is there a connection?. J Perinat Educ 2012;21:228-37.
18. Fisher C, Hauck Y, Bayes S, Byrne J. Participant Experiences of Mindfulness-based Childbirth Education: A Qualitative Study. BMC Pregnancy Childbirth 2012;12:126.
19. Quine L, Rutter DR, Gowen S. Women's Satisfaction With the Quality of the Birth Experience: A Prospective Study of Social and Psychological Predictors. J Reprad Infant Psychol 1993;11:107-13.