

Antenatal Education About Pregnancy, Delivery and Puerperium During Antenatal Care

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Abstract

Objective: Our purpose was to investigate the conditions of antenatal education about pregnancy, delivery and puerperium during antenatal care.

Methods: The study was planned as cross-sectionally and antenatal education was investigated in 420 women who had prenatal care and gave birth in last 2 years.

Results: Majority of women (82.1%) reported that they used different information resources for antenatal education. The ratio of using different information resources for antenatal education was higher in women who live in city, have high socioeconomic status, high educational level and social security. The ratio of women who had higher educational level (≥ 12 years) was higher in women who had used other information resources than that of not used (12.8% versus 2.7%, $p = 0.00$). Women were reported that they received better information on 'antenatal care', 'nutrition', and 'immunisation'. But antenatal education was inadequate in these subjects: 'exercise', 'sexual life', and 'chromosomal anomaly screening'. Information resources that were used most commonly were books, television, and friends.

Conclusion: Antenatal education is especially important in women who live in village, have low socioeconomic state, low educational level, have not social security and in housewives. 'Chromosomal anomaly screening', 'sexual life' and 'exercise' are the subjects that pregnant women are not informed enough and giving adequate information in these issues is important. Books and television are the most common used information sources and we should use them more effectively.

Keywords: Antenatal education, antenatal care, pregnancy.

Doğum öncesi bakım esnasında gebelik, doğum ve doğum sonrası döneme ilişkin bilgi edinme durumu

Amaç: Gebelerin doğum öncesi bakım (DÖB) esnasında gebelik, doğum, ve doğum sonrası dönem ile ilgili bilgi edinme durumlarının araştırılması.

Yöntem: Çalışma kesitsel planlı olup son iki yıl içinde doğum yapan ve DÖB alan 420 kadın ile yapılan görüşmede, gebelik esnasında, gebelik/doğum ile ilişkili bilgilendirme durumu araştırıldı.

Bulgular: Kadınların %82.1'i muayene oldukları yerin dışındaki bir kaynaktan gebelik, doğum, doğum sonrası dönem ile ilgili bilgi aldıklarını bildirdi. Şehir merkezinde yaşayan, eğitim düzeyi yüksek, işte çalışan, sosyal güvencesi olan ve sosyoekonomik düzeyi yüksek olan kadınların DÖB esnasında, muayene olduğu yerin dışındaki bir kaynaktan bilgi edinme oranlarının daha yüksek olduğu saptandı. Başka kaynaktan bilgi alanlarda eğitim süresi 12 yıl ve üstünde olanların oranı %12.8 iken bilgi almayanlarda %2.7 oldu ($p = 0.00$). DÖB esnasında gebelere en çok bilgi verilen konular 'gebelik muayeneleri', 'gebelikte beslenme ve kilo alımı', 'aşı yaptıırma' olurken en az bilgi verilen konular 'egzersiz', 'cinsel yaşam' ve 'kromozom anomali taraması' oldu. DÖB alınan yerin dışında gebelik, doğum, doğum sonrası dönem ile ilgili en sık bilgi alınan kaynaklar ise kitap/dergi, televizyon ve arkadaş/tanidik oldu.

Sonuç: DÖB esnasında gebelik/doğum ile ilgili bilgilendirmenin öncelikli olarak yapılması gerekenler köy/kasabada yaşayan, sosyoekonomik düzeyi düşük olan, sosyal güvencesi olmayan, eğitim düzeyi düşük olan ve işte çalışmayan gebelerdir. DÖB esnasında yetersiz bilgilendirme yapılan konuların başında kromozom anomali taraması, cinsel yaşam, egzersiz gelmekte olup bu konularda gebelerin bilgilendirilmesine önem verilmelidir. Gebelerin en çok kullandığı bilgi kaynakları kitap/dergi ile televizyon olup toplumun eğitiminde bunlar etkili olarak kullanılmalıdır.

Anahtar Sözcükler: Doğum öncesi eğitim, doğum öncesi bakım, gebelik.

Introduction

One of the important factors affecting the satisfaction of pregnant women with the antenatal care education they receive is good communication between the pregnant women and the health worker giving the antenatal care education.¹ Providing pregnant women with suitable and accessible information is one of the important factors in ensuring good communication.²

It has been stated that there is an increase of knowledge and adaptation in pregnant women continuing antenatal care education and that the ratio of starting formula with caesarean and before being discharged is low.³ Turan and Say have stated that antenatal care education which is to be given to women experiencing their first pregnancy may have a positive effect on the man's contribution to family planning with the early start of breastfeeding and newborn follow-ups.⁴ In response to this, there are also studies reporting that continuing antenatal care education have no positive contribution to antenatal care and feeling good about the self.^{5,6}

The education which is to be provided for pregnant women during antenatal care may ensure positive contributions on the health of the mother and the baby such as receiving adequate antenatal care, the realization of the delivery under healthy conditions, the appropriate use of family planning methods, and the elimination of negativities in regards to baby care.

Antenatal education in our country is most often provided in the form of clinic education by the midwife/nurse or doctor whom the pregnant woman receives antenatal care. Educating with antenatal care education classes commonly used in developed countries is not done outside the limited number of centers. Similarly, education through booklets and brochures is also non-common.

This study was designed with the consideration that it would contribute to appropriate planning and programming in relation to educating pregnant women in our country, and with the object to investigate information regarding antenatal education about pregnancy, delivery and puerperium during antenatal care.

Methods

The study was planned cross-sectionally and the investigation included women who delivered within the last two years. The women included in the study and the Abant Izzet Baysal University were discussed

at Izzet Baysal Faculty of Medicine, Department of Gynecology and Obstetrics; Izzet Baysal Obstetrics Hospital and Children's Health Hospital; Refika Baysal Mother Child Health and Family Planning Center, and Health Care Center between the first of August and 30th of December 2004. The discussions were realized by the investigation staff from our clinic. Women were asked questions regarding 'the state of education during antenatal care' taking place in a broad survey form related to antenatal care. The study group consisted of 420 cases in total.

Annual income in USD dollars, having social security, being a homeowner, being an automobile owner were used as criteria in the determination of the socioeconomic level. Those who had an annual income over 12.000 USD or between 6.000 to 12.000 USD and had two out of social security, house, automobile, or those who did not know what their annual income was and had social security, a house, and an automobile were included in the "high socioeconomic level" group. Those who have an annual income below 6.000 USD and had at the most one out of house, automobile or social security were included in the "low socioeconomic level" group, and the remaining cases were included in the "middle socioeconomic level" group.

Statistical evaluations were performed with the SPSS package program (version 11) by the transferal of survey data to the computer environment. Student t, Mann, Whitney U, χ^2 and Fisher's exact χ^2 tests were used for the statistical evaluation. The significance limit was taken as $p < 0.005$.

Results

The average study group age is 26.5 ± 4.8 , number of deliveries is 1.6 ± 0.8 , average annual income is 5136.9 ± 4336.4 , and other socioeconomic characteristics and some antenatal care related fundamental variables are given in Table 1. 82% of women have been stated to have received information regarding pregnancy, delivery and puerperium from a different source. Factors such as living in the city central, higher educational level, being employed, having social security and a high socioeconomic level were detected to have an impact on using information from a different source (Table 2). In response to this, using information regarding pregnancy, delivery and puerperium during antenatal care from a source other than the health unit from which antenatal care is received did not show any difference from that provided by the antenatal care doctor or midwife/ nurse.

Table 1. The main sociodemographic characteristics of the study group and some variables associated with antenatal care.

	Average \pm standard divergence	Extreme values
Age	26.5 \pm 4.8	17-41
Number of pregnancies	1.9 \pm 1.2	1-10
Doğum Sayısı	1.6 \pm 0.8	0-6
Number of deliveries	0.2 \pm 0.6	0-7
Number of spontaneous abortions	0.1 \pm 0.3	0-2
Number of children living	1.6 \pm 0.8	1-5
Average annual income (USD)	5 136.9 \pm 4 336.4	0-30 000
Month pregnancy follow-ups started	2.4 \pm 1.4	1-9
Total number of check-ups	9.5 \pm 4.2	1-30

USD: American Dollars

While the ratio of pregnant women with education of 12 years or more who used information from a different source was 12.8%, the ratio of those who did not was 2.7% ($p = 0.00$). The ratio of women working who reported to have used information from a source other than the health unit they received antenatal care when pregnant was higher than women who did not (6.7%) with 15.5% ($p = 0.05$). It was detected that the ratios of living in the city (60.6% against 41.3%, $p = 0.00$), having a high socioeconomic status (22.3% against 12.0%, $p = 0.06$), and

having social security (91.3% against 84.0%, $p = 0.05$) was higher in women who reported to have used information from a different source.

While the subjects which pregnant women were given information most often on at the health unit which they received antenatal care and their ratios were 'pregnancy check-ups (82.6%)', 'diet and weight gain during pregnancy (80.0%)', 'getting vaccinations (70.2%)', the subjects in which the least information was given were 'exercise (39.5%)', 'sexual life

Table 2. The sociodemographic characteristics of pregnant women who used a difference source of information about pregnancy, delivery and puerperium.

	Receiving information about pregnancy	
	Yes	No
Place of residence (420 cases, $\chi^2 = 12.17$, $p = 0.00$)		
Province	209 (%60.6)	31 (%41.3)
Town	44 (%12.8)	9 (%12.0)
Village	92 (%26.7)	35 (%46.7)
Socioeconomic level (420 cases, $\chi^2 = 5.60$, $p = 0.06$)		
Low	108 (%31.3)	32 (%42.7)
Medium	160 (%46.4)	34 (%45.3)
High	77 (%22.3)	9 (%12.0)
Social security (420 cases, $\chi^2 = 3.65$, $p = 0.05$)		
Yes	315 (%91.3)	63 (%84.0)
No	30 (%8.7)	12 (%16.0)
Term of education (420 cases, $\chi^2 = 20.88$, $p = 0.00$)		
0-5 years	178 (%51.6)	60 (%80.0)
6-11 years	123 (%35.7)	13 (17.3)
12 years and above	44 (%12.8)	2 (%2.7)
State of being employed (420 cases, $\chi^2 = 3.71$, $p = 0.05$)		
Housewife	293 (%84.9)	70 (%93.3)
Employed	52 (%15.1)	5 (%6.7)
The person providing the most frequent antenatal care (420 cases, $\chi^2 = 0.09$, $p = 0.77$)		
Midwife/nurse	109 (%31.6)	25 (%33.3)
Doctor	236 (%68.4)	50 (%66.7)

Table 3. The ratios of education on various subjects about pregnancy, delivery and puerperium during antenatal care.

The ratios of education during antenatal care	(%)
Pregnancy check-ups	347 (%82.6)
Diet and weight gain during pregnancy	336 (%80.0)
Getting vaccination	295 (%70.2)
Lactation	267 (%63.6)
Common illnesses during pregnancy (nausea, constipation, etc)	261 (%62.1)
Delivery	223 (%53.1)
Signs of danger during pregnancy (pain, bleeding, etc)	213 (%50.7)
Puerperium care	201 (%47.9)
Family planning	171 (%40.7)
Exercise	166 (%39.5)
Sexual life	165 (%39.3)
Chromosomal anomaly screening	112 (%26.7)

Table 4. The ratio of pregnant women feeling the need to be educated on various subjects about pregnancy, delivery and puerperium during antenatal care.

The ratio of pregnant women feeling the need to be educated during antenatal care	(%)*
Diet	185 (%44.0)
Signs of danger during pregnancy (pain, bleeding, etc)	144 (%34.3)
Delivery	136 (%32.4)
Check-up frequency and time	124 (%29.5)
Lactation	114 (%27.1)
Sexuality	112 (%26.7)
Daily activities	67 (%16.0)
Being employed	54 (%12.9)

*The total of the percentages is over 100% since pregnant women use more than one source.

Table 5. The other sources used to gain information about delivery and puerperium during antenatal care.

The other sources used to gain information	(%)*
Books/magazines	227 (%54.0)
Television	168 (%40.0)
Friend/acquaintance	94 (%22.4)
Radio	32 (%7.6)
Internet	20 (%4.8)
Other (newspaper, brochure, etc)	17 (%4.0)

*The total of the percentages is over 100% since pregnant women use more than one source.

(39.3%)', and 'chromosomal anomaly screening (26.7%)' (Table 3). 65.5% of women reported that they felt the need to acquire information from other sources regarding antenatal education about pregnancy, delivery and puerperium during their preg-

nancy. The subjects which they felt the need to receive the most information during pregnancy and their ratios were 'diet (44.0%)', 'signs of danger during pregnancy (%34.3)', and 'delivery (32.4%)' (Table 4). The other sources most commonly used for information regarding antenatal education about pregnancy, delivery and puerperium during antenatal care were books/magazines (54%), television (40%), and friends/acquaintances (%22.4). In response to this, it was determined that other sources such as radio, internet, newspaper and brochures were not used much for this purpose (Table 5).

Discussion

It was detected that women felt the need to receive an important ratio of information during antenatal care and that they referred to sources other than clinic education to receive information. The ratio of women who reported that they used information from other sources regarding pregnancy, delivery and puerperium was found to be 82.1%, and the ratio of those who felt the need to be educated was found to be 65.5%. These results show that clinic education provided by the midwife/nurse or doctor giving antenatal care was inadequate, and that pregnant women felt the need to be educated and they tried to ensure this through other sources. In the study which was performed by Karatas⁷ with the objective to examine the efficiency of the prenatal care and education provided by the nurse with the group education method, it was shown that women lacked knowledge regarding the health of the mother and the child and by proving that they want to be educated, that it is possible to ensure a significant increase in their level of knowledge by providing continuous education in direction to the needs. It was detected that women who used information from different sources during pregnancy had a high level of education, and that the ratios of having a high socioeconomic level, living in the city, having social security and being employed was higher. We consider that the woman's level of education is the most important of these factors. As women's level of education increases, their possibility of being employed increases, consequently, the possibilities of having social security, living in the city, being of a high socioeconomic status increase.

It seems that the place antenatal care is receive or from who it is received does not significantly affect the pregnant woman's state of being educated. It was observed that women who stated that

antenatal care is most frequently received from the midwife/nurse, secondly received antenatal care from the doctor. Therefore, in order to investigate whether there is a difference in the ratio and content of education given to pregnant women during antenatal care in comparison to receiving antenatal care from the doctor or the nurse, it will be appropriate to compare pregnant women who received antenatal care only from the doctor or the nurse.

While the subjects which pregnant women were given information most often on at the health unit which they received antenatal care and their ratios were 'pregnancy check-ups (82.6%)', 'diet and weight gain during pregnancy (80.0%)', 'getting vaccinations (70.2%)', the subjects in which the least information was given were 'exercise (39.5%)', 'sexual life (39.3%)', and 'chromosomal anomaly screening (26.7%)'. In the study in which they interviewed 151 puerperants after delivery, Ozbasaran and Yanikkerem,⁸ have reported that the subjects in which pregnant women received the most education during antenatal care was diet and tetanus vaccination. Education about chromosomal anomaly screening done during antenatal care is of special importance. This is because it is possible for the pregnant woman to give informed consent consciously regarding invasive approach for screening tests and/or exact diagnosis only by having adequate knowledge. It was stated that 32%-40% of pregnant women felt that they did not receive adequate information regarding the benefits and risks of various screening tests.⁹ It was stated that education on antenatal screening tests is inadequate for informed consent, that it is at times wrong or misleading,¹⁰ that this situation may be due to the lack of knowledge of the person giving antenatal care, their lack of education on how to communicate information in a conceivable way, or the lack of sufficient time and resources for education.¹¹⁻¹³ In order to provide efficient use of antenatal screening tests in our country, in order to provide efficient contribution to the process of the decision making of families, it is important to provide adequate education for pregnant women regarding the subject.

In the study, 65.5% of women reported that they felt the need to acquire extra information during their pregnancy and the subjects which they felt the need to receive the most information were 'diet (44.0%)', 'signs of danger during pregnancy (%34.3)', and 'delivery (32.4%)'. It was reported in a study that the most important objective of the education given during antenatal care was to

ensure self-confidence in women for delivery and baby care.¹⁴ It was reported that the subjects which pregnant women were most interested in during antenatal education were physical and psychological changes linked to pregnancy, fetal development, the act of giving birth, delivery and baby care.¹⁵ A pregnant woman who is aware of the danger signs in pregnancy will contact a health institute on time at the circumstance of risky situations, and when they have adequate knowledge on delivery, they will want to realize delivery in a place with the appropriate conditions. The pregnant woman contacting a health institute on time at the circumstance of risk, and the delivery taking place in healthy conditions, the decrease in mortality being primary, it may provide remedial contributions to the health of the mother and baby.

The other sources most commonly used for information regarding antenatal education about pregnancy, delivery and puerperium during antenatal care were books/magazines (54%), television (40%), and friends/acquaintances (%22.4). In response to this, it was determined that other sources such as radio, internet, newspaper and brochures were not used much for this purpose. In a study, 65 midwives and 100 randomly selected pregnant women were interviewed.¹⁶ During the first check-up, in this study which antenatal education is provided, only 33% of pregnant women have reported that they were able to follow the recommendations given to them during the education by midwives, without the aid of written or visual tools. In the conclusion of the study, it was stated that giving information is not the most appropriate method of educating in the education of pregnant women, and that other methods such as mass communication media and brochures need to be used more often than usual.

Education through antenatal education classes is not common in our country, and there have been no women in the study who stated that they received any information in the said way. In their study, Turan and Say4 have reported that the early start of antenatal lactation and baby check-ups and participation in family planning applications may be beneficial in women experiencing their first pregnancy. In a study which reports the frequency of continuing antenatal education classes as 23%, the ratio of a caesarean section and the ratio of starting formula before being discharged from the hospital was found to be lower in women who continued antenatal education, and that antenatal

education increased the knowledge and adaptation of women.³ The popularization of antenatal education plays an important role in the enabling of pregnant women to access reliable and uniform information about pregnancy, delivery and puerperium in our country. Antenatal education should not be considered a luxury, the necessary arrangements should be made to start antenatal education implementations at regular intervals especially at health institutes with an annual delivery rate over a specific number.

In conclusion, two out of every three pregnant women in the study feels the need to be educated about pregnancy, delivery and puerperium during antenatal care, and four out of every five pregnant women try to gain information from a different source. The factors of using a different source are living in the city, having high socioeconomic status, having a high level of education, being employed, and having social security. Therefore, those who primarily need to be given antenatal education are pregnant women living in the rural areas, having a low socioeconomic status, and who are unemployed. Chromosomal anomaly screening, sexual life, exercise being the main subjects in which education is inadequate during antenatal education, importance must be attached to educating pregnant women on the said subjects. The sources of information most often preferred in antenatal education are books/magazines, And these resources should be used effectively in public education.

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