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Opinions of pregnant women about vaginal birth after caesarean section

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Abstract

Vaginal birth after caesarean section (VBAC) is regarded as an effective option to reduce rapidly increasing C-section rates. The aim of the descriptive and cross-sectional study was to reveal opinions of women with experiences of prior C-section about VBAC and the factors affecting their opinions. The study included 283 pregnant women whit a history of previous C-section and followed up in a research and training hospital in İstanbul. Study data were collected by face-to-face interview method through The Personal Information Form and The Opinions about VBAC Form. Obtained data were analyzed with Number Cruncher Statistical System 2007 and evaluated with percentages, mean, standard deviation and Chi-square test. The statistical significance was set at $p<0,05$. According to the study results, 74.6% of the participants wanted to have a vaginal birth (VB) in their first pregnancy, whereas 56.9% were satisfied with the result of their first pregnancy with a C-section. The rate of those who are satisfied with the current pregnancy being planned as a repeat C-section is 66.8%. Also of all the women, 66.4% found VBAC acceptable, 44.5% wanted to give birth through VBAC, and 73.1% believed it should be promoted in the country. Women thoughts about VBAC were not affected by sociodemographic and obstetric features ($p>0.05$). On the other hand dissatisfaction with previous C-section had positive effects on finding VBAC acceptable ($p=0.000$), willingness to have VBAC ($p=0.000$), and wanting its promotion in the country ($p=0.007$). Also dissatisfaction with repeated C-sections plans had positive effects on finding VBAC acceptable ($p=0.000$) and willingness to have VBAC ($p=0.000$). Similarly, an increased frequency of antenatal visits was found to increase the thoughts about the promotion of VBAC in the country ($p=0.015$), and asking to have C-section in the first pregnancy was found to decrease the willingness to have VBAC in the current pregnancy ($p=0.000$). The study results showed that although the pregnant women participating in this study had positive perceptions about VBAC, they abstained from preferring this method. Also opinions of pregnant women about VBAC were shaped by women's birth experiences and the care services they received. *(Afr J Reprod Health 2022; 26[8]: 100-111).*

Keywords: Caesarean section, pregnancy, vaginal birth, vaginal birth after caesarean section

Résumé

L'accouchement vaginal après césarienne (AVAC) est considéré comme une option efficace pour réduire l'augmentation rapide des taux de césarienne. Le but de l'étude descriptive et transversale était de révéler les opinions des femmes ayant déjà subi une césarienne sur l'AVAC et les facteurs affectant leurs opinions. L'étude a inclus 283 femmes enceintes ayant des antécédents de césarienne et suivies dans un hôpital de recherche et de formation à Istanbul. Les données de l'étude ont été recueillies par la méthode d'entretien en face à face via le formulaire d'informations personnelles et le formulaire d'opinions sur l'AVAC. Les données obtenues ont été analysées avec le système statistique Number Cruncher 2007 et évaluées avec des pourcentages, une moyenne, un écart type et un test du chi carré. La significativité statistique a été fixée à $p<0,05$. Selon les résultats de l'étude, 74,6 % des participantes souhaitaient avoir un accouchement vaginal (VB) lors de leur première grossesse, tandis que 56,9 % étaient satisfaites du résultat de leur première grossesse avec césarienne. Le taux de celles qui sont satisfaites que la grossesse actuelle soit planifiée comme une césarienne répétée est de 66,8 %. De plus, parmi toutes les femmes, 66,4% ont trouvé l'AVAC acceptable, 44,5% voulaient accoucher par l'AVAC et 73,1% pensaient qu'il devrait être promu dans le pays. Les pensées des femmes sur l'AVAC n'étaient pas affectées par les caractéristiques sociodémographiques et obstétricales ($p>0,05$). D'autre part, l'insatisfaction vis-à-vis de la césarienne précédente a eu des effets positifs sur l'acceptation de l'AVAC ($p = 0,000$), la volonté d'avoir l'AVAC ($p = 0,000$) et le souhait de sa promotion dans le pays ($p = 0,007$). De plus, l'insatisfaction à l'égard des plans de césariennes répétées a eu des effets positifs sur l'acceptation de l'AVAC ($p = 0,000$) et la volonté d'avoir l'AVAC ($p = 0,000$). De même, il a été constaté qu'une fréquence accrue des visites prénatales augmentait les réflexions sur la promotion de l'AVAC dans le pays ($p = 0,015$), et le fait de demander à avoir une césarienne lors de la première grossesse diminuait la volonté d'avoir l'AVAC dans le pays. grossesse en cours ($p=0,000$). Les résultats de l'étude ont montré que bien que les femmes enceintes participant à cette étude aient une perception

positive de l'AVAC, elles se sont abstenues de préférer cette méthode. De plus, les opinions des femmes enceintes sur l'AVAC ont été façonnées par les expériences d'accouchement des femmes et les services de soins qu'elles ont reçus. *(Afr J Reprod Health 2022; 26[8]: 100-111).*

Mots-clés: Césarienne, grossesse, accouchement par voie basse, accouchement par voie basse après césarienne

Introduction

Caesarean section (C-section) is a surgical birth method performed with abdominal and uterine incisions[1]. This surgical procedure, which is best known in human history, was used to save the babies of pregnant women who died or were about to die during the Roman Empire (715-673 BC). The increase in the number of live births in the seventeenth and eighteenth centuries gave rise to the idea that C-section could be performed on live women. However, the mortality rate in C-sections performed on live women ranged from 52% to 100%[2]. In the twentieth century, the mortality rate reduced to 1-2% with preventive surgical techniques, developments in pharmacology, and the provision of antisepsis before and during surgery. These successful results naturally paved the way for new pregnancies after C-section. However, with the emergence of the possibility of uterine rupture during vaginal birth (VB) in women with classical incisions, the argument of 'once a caesarean, always a caesarean' was put forward, so repeat C-sections (RCS) turned into a medical tradition[3].

Today's modern medicine defines C-section as a life-saving mother-friendly surgical procedure[4,5]. The studies conducted worldwide by the World Health Organization (WHO) supported this view and it was determined that approximately 10-15% of all births had a cesarean indication[6]. Therefore, health systems are expected to provide women access to C-section when necessary[4]. On the other hand, there has been an alarming uncontrolled increase in C-section rates in recent years[5]. According to the current data of WHO, more than one-fifth (21%) of births worldwide are performed by C-section. The organization predicts that this rate will increase, and approximately one-third (29%) of births will occur by C-section in 2030[4]. RCS is one of the most important reasons for this rapid[7,8].

Non-indicated C-section and especially RCS are associated with maternal and fetal mortality and morbidity contrary to expectations[8-11]. And also, the effects of C-section rates on psychological and social well-being are still unclear[6]. Though small in number, there are studies showing negative effects of C-section on childhood obesity, asthma incidence, natural microbiota, and cognitive development of children[11]. C-sections performed without medical indications are another debatable issue in that they are considered unethical and bring an extra financial burden on the healthcare system[6,12]. For all these reasons, health authorities are in consensus to keep C-sections rates between 10-15%[6,13,14]. In this point, the paradigm of “once a caesarean always a caesarean" was questioned, and vaginal birth after C-section (VBAC) is considered as an effective option to reduce RCS rates[6,14].

VBAC is likely to succeed under suitable clinical conditions and ineligible cases[15,16]. Therefore, The International Federation of Gynecology and Obstetrics (FIGO) states that VBAC should be the first choice for all women with a previous C-section unless there is an evidence-based medical indication[17]. Similarly, the American College of Gynecology and Obstetrics states that most women with once C-section and lower segment transfer incision would be suitable candidates for VBAC[14]. As seen in the given examples, VBAC supported by health authorities. But despite this support VBAC rates are pretty low worldwide due to some factors[14]. The guide published by WHO in 2018 to reduce the rates of unindicated C-section stated that the belief of healthcare professionals that high-level infrastructure is required for VBAC is a kind of obstacle to the spread of VBAC. On the other hand, in the same guide, the contradiction that VBAC is not applied in most hospitals, even if they have a high-level infrastructure, is underlined[18]. In a study carried out to increase the rates of VBAC in European countries within the scope of the OptiBIRTH Project, it was determined that fear is closely related to low rates of VBAC. In the study, it was emphasized that health professionals transferred their fears that VBAC is a risky practice to women, and therefore, women's demands for VBAC were low[19]. Another important factor is cultural differences. In European countries with high rates of VBAC, both healthcare professionals

and pregnant women see VBAC as their first choice and accept VBAC. On the other hand, in European countries with low VBAC rates, the obstetricians make the final decision regarding the type of birth, and the pregnant women remain passive in the decision mechanism[20,21]. Overcoming the fear of VBAC and increasing the willingness of pregnant women are closely related to the impartial and evidence-based information about birth methods and the adoption of a mother-friendly antenatal care approach[20,22]. Therefore, the Royal College of Obstetricians & Gynaecologists recommends that all women with a previous C-section to be informed in detail about VBAC and decide on the type of birth together with health professionals[23].

Turkey is one of the countries with the highest C-section rates, according to international statistics[24]. Especially in big cities, C-section rates reached 50%[25]. For this reason, national VBAC application criteria were determined to reduce the C-section rates at the alarm level, and VB was supported in the country[26]. However, there is no evidence that VBAC is routinely practiced in the Turkey[27]. In addition, in a limited number of studies on this subject, the clinical aspect of VBAC and the opinions of healthcare professionals about VBAC were investigated[28-32]. However, another issue that is as important as the clinical approach is the opinions of women about VBAC. Because women have the right to take part in this important decision mechanism to be made about themselves. In two qualitative studies examining this aspect of the issue, it was shown that women need to be supported by healthcare professionals[33,34]. Another study examining birth methods in the country showed that 41% of women believed they could give birth with VBAC. However, the factors affecting these decisions of women were not evaluated in the study[35]. Starting from this point of view, in this study, it was aimed to determine the satisfaction of pregnant women living in one of the countries with the highest CS rates from the previous C-section and their thoughts about VBAC and the factors affecting their thoughts.

Research questions

1. What are the opinions of pregnant women having had C-section about VBAC?
2. What are the factors affecting the opinions of pregnant women having had C-section about VBAC?

Methods

Study design and population

This cross-sectional descriptive study was conducted from September 30, 2018 to December 30, 2018 in a research and training hospital in Istanbul. The study population comprised all pregnant women with a history of previous C-section and followed up in the three antenatal outpatient clinics of the hospital. Between study dates 354 pregnant women with a history of the previous C-section were registered to the hospital. Sample size was calculated based on the known population size. With a 95% confidence interval and 5% sampling error, we calculated that at least 185 pregnant women were necessary. To reach the desired sample, 337 women were invited to complete a questionnaire. A total of 294 of the 337 invited women responded. Of these, 11 women were excluded because they did not provide complete questionnaire responses. As a result, the study was completed with 283 participants. Also no sample selection method was used in the study. The inclusion criteria were women with a history of previous C-section, experiencing their third trimester, understanding and speaking Turkish, filling out the forms completely, and accepting to participate in the study.

Data collection and data collection tools

The pregnant women were interviewed face-to-face by the researcher in a room in the antenatal outpatient clinics. They were given information about the study, and those accepting to participate in the study gave their oral and written consent. Then participants were asked to fill out the data collection tools. The researcher completed the questionnaire on behalf of illiterate participants based on their self-report. The study data were collected using the "Personal Information Form" and "Opinions about VBAC Form". It took the pregnant women approximately 15–20 min to fill in these forms.

The personal information form: This form was developed by the researchers to determine the personal information of women. The form included 12 questions regarding the participants' characteristics such as age, educational status, employment status, family income, having health

insurance, number of parity, number of antenatal visits, type of prior birth(s), the status of attending childbirth education program, type of first birth planned/wanted, satisfaction with the first birth through C-section, and satisfaction with planning repeat C-section for prospective birth.

The opinions about vaginal birth after c-section form: After a review of the literature, this form was developed by the researchers to determine the opinions of women about VBAC[28,34,35]. The form has five questions. These items are as follows: What are your sources of information about VBAC? Do you consider VBAC to be an applicable/acceptable method? Would you be willing to have VBAC if clinical conditions were appropriate? What are your reasons for wanting or not wanting VBAC? Do you think VBAC should be promoted in Turkey?

Statistical analyses

Obtained data were analyzed with Number Cruncher Statistical System 2007 (Utah, USA) and evaluated with percentages, mean, standard deviation, and Chi-square test. The statistical significance was set at $p<0,05$.

Results

This study was conducted with a total of 283 pregnant women with a history of previous C-section. The mean age of the women was 28.8 ± 5.0 years (min:18 years; max: 42 years) and the mean duration of their education was 5.04 ± 3.44 years (min:0 years; max:16 years). The mean number of pregnancies was 2.94±1.21 (min:1; max:10), the mean parity was 1.65±0.79 (min:1; max:5), and the mean number of antenatal care was 8.6±3.9 (min:1; max:20). Other sociodemographic and obstetric characteristics of the participants are shown in Table 1.

The distribution of the opinions of the women about VBAC is shown in Table 2. Of all the women, only 8.1% received information about VBAC from a healthcare professional, 66.4% found VBAC acceptable, 44.5% wanted to give birth through VBAC, and 73.1% believed it should be promoted in the country. In addition, 33.2% of women thought that VBAC is better than C-section for mother and child health, while 29.3% of women thought that VBAC is very risky.

Table 1: Distribution of the pregnant women by their sociodemographic and obstetric features (N= 283)

Sociodemographic Features	N (%)
Age, years	
≤30	180 (63.6)
≥31	103 (36.4)
Education status	
No school graduated	50 (17.7)
Elementary school	200 (70.7)
Secondary school and above	33 (11.6)
Employment status	
Working	19 (6.7)
Not working	264 (93.3)
Family income	
Income less than expenses	136 (48.0)
Income equal to or more than expenses	147 (52.0)
Having health insurance	
Yes	230 (81.2)
No	53 (18.8)
Number of parity	
1	145 (51.2)
2	98 (34.7)
≥ 3	40 (14.1)
Status of attending a childbirth education program	20 (7.1)
Participating	263 (92.9)
Not participating	
Number of antenatal visits	
1-5	68 (24.0)
6-10	148 (52.3)
≥11	67 (23.7)
Type of prior birth(s)	
C-section	244 (86.2)
First birth VB, second birth C-section	39 (13.8)
Type of first birth planned/wanted	
VB	211 (74.6)
C-section	72 (25.4)
Satisfaction with the first birth through C-section	161 (56.9)
Satisfied	122 (43.1)
Dissatisfied	
Satisfaction with planning C-section for prospective birth	189 (66.8)
Satisfied	94 (33.2)
Dissatisfied	

VB: Vaginal Birth, C-section: Caesarean section

This study made a comparison of considering VBAC as an acceptable birth method, willingness to have a birth with VBAC, and promotion of VBAC in the country and some sociodemographic and obstetric features (Table 3). Analysis results showed that these thoughts were not affected by age, education level, working or not, health insurance, family income, parity, participation in antenatal classes, and previous birth type ($p>0.05$). But, the ratios of finding VBAC acceptable were higher in those who were not satisfied with their

Table 2: Distribution of the opinions of the women about VBAC (283)

Opinions	N (%)
Sources of information about VBAC	
Friends and relatives	221 (78.1)
Internet/television etc.	39 (13.8)
Doctors, midwives, and nurses performing follow-ups	23 (8.1)
Considering VBAC as acceptable	
Yes	188 (66.4)
No	63 (22.3)
Indecisive	32 (11.3)
Willingness to have VBAC	
Yes	126 (44.5)
No	157 (55.5)
Reasons for wanting or not wanting VBAC*	
VBAC is better than C-section for mother and child health	94 (33.2)
It is better than having surgery again	46 (16.3)
I want to experience the excitement of birth	26 (9.1)
I asked my doctor if I would have VBAC, but he/she rejected it and found it risky	40 (14.1)
If it was healthy, doctors would recommend it	38 (13.4)
I think it is very risky	83 (29.3)
I am already afraid of VBAC	64 (22.6)
Whatever method is used for the first birth should be adopted for further births	52 (18.3)
My abdominal area has already been damaged by C-section. I do not want my perineum to be affected by VB too.	51 (18.2)
Doctors should decide VBAC, not pregnant women	22 (7.8)
I do not want to experience labor pain	18 (6.3)
VBAC should be widespread in Turkey	
Yes	207 (73.1)
No	49 (17.3)
Indecisive	27 (9.6)

VBAC: Vaginal Birth after Caesarean section * More than one answer was given

previous C-section and prospective C-section planned in their current pregnancy (p=0.000). Also, VBAC willingness of the participants who planned C-section in their first pregnancy was significantly lower than those who planned VB (p=0.000). On the other hand, VBAC willingness was significantly higher in those who were not satisfied with previous C-section experiences, and prospective C-section planned in their current pregnancy (p=0.000). In addition, the ratios of agreeing with the promotion of VBAC in the country were higher in pregnant women who had antenatal visits 11 times and more and who were not satisfied with their previous C-section experience (p=0.007).

Discussion

Reducing the rapidly increasing C-section rates is a global target[6-8]. In order to achieve this goal, the indications of VBAC, which is one of the best solutions that might be used, the effects on maternal and fetal health, as well as the factors that increase or hinder its applicability need to be discussed in detail[36,37]. The birth experiences of pregnant women who had a previous C-section and their thoughts on VBAC are essential at this point because women's willingness for a vaginal birth and VBAC increases the rates of VBAC[33,38,39]. And also, determining the thoughts of women on this subject and developing policies is an approach that protects their body autonomy and rights[40]. In addition, as recommended by WHO, it is critical to evaluate whether women have a positive birth experience as well as maintaining maternal and fetal health in birth management[41].

The majority of the participants of this study, which was conducted to determine the satisfaction of the pregnant women from the previous C-section and their thoughts about VBAC, were young, were housewives and had an elementary school education level, social insurance, and medium income. Although nearly half of the participants were multiparous, the number of women who had a VB in their first pregnancy is very low and none of the pregnant women had VBAC experience. These results are consistent with the information that elective C-section rates are high in Turkey[25,27]. Despite that, as indicated in the

Table 3: Comparison of the participants' selected characteristics with their opinions about VBAC

Variables	VBAC is an acceptable birth method: I agree N (%)	I disagree N (%)	χ2 / p	Use of VBAC should be widespread in Turkey: I agree N (%)	I disagree N (%)	χ2 / p	Willingness to have a VBAC: Yes N (%)	No N (%)	χ2 / p
Age									
≤30	126 (77.3)	37 (22.6)	1.425	140 (84.3)	26 (15.6)	3.690	87 (48.3)	93 (51.6)	2.907
≥31	62 (70.5)	26 (29.5)	0.233	67 (74.4)	23 (25.6)	0.055	39 (37.8)	64 (62.1)	0.088
Education status									
No school graduated	35 (77.8)	10 (22.2)	0.303	39 (86.7)	6 (13.3)	1.710	27 (54.0)	23 (46.0)	2.208
Elementary school	132 (74.5)	45 (25.4)	0.859	144 (80.4)	35 (19.5)	0.425	85 (42.5)	115 (57.5)	0.331
High School and above	21 (72.4)	8 (27.6)		24 (75.0)	8 (25.0)		14 (42.4)	19 (57.5)	
Employment status									
Working	176 (93.6)	57 (30.3)	0.699	13 (68.4)	6 (31.5)	2.052	6 (31.5)	13 (68.4)	1.382
Not working	12 (66.6)	6 (33.3)	0.403	194 (81.8)	43 (18.1)	0.152	120 (45.4)	144 (54.5)	0.240
Family income									
Income less than expenses	88 (74.5)	30 (25.4)	0.012	94 (79.6)	24 (20.3)	0.203	60 (44.1)	76 (55.8)	0.185
Income equal to or more than expenses	100 (75.1)	33 (24.8)	0.403	113 (81.8)	25 (18.1)	0.652	66 (44.8)	81 (55.1)	0.667
Having health insurance									
Yes	154 (74.0)	54 (25.9)	0.480	174 (82.4)	37 (17.5)	1.998	101 (43.9)	129 (56.0)	0.480
No	34 (79.0)	9 (20.9)	0.489	33 (73.3)	12 (26.6)	0.157	25 (47.1)	28 (52.8)	0.489
Number of parity									
1	99 (77.9)	28 (22.0)	1.351	111 (84.7)	20 (15.2)	2.604	62 (42.7)	83 (57.2)	0.418
2	64 (71.1)	26 (28.8)	0.509	70 (76.9)	21 (23.0)	0.272	46 (46.9)	52 (53.0)	0.811
≥ 3	25 (73.5)	9 (26.4)		26 (76.4)	8 (23.5)		18 (45.0)	22 (55.0)	
Status of attending childbirth education program									
Participating	15 (75.0)	5 (25.0)	0.301	15 (75.0)	5 (25.0)	0.010	11 (55.0)	9 (45.0)	0.956
Not participating	173 (74.8)	58 (25.1)	0.583	192 (81.3)	44 (18.6)	0.919	115 (43.7)	148 (56.2)	0.328
Number of antenatal visits									
1-5	39 (67.2)	19 (32.7)	2.930	40 (67.7)	19 (32.2)	8.463	28 (41.1)	40 (58.8)	1.457
6-10	99 (75.5)	32 (24.4)	0.231	113 (84.9)	20 (15.0)	**0.015***	64 (43.2)	84 (56.7)	0.483
≥11	50 (80.6)	12 (19.3)		54 (84.3)	10 (15.6)		34 (50.7)	33 (49.2)	
Type of prior birth(s)									
C-section	166 (76.1)	52 (23.8)	1.370	181 (81.1)	42 (18.8)	0. 105	108 (44.2)	136 (55.7)	0.049
First birth VB, second birth C-section	22 (66.6)	11 (33.3)	0. 242	26 (78.7)	7 (21.2)	0. 746	18 (46.1)	21 (53.8)	0.863
Type of first birth planned/wanted									
VB	39 (67.2)	19 (32.7)		47 (77.0)	14 (22.9)	0. 751	115 (54.5)	96 (45.4)	

C-section	149 (77.2)	44 (22.7)	2.354 0.125	160 (82.0)	35 (17.9)	0. 386	11 (15.2)	61 (84.7)	33.439 **0.000***
Satisfaction with the first birth through C-section									
Satisfied	92 (66.1)	47 (33.8)	12.580	108 (75.0)	36 (25.0)	7. 301	44 (27.3)	117 (72.6)	44.699
Unsatisfied	96 (86.0)	16 (13.9)	**0.000***	99 (88.3)	13 (11.6)	**0.007***	82 (67.2)	40 (32.7)	**0.000***
Satisfaction with planning C-section for prospective birth									
Satisfied	109 (67.7)	52 (32.2)	12.376	129 (77.7)	37 (22.2)	3.024	55 (29.1)	134 (70.8)	54.794
Unsatisfied	79 (87.7)	11 (12.2)	**0.000***	78 (86.6)	12 (13.3)	0.082	71 (75.5)	23 (24.4)	**0.000***

VB: Vaginal Birth, C-section: Caesarean section, VBAC: Vaginal birth after C- section, $\chi 2$: Chi-square test, *p<0, 05, Those who were indecisive were excluded from the analysis.

literature, participating women's in this study tendency for VB is quite high in their first pregnancy because women found VB healthier and more comfortable and believed that returning to daily life and domestic responsibilities would be faster[31,42-44]. However, the increase in the rate of those who are satisfied with the current RCS plan compared to the first C-section shows that RCSs increase the acceptability of C-section in women. WHO attaches great importance to this breaking point, which we determined in our study, and emphasizes that the most effective way to reduce C-section rates is to ensure that the first birth occurs vaginally and to support the mother for a positive birth experience[6].

All women and their babies have the right to benefit from antenatal services, and in the provision of these services impartial and evidence-based information must be provided about birth methods[6,14,23,45]. Unfortunately, decisions made with insufficient or no information about repeat C-section and VBAC are a common problem in many countries[33,38,46,47]. The attitude of health professionals in the decision mechanism is quite essential. Because there is a possibility that health professionals may transfer their feelings and thoughts to pregnant women. For example, in a study, it was shown that health professionals transferred their fears and concerns about VBAC to pregnant women and caused them to be afraid of this method[19]. In another study conducted in Iran, it was stated that obstetricians and some midwives kept away from VBAC due to possible complications, and therefore, they negatively affected women's decisions[46]. In two separate studies conducted in Europe and Australia, pregnant women stated that they wanted to receive support from healthcare professionals who were confident about VBAC[20,48]. In this study, the frequency of antenatal follow-up is quite high, just like the average in Turkey[25]. However, very few participants stated that they attended antenatal classes and received information about VBAC from a healthcare professional. Also, in other studies examining antenatal services in Turkey, it is seen that there is a lack of antenatal counseling and information[34,35]. Despite this deficiency, the fact that all the pregnant women have knowledge about VBAC, the majority of them find the method acceptable, and they want it to become widespread in the country shows that they have an interest in VBAC and have a positive attitude in theory. However, the low rate of those who want to do VBAC indicates that women are hesitant to apply it in practice. In this study, it is thought that the inability of women to receive impartial and evidence-based counseling on birth types caused them to abstain from choosing the method. Pregnant women's such statements "I asked my doctor if I would have VBAC, but he/she rejected it and found it risky" and "If VBAC was healthy, doctors would recommend it" etc. support this idea. When the results of two studies conducted in Turkey are examined, it is seen that women believe that health professionals do not respect the birth preferences of pregnant women and do not give enough information about birth methods, just as in the examples of other countries given above and the findings of this study[33,34]. Studies conducted with health professionals in Turkey also reported that they abstained from VBAC[29,30]. Based on study results and literature examples, it is thought that culture-specific antenatal education and information on birth methods with an unbiased approach will increase the willingness of pregnant women to perform VBAC.

Determining factors affecting women's attitudes towards VBAC and developing encouraging approaches are as important as forming a clinical infrastructure to increase VBAC rates and encouraging health professionals[21,22,36]. Previous studies show that VBAC willingness was high in young women, black women, women who wanted many children, who had vaginal birth experience, who did not have RCS indications, and who were informed about VBAC during their pregnancy[34,39,49-51]. On the other hand, women with low VBAC tendency were pregnant women who had high education level, who did not work, who did not have health insurance, and who had labor fear in their first pregnancy[49-51].

In this study, unlike other studies, sociodemographic characteristics did not have effect on pregnant women's VBAC tendency. On the other hand, pregnant women found VBAC acceptable. It was determined that the most crucial factor affecting their willingness to give birth with VBAC and their desire for the method to become widespread in the country was their previous negative C-section experience. In the study of Attanasio et al., in 2019, it was revealed that the previous negative C-section experience increased

the VBAC tendency, just as in this study [49]. On the other hand, in qualitative studies on this subject, some women describe their previous C-section experiences as stressful, traumatic, fearful, captivity, soullessness, loss of control, pain, etc.[33,34,47]. Considering these statements, it may be assumed that for some women, their previous C-section experiences turned into some kind of trauma. In fact, some women who want VBAC prefer the method because they want to replace their previous negative C-section experience with a positive VB[34]. At this point, despite an alternative such as VBAC, it is a dramatic situation that women are forced to have a C-section in their next pregnancies by ignoring their will, as exemplified above. Therefore, if medical conditions are suitable, encouraging women for VBAC, particularly those who were not satisfied with their previous C-section experience, will be a good approach.

Vaginal birth is respected and accepted in all cultures. However, some women have fear of vaginal birth due to reasons such as pain, concern that the baby may be harmed during vaginal birth, previous negative vaginal birth experience, unfavorable birth environment, etc.[52-54]. Naturally, this fear is expected to affect the VBAC trend. For example, in a study conducted in Taiwan, it was reported that women with fear of pain preferred repeat C-section to VBAC[55]. Similarly, this study found that VBAC willingness was significantly lower in women who did not want VB at their first birth. In addition to the comparisons, statements such as "I do not want to have VBAC; I am already afraid of vaginal birth," "I think it is very risky" indicate negative attitudes towards VBAC. The findings of this study and literature examples suggest that women with a high tendency for C-section, particularly in the first pregnancy, form the resistant group. It is considered that women should be provided with objective consultancy; their thoughts and preferences should be respected, and there should be no compelling behaviors. On the other hand, as recommended by the WHO, effective use of policies supporting VB could contribute to women's health by preventing both C-section and RCSs[6].

As discussed above, Turkey is one of the countries with a well-developed antenatal follow-up system, and the frequency of antenatal examinations in the country is quite high. In the comparison made from this point of view, it was determined that pregnant women with a high frequency of antenatal follow-up were more likely to agree with the idea that "VBAC should be widespread in the country." This finding is highly important as it is assumed that antenatal visits increased trust in health services. Hence, informing women about VBAC during antenatal visits and clinicians' encouraging approach to VBAC is considered to increase pregnant women's willingness to VBAC more[39]. Two studies that investigated VBAC rates in Europe showed that health professionals' approach affected VBAC willingness and the country's VBAC ratios, which is in line with the findings of this study[19,56].

Ethical considerations

Ethical approval was obtained from Istanbul Medipol University Ethical Board before initiation of the study (approval date: 17.09.2018; approval number: 10840098-604.01.01.-E.38414). Permission was taken from the administration of the hospital where the study was conducted, and oral and written consent was obtained from the participants by using a form prepared in accordance with the Declaration of Helsinki.

Conclusions

The vast majority of women participating in this study wanted to have a VB in their first pregnancy. Contrary to their expectations, half of the participants were satisfied with their first birth with a C-section, and the number of women who were satisfied increased with a repeat C-section. Although the pregnant women participating in this study had positive perceptions about VBAC, they abstained from preferring this method. Pregnant women's sociodemographic characteristics did not have effects on their thoughts about VBAC. On the other hand, dissatisfaction with previous C-section experiences and RCS plans had positive effects on finding VBAC acceptable, willingness to have VBAC, and asking its promotion in the country. Similarly, increased frequency of antenatal visits was found to increase the thoughts about the promotion of VBAC in the country, and wanting to have C-section in the first pregnancy was found to decrease willingness to have VBAC in the current pregnancy. These findings indicate that attitudes and thoughts about VBAC were shaped by women's birth experiences and the care services

they received. Therefore, it is recommended to increase health professionals' awareness and motivation about the issue, develop care models specific to VBAC and implement them in clinics.

What do the results of this study add?

The opinions of pregnant women about VBAC in one of the countries with the highest C-section rates were reflected in the literature in this study. The limited number of studies conducted with pregnant women in the Turkey on this subject are qualitative type. But there was no large sample descriptive study example supporting these qualitative study results likes our study. Both women's thoughts about VBAC and some factors affecting these thoughts were determined with this large sample size current study. It is thought that the information obtained from this study will contribute to the policies to be developed to reduce the increasing C-section rates.

Limitations

This study was conducted with non-probability sampling, the findings are limited to the study group and cannot be generalized.

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Conflicts of interest

The authors declare that there is no conflict of interest.

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