

Women's birth beliefs and associated factors in an obstetrics clinic in the Southeastern Anatolian Region of Turkey

Women's birth beliefs and related factors

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Abstract

Purpose – The impact of birth beliefs on pregnancy and delivery are universally recognized, but the factors that affect birth beliefs vary across regions depending on individual and cultural characteristics. This study aimed to determine women's birth beliefs and examine their associated factors.

Design/methodology/approach – This cross-sectional study was conducted with 548 primiparas in the obstetrics clinic of a university hospital located in the Southeastern Anatolian Region of Turkey from February to June 2019. Descriptive characteristics, form and the Birth Beliefs Scale were used in data collection. To analyze the data, descriptive statistics, T-tests and ANOVA analyses were used.

Findings – It was determined that factors such as age group, income level, any problems during pregnancy and preferred delivery mode statistically affected women's birth beliefs.

Originality/value – Based on the findings from this study, healthcare personnel should provide training and consultation services to pregnant women starting from the prenatal period to help ensure a positive labor experience.

Keywords Birth beliefs, Prenatal care, Turkey

Paper type Research paper

Introduction

Although pregnancy and childbirth are biological and physiological processes, they can also be experiences that induce feelings of fear, excitement and happiness in women [1]. This experience is influenced by the pregnant woman's culture and culture-bound beliefs. In addition to cultural influences, women may also have an opinion regarding childbirth without having had a birthing experience [2]. These basic beliefs are classified as beliefs about birth as a natural process and birth as a medical process in studies [3–6].

The beliefs about birth as a medical or a natural process can be defined as the general view of the physical essence of the birth process [4]. Belief about birth as a natural process refers to the fact that birth is a normal, natural and safe process, women's bodies are well-designed for birth, birthing pain is an inherent part of giving birth and intervention should be avoided unless required [5, 7, 8]. Birth as a medical process, on the other hand, refers to the belief that birth is dangerous and risky, cutting edge technology must be used and that labor pain requires medical intervention [5, 8, 9]. Women can be influenced by both beliefs. Therefore, medical care may be preferred to ensure a safe childbirth although a woman ideally desires a



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natural delivery. Either or both beliefs influence a woman's preferred delivery mode [4]. Similarly, social and cultural factors as well as fear- and anxiety-related beliefs may affect women's preferred delivery mode. Women who decide to have a normal or natural birth are often better regarded by society, and consequently, some women may force themselves to have a normal birth or may have to undergo a caesarian section due to the fear or anxiety of childbirth. False birth beliefs may result in negative experiences that affect maternal and infant health. Studies on this subject reveal that women's beliefs about birth influence their preferences during pregnancy [2, 5, 7, 8, 10–12]. It is also suggested that birth beliefs affect women's preferences for giving birth at home or in a hospital [10], with either a caesarian section or vaginal birth [2, 7, 8, 10], going into labor with a midwife or an obstetrician [5, 11, 12] or using anesthetics or not. Thus, it is highly important to determine women's birth beliefs.

Factors that affect birth beliefs vary across regions depending on individual and cultural characteristics; However, the impact of birth beliefs on pregnancy and delivery are viewed as universal [13, 14]. It is known that understanding the beliefs, attitudes and fears of women contribute positively to the interaction between healthcare professionals and women during labor [7]. Thus, determining a woman's birth beliefs and associated factors will help to enable the development of strategies for women's care.

Methodology

Study design: this cross-sectional study was conducted in the obstetrics clinic of a university hospital from February to June 2019.

Study universe and sample: The present study was performed in the obstetrics clinic of a university hospital located in the Southeastern Anatolian Region of Turkey where the birth rate is high. The study sample included 548 primipara women who complied with the sampling criteria and volunteered to participate in the study. Data were collected by the researchers through a face-to-face interview method. Following the completion of the study, G Power 3.19.2 was used to determine the suitable sample size for a sufficiently strong study design. Based on the mean scores and standard deviations from the scales calculated from the sample, post hoc and influence quantity were measured using a *t*-test. In accordance with the results obtained from the study, post hoc was measured as 80%, $\alpha = 0.05$ and influence quantity was measured as 0.52 in the calculation based on the mean score from the acceptance of pregnancy scale. Data collection was finalized.

Inclusion criteria: primiparas who were in the second trimester and had no complications during pregnancy (preeclampsia, intrauterine growth retardation, etc.) were included in the study.

Exclusion criteria: this included illiteracy, multiparity and hearing–vision problems or mental disability.

Data collection tools/instruments: data were collected via a descriptive characteristics form and the Birth Beliefs Scale.

Descriptive characteristics form: This is a form developed by the researchers in line with the literature consisting of questions regarding pregnant women's sociodemographic characteristics; age, gender, level of income (high, moderate, low), obstetric history pregnancy plan and preferred delivery mode that may affect their birth beliefs.

Birth Beliefs Scale (BBS): This scale, developed by Preis and Benyamini [4], is an 11-item Likert- type scale that inquires about basic birth beliefs regarding the nature of the labor experience. The scale included two sub-dimensions, one of which evaluated childbirth as a natural process (items 3, 5, 7, 8, 11) while the other evaluated it as a medical process (items 1, 2, 4, 6, 9, 10). Participants were asked to respond to the items with scores ranging from 1-strongly disagree to 5-strongly agree. The scale had two subscales which were BBS-Med (beliefs about birth as a medical process) and BBS-Nat (beliefs about birth as a natural

process). Cronbach's α ranged from 0.70–0.82 [6]. The scale's validity and reliability in Turkey were measured by Ahsun in 2018 [15]. In Ahsun's study, Cronbach's α was calculated as 0.890 while it was found to be 0.732 in this study.

Procedure: Prior to the onset of the study, all details were introduced to the personnel working in the obstetrics polyclinic. Women who agreed to participate in the study were informed of its purpose, and they signed an informed consent form. They were required to complete a medical examination before the questionnaire was given. Questionnaire forms were filled in by the researcher using a face-to-face interview technique in a room at the clinic to avoid noise and interruptions.

Statistical analysis: The IBM SPSS Statistics 22.0 (IBM Corp., Armonk, New York, ABD) statistical program package was used for data assessment. In the analysis, descriptive statistics, *t*-test and ANOVA analysis were used. The statistical significance level was set at $p < 0.05$.

Ethics approval: This study was conducted in compliance with the principles of the Declaration of Helsinki. Permission from the Head Physician in Dicle University Hospital and approval from the Non-Interventional Clinical Studies Ethics Committee in the Medical Faculty of Dicle University (2018/12.) were received. In addition, as participation in the study was on a voluntary basis, patients included in the study signed a written consent form.

Results

The average age of the women was 29.28 ± 2.02 , and 40.1% of them were 30 years and above. 44% of the participants had an educational attainment of at least primary school and 79% of them had moderate income levels. The percentage of those who had planned their pregnancy was 92%, and 78.1% of them were planning to have a vaginal birth (Table I).

Table II, Scores received by pregnant women from the subscales of birth beliefs scale according to some variables are presented in Table II. The difference between women's age

		Min-max	Mean \pm SD
Age (years)		18-45	29.28 \pm 2.02
		<i>N</i>	%
Age group	25 years and below	208	38.0
	26–30 years	120	21.9
	30 years and above	220	40.1
Educational attainment	Primary school	238	43.4
	Middle school	156	28.5
	High school	102	18.6
	University graduate	52	9.5
Family type	Nucleus family	354	64.6
	Extended family	194	35.4
Working status	Working	51	9.3
	Nonworking	497	90.7
Income level	High	72	13.1
	Moderate	431	78.6
	Low	45	8.2
Health security	Yes	453	82.7
	No	95	17.3
Pregnancy plan	Planned	504	92.0
	Unplanned	44	8.0
Preferred delivery mode	Vaginal	428	78.1
	Caesarian section	120	21.9
Did any problems occur during pregnancy?	Yes	305	55.7
	No	243	44.3

Table I.
Descriptive characteristics of pregnant women participating in the study (*N* = 548)

Table II.
Assessment of Birth Beliefs Scale subscale scores according to sociodemographic characteristics of pregnant women

Descriptive characteristics		Beliefs about medical birth Mean ± SD	Beliefs about natural birth Mean ± SD
Age group	25 years and below	4.74 <i>t</i> ± 0.68	3.42 ± 0.52
	26–30 years	4.71 ± 0.60	3.62 ± 0.42
	31 years and above	4.76 ± 0.50	3.64 ± 0.37
Educational attainment	<i>F, p</i>	0.228/0.796	14.247/<0.01
	Primary school	4.74 ± 0.55	3.55 ± 0.43
	Middle school	4.79 ± 0.57	3.55 ± 0.46
	High school	4.77 ± 0.65	3.57 ± 0.51
	University graduate	4.51 ± 0.70	3.58 ± 0.44
Working status	<i>F, p</i>	3.174/0.24	0.74/0.974
	Working	4.52 ± 0.65	3.60 ± 0.44
	Nonworking	4.76 ± 0.58	3.55 ± 0.46
Income level	<i>t, p</i>	-2.718/0.007	0.645/0.519
	High	4.67 ± 0.66	3.53 ± 0.54
	Moderate	4.78 ± 0.57	3.60 ± 0.42
	Low	4.51 ± 0.63	3.15 ± 0.49
Pregnancy plan	<i>F, p</i>	4.724/0.09	21.247/<0.01
	Planned	4.74 ± 0.6	3.56 ± 0.46
	Unplanned/other	4.69 ± 0.46	3.49 ± 0.38
Preferred delivery mode	<i>t, p</i>	0.575/0.566	1.010/0.313
	Vaginal caesarian section	4.78 ± 0.572	4.61 ± 0.671
	<i>t, p</i>	2.816/0.05	3.38/<0.01
	<i>t, p</i>	-1.914/0.056	-5.648/<0.01

groups, income levels and pregnancy-related problems and beliefs about birth as a medical process was statistically significant ($p < 0.05$). There was a statistically significant difference between the delivery mode plan and the two subscales ($p < 0.05$). The difference between the educational attainment and working status of women and the subscales was statistically insignificant ($p < 0.05$).

Discussion

Birthing preferences of women are important in order to ensure high-quality delivery and for the prevention of postpartum complications [3, 5, 6]. It is thought that understanding the birth beliefs of women to help them have a healthy pregnancy experience will contribute to perceiving the childbirth process as a positive experience. Women’s birth beliefs and the factors that lead them to perceive birth as a medical process or a natural process are induced by multiple factors [4]. Sociocultural beliefs and the obstetric history of the women are two of these. The findings of this study conducted to determine the birth beliefs of pregnant primiparas in Turkey and associated factors are discussed in this section.

In the present study, age was found to be one of the many factors affecting women’s birth beliefs. Preis *et al.* [16] had suggested in a study on the factors affecting birth beliefs that age was not an associated factor. However, several studies in the literature did report that a woman’s age does influence labor experience, delivery mode and postnatal perception [17, 18]. In this study, pregnant women aged 25 years and below received low scores from the subscale belief about birth as a natural process, and the difference between age groups was statistically significant. Women who were experiencing pregnancy at a young age had a harder time accepting pregnancy and experienced more labor-related fear and anxiety as the day of labor approached and more fear and anxiety regarding the role of motherhood in the

postpartum period [19]. It is thought that this is because all the pregnant women participating in the study had never experienced labor before.

Preis *et al.* [16] reported that educational attainment is another factor that affects birth beliefs. In this study, no statistically significant difference was found between the educational attainment of pregnant women and the subscale scores from the birth beliefs scale. It was detected that the mean scores of university graduates from beliefs about birth as a medical process subscale were lower than others. In a study conducted by Preis and Benyamini *et al.* in 2017 [4], it was reported that women with low educational attainment had high scores from beliefs about birth as a medical process subscale. In contrast, studies performed in Turkey reveal that as educational attainment increased, preferences for a caesarian section also increased [20, 21].

Women with higher income levels have more labor options and easier access to health services. Studies on this subject indicate that women who do not work or have low-income levels have more financial concerns about the future [22, 23]. In the present study, income levels of pregnant women were treated as a variable that might affect their birth beliefs, and it was found that women with the lowest income levels had the lowest scores from beliefs about birth as a natural process subscale. It was detected in a study on this subject that income levels of women were associated with their preference for health services and the ability to pay [24]. It was also reported that women with low-income levels experienced more negative feelings during childbirth [25]. This finding possibly explains the low mean scores of pregnant women.

In this study, a comparison of the planned delivery mode and birth beliefs demonstrated that pregnant women who were planning to have a vaginal birth had higher scores regarding birth as a natural process with a statistically significant difference in their beliefs about birth as a medical process. In previous literature studies, birth beliefs are reported as one of the factors affecting the preferred delivery method of women [4, 7, 8]. Birth beliefs are a significant factor that influences women's expectations regarding childbirth. It was detected in one study that pregnant women with higher scores from a belief about birth as a medical process were more pessimistic about childbirth, while pregnant women with higher scores from a belief about birth as a natural process experienced less fear and anxiety [14]. Duran and Ünsal [26] detected in their study that some women exhibited a positive attitude toward normal delivery while some of them had concerns about normal delivery and thus preferred a caesarian section. As a result, they concluded that there may be differences between birth preferences. Although most women in Turkey prefer to have a normal delivery as a result of their beliefs about birth as a natural process, they often prefer to choose a caesarian section, deciding upon this route from the early period of pregnancy due to fear of labor pains, fear of inflicting trauma on the baby or because the mother-to-be wanted a specific birth date and/ or her husband wanted as well [27–29]. It can thus be concluded from the studies that Turkish women have higher scores from beliefs about birth as a medical process.

In the present study, it was detected that experiencing pregnancy-related problems was among the factors affecting birth beliefs, and those who experienced no problems had higher mean scores from beliefs about giving birth as a natural process with a statistically significant difference. Any problems experienced during pregnancy affected the pregnant woman's daily activities and as a result, her quality of life. Therefore, women experiencing problems during pregnancy may perceive labor as a negative process. It is thought that this finding is responsible for the result.

Conclusion

It was detected that age group, income level, problems experienced during pregnancy and planned delivery mode are among the factors that statistically affect women's birth beliefs. If health personnel reinforce women's beliefs in themselves, pregnant women may have a more

positive birth experience. Pursuant to these results, it is suggested that healthcare personnel provide training and consultation services during the prenatal period to help pregnant women have a positive labor experience and positive birth beliefs.

Limitations

It is essential to determine pregnant women's birth beliefs to help them have a positive labor experience. This study is important in that it determines pregnant women's birth beliefs and associated factors. However, the study has some limitations. Because it was conducted in a single center with pregnant women, study results can only be generalized to its own study universe.

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