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ARTICLE

The role of personality traits on mode of delivery

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ABSTRACT

Purpose: The aim of this study is to understand the motives behind CS requests in nulliparous women in their late pregnancy better and to investigate if specific personality traits affect the maternal decision on mode of delivery.

Material and Method: This prospective study was conducted with 70 healthy, nulliparous parturient with singleton pregnancies. Women at their 28–32. weeks of gestation were asked to fill a socio-demographic data form and the questionnaires; Personality Belief Questionnaire – Short Form (PBQ-SF) and The Childbirth Attitudes Questionnaire (CAQ). After delivery, all the results of pre-filled questionnaires and women's mode of delivery were analyzed and compared.

Results: There were significant differences in personality types; dependent ($p = 0.033$), passive-aggressive ($p = 0.031$), obsessive-compulsive ($p = 0.001$), antisocial ($p = 0.014$), narcissistic ($p = 0.014$) and borderline ($p = 0.014$) between vaginal delivery and CS groups. The CAQ scores of the mothers who requested CS were significantly higher (p:0.007). Weak but significant positive relation was found between total CAQ scores and avoidant ($p = 0.022$), dependent ($p = 0.034$), passive-aggressive ($p = 0.040$), narcissistic ($p = 0{,}006$), schizoid ($p = 0.007$), paranoid ($p = 0.007$) and borderline ($p = 0.007$) personality types.

Conclusion: This is the first study that investigates the relationship between mode of delivery and personality traits according to the Diagnostic and Statistical Manual of Mental Disorders (DSM) and cognitive behavioral perspective in the literature. These personality traits can be carried at a level that is not clinically significant to create an obvious pathology, yet they might play a role as the motives behind the apparent reasons for women who request CS. Understanding women's motives and attitudes for childbirth during their pregnancy may help healthcare providers to tailor women's approach to childbirth to avoid unnecessary CS.

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Mode of delivery; pregnancy; childbirth; fear of childbirth; personality

Introduction

The cesarean section (CS); appears like a quick and safe way of birth. CS has evolved aiming to improve maternal and fetal health but now it's being over-performed globally with no medical indication and becoming a serious health concern. World Health Organization (WHO) states that CS should only be performed when it is medically indicated and the rates above 10–15% at the population level are unlikely associated with improvement in maternal/perinatal outcomes [1]. The global CS rate in 1990 had jumped from 6% to 19% in 2014 [2]. When compared to vaginal delivery, the risks of life and future fertility threatening conditions like uterine rupture, placenta previa, placenta accreta, and gravid hysterectomy increase with each subsequent CS [3].

However, a new trending reason for CS is on the rise; "maternal request" (CS in the absence of a standard obstetric indication like suspected fetal distress, the arrest of labor, history of previous CS, and malpresentation of the fetus) which consists 4–18% of all CSs whereas 14–22% of all elective CSs [3]. Some of the concerns behind requesting CS are potential risks of vaginal delivery on the fetus, fear of labor, fear of genital trauma that may cause sexual disorders, incontinence or prolapse [3].

Fear of childbirth (FOC) is an anxiety disorder or a phobic fear which may present itself as physiological

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symptoms, nightmares and concentration problems in women. Clinical FOC is described as "disabling fear that interferes with occupational and domestic functioning, as well as social activities and relationships" [4]. As FOC plays a role in high CS rates by determining maternal decision on mode of delivery (MOD); researchers concentrated on identifying pregnant women with FOC earlier as well as investigating psychological factors that play role in FOC [5]. FOC consists of psychological variables such as tocophobia, the feeling of incompetence, fear of losing control during birth which may disrupt physiological labor [4]. Moreover, there seems to be a strong relationship between FOC and pregnancy-related anxiety with socio-economic factors and certain personality characteristics such as anxiety, vulnerability, neuroticism, low self-esteem, depression, lack of social support, and dissatisfied partnership [6]. Understanding women's level of fear and attitudes for childbirth during their pregnancy and the factors that affect these attitudes may help healthcare providers to tailor women's approach to childbirth to avoid unnecessary CS.

The abiding patterns of perceiving, thinking, and relating to people about oneself and the environment that are presented in a variety of personal and social contexts and beliefs form personality traits. If these traits cause significant functional deterioration or subjective distress due to their inability to adapt or flex, they become personality disorders [7].

Personality disorders have three different clusters according to the Diagnostic and Statistical Manual of Mental Disorders (DSM) [8]. Cluster A (eccentric or odd disorders) consist of schizoid, schizotypal, and paranoid personality disorders. Cluster B (emotional, dramatic, or erratic disorders) consists; antisocial, borderline, histrionic, narcissistic personality disorders. Cluster C (anxious or fearful disorders) consists, avoidant, dependent, and obsessive-compulsive personality disorders. Personality disorders from different clusters frequently co-occur in individuals. Estimated prevalence are 5.7% for Cluster A, 1.5% for Cluster B, 6.0% for Cluster C and 9.1% for any of these personality disorders which suggests frequent overlap among the personality disorders from different clusters [8].

Only a few studies in the literature had investigated the relation between CS by maternal request (CSMR) and personality traits [9–11]. Previous studies have investigated the elements that affect positive attitudes and personality traits toward labor. This is the first study that investigates the role of personality beliefs on MOD and aims to understand the motives behind CS requests in nulliparous women in their late pregnancy better.

Material and method

Sample and procedure

A prospective study was conducted with 93 nulliparous pregnant women who applied to Baskent University Istanbul Health Application and Research Center – Obstetrics and Gynecology Clinic between July 2018 and July 2019. This study was approved by Baskent University Institutional Review Board (Project No: KA18/223).

Nulliparous pregnant women between gestational weeks of 28 to 32 with singleton pregnancies and who can read and write in Turkish were included in this study. Women with multiparity, multiple pregnancies, history of infertility treatment, diagnosed major psychopathology, chronic disease or mental retardation were not included in the study. After having consented to participate, all women (at their late pregnancy – 28 to 32 weeks of gestation) were asked if they prefer vaginal delivery or CS and given a sociodemographic data form and the questionnaires; Personality Belief Questionnaire – Short Form (PBQ-SF) and The Childbirth Attitudes Questionnaire (CAQ). Respondents took the time they needed to fill the forms and the forms were collected on the same day. Women with a medical indication for cesarean section were excluded from the study. Women who had labor contractions and tried vaginal delivery but went through CS because of a medical indication (arrest of labor or suspected fetal distress) were also excluded from the study. After exclusion, a final statistical analysis was performed on 70 women out of 93.

All the women who requested CS earlier according to the filled forms at 28–32 weeks had been encouraged for and informed about the advantages of the normal delivery by obstetricians and midwives. Women who insisted to have CS ended up with CS as requested at 39 weeks of gestation (if spontaneous contractions of labor didn't start earlier). Among women who checked vaginal delivery as their preferred MOD on the forms at 28–32 weeks of gestation, the ones who insistently requested CS during their labor were allowed to have CSMR. All women were allowed to have their partner near them to support during labor along with a midwife. The hospital was fully equipped with 24/7 serving obstetrician, midwife and operating room team. All the previously gathered data were analyzed and compared with the data acquired during the postpartum period.

Instruments

Socio-demographic data

A form developed by the research team consists of women's height, weight, level of education, marital status, profession, monthly income, details about family, history of psychiatric disorder or medical conditions and other sociodemographic determinants.

PBQ-SF

PBQ; a self-report questionnaire as an instrument to identify dysfunctional beliefs associated with nine different personality disorders by 126 items [12]. Later on, a shorter and more practical form was developed – PBQ-Short Form (PBQ-SF) – containing 65 items that measure each one of the personality beliefs associated with one of 10 personality traits/disorders; avoidant, dependent, passive-aggressive, obsessive-compulsive, antisocial, narcissist, histrionic, schizoid, paranoid and borderline [7,13]. As the scores of certain beliefs increase, the severity of the related personality trait increases. The validity and reliability of the Turkish version were confirmed by Bilge et al. [14].

CAQ

CAQ is a 16-item questionnaire with a Likert response scale of 1–4. Scale scores are computed by taking the mean of the 16 items and the total score ranges from 16 to 64. There is no cutoff value for CAQ while the higher scores are associated with higher fear of childbirth [15]. The validity and reliability of the Turkish version were confirmed by Dag et al. [16].

Statistical analysis

Statistical Analysis was performed using the "Statistical Package for Social Sciences v25.0". When parametric test assumptions are provided for numerical variables, mean ± standard deviation is given as descriptive statistics, median (minimum–maximum) is given when not provided, frequency (n) and percentage (%) are given for categorical data. For the continuous dependent variables, Student's *t* or Mann–Whitney *U* test was used for comparisons between two groups, depending on whether the dependent variable follows a normal distribution. The relationships between the variables were evaluated with the Spearman correlation analysis. The probability of a Type I error (alpha) was chosen as 5% (two-tailed) in all tests.

Results

The women were divided into two groups as vaginal delivery and CSMR. There was no significant difference between the two groups in terms of sociodemographic data and the factors that may affect the MOD like the birth weight, head circumference and gestational week at the day of birth (Table 1).

Among these 70 women, 36 of them had vaginal delivery whereas 34 of them went through CSMR. Induction rate of the vaginal birth group was 11.1% (4/36) in which the indications were oligohydramnios for one and premature rupture of membranes for the rest. 17 of 34 CS performed women mentioned their preferred MOD as "vaginal delivery" on the previously filled form, requested CS as their labor contractions began. The induction rate of this group was 17.6% (3/17) in which the indications were premature rupture of membranes for one and oligohydramnios for the rest. There were no significant differences between CAQ and PBQ scores between both of these CSMR performed groups.

There were significant differences in personality beliefs; dependent ($p = 0.033$), passive-aggressive ($p = 0.031$), obsessive-compulsive ($p = 0.001$), antisocial ($p = 0.014$), narcissistic ($p = 0.014$) and borderline ($p = 0.014$) between vaginal delivery and CS groups. The CAQ scores of the mothers who requested CS were higher ($p = 0.007$) when compared to vaginal delivery (Table 2**).**

Spearman correlation analysis was conducted between personality beliefs and total CAQ scores (n:70). Weak but significant positive relation was found

Table 1. Comparison of parameters between delivery types.

	Vaginal ($n = 36$)	Cesarean ($n = 34$)	p
Age	30.61 ± 4.271	31.91 ± 4.920	0.241[a]
BMI	26.711 ± 4.632	27.719 ± 5.544	0.411[a]
Education (University)*	31 (86.1%)	30 (88.2 %)	0.537[b]
Gestational week of delivery	38.6 ± 1.18	38.66 ± 0.921	0.826[a]
Birth weight	3243.89 ± 356.206	3295.12 ± 334.734	0.538[a]
Head circumference	34 (31–50)	34.8 (32–37)	0.181[c]

[a]Student's *t* Test, mean ± standard deviation.
[b]Chi-square test, *n* (%).
[c]Mann–Whitney *U* Test, median (minimum-maximum).
*Education level of the remaining women is high school, and not statistically significant.
$p < 0.05$ is statistically significant.

Table 2. Personality beliefs and Childbirth Attitudes Questionnaire score comparisons between vaginal delivery and cesarean section.

	Vaginal ($n = 36$)	Cesarean ($n = 34$)	p
Avoidant	10.67 ± 4.283	11.5 ± 5.189	0.465[a]
Dependent	3 (0–8)	4.5 (0–16)	**0.033**[b]
Passive Aggressive	9.19 ± 4.845	11.79 ± 5.008	**0.031**[a]
Obsessive-Compulsive	9.5 ± 4.614	13.21 ± 4.715	**0.001**[a]
Antisocial	4 (0–19)	7.5 (1–18)	**0.014**[b]
Narcissistic	6.22 ± 3.642	8.56 ± 4.113	**0.014**[a]
Borderline	4 (0–11)	5 (1–13)	**0.043**[b]
Histrionic	3 (0–9)	4 (0–20)	0.058[b]
Schizoid	10.78 ± 4.77	12.88 ± 5.198	0.082[a]
Paranoid	7 (0–18)	7 (1–20)	0.440[b]
CAQ Score	1.63 (1–2.56)	2.19 (1.13–3.44)	**0.007**[b]

[a]Student's *t*-Test, mean ± standard deviation
[b]Mann–Whitney *U* Test, median (minimum-maximum).
Significant *p*-value ($p<0.05$) is indicated in bold.

Table 3. Correlation Between Total Childbirth Attitudes Questionnaire Scores and Personality Beliefs.

	Childbirth Attitudes Questionnaire ($n = 70$)	
Personality Beliefs	Spearman's rho coefficient	p
Avoidant	0.273	**0.022**
Dependent	0.253	**0.034**
Passive-Aggressive	0.246	**0.040**
Obsessive-Compulsive	0.193	0.109
Antisocial	0.230	0.056
Narcissistic	0.328	**0.006**
Histrionic	0.192	0.112
Schizoid	0.320	**0.007**
Paranoid	0.321	**0.007**
Borderline	0.318	**0.007**

Spearman correlation.
Significant *p*-value ($p<0.05$) is indicated in bold.

between total CAQ scores and avoidant ($p = 0.022$), dependent ($p = 0.034$), passive-aggressive ($p = 0.040$), narcissistic ($p = 0,006$), schizoid ($p = 0.007$), paranoid ($p = 0.007$) and borderline ($p = 0.007$) personality beliefs (Table 3).

Discussion

Increasing CS rates are becoming a more serious concern each day worldwide. Organizations update their guidelines frequently on this issue to increase awareness [1,17].

CS rates in Turkey have reached up to 51.2% [18]. Although the superiority of vaginal delivery to CS is advocated, an effective health policy has not yet been established and the rate of CS is increasing in public, private and university hospitals (39.7%, 70.6% and 70.3% respectively) [18]. The contribution of CSMR to these rates is not well known as it's not formally documented. Another reason for liberal use of CS is the defensive medicine approach driven by fear of medico-legal problems as the obstetricians are the most frequently sued doctors in Turkey [18].

This is the first study in the literature that investigates the relationship between MOD and personality beliefs according to DSM-5, cognitive behavioral and common personality disorder model perspective. The follow-ups of the labors were done by the experienced midwives in which the obstetricians attended mostly in the last hour before birth. There was no bias for the patient nor the clinician in terms of the cost of delivery since the costs of both normal vaginal delivery and CS were about the same in the clinic.

Studies show that women with higher maternal age and education level prefer CS more than vaginal delivery as MOD [19]. Fisher et al. suggest that along with the mother's personality, economic and education levels play role in maternal MOD preference [20]. The socioeconomic and cultural differences may have an effect on this decision as they tend to have more control over their birth experience. In our study most of the women were university graduates and also in terms of age and socioeconomic levels, no significant difference was observed between the two groups.

Nulliparous women show higher levels of anxiety about vaginal delivery when compared to parous women [21]. Only nulliparous women were included to our study in which there were no previous birth experience which could have influenced the decision on the MOD. Yet, there are significant differences in the level of FOC between nulliparous women which might have an association with certain personality beliefs.

Women with a history of infertility tend to request CS as they consider this MOD safer for their baby since they may have the feeling like it's their only chance to have a healthy baby [17]. We excluded those women from the study to eliminate a possible bias.

Women with higher levels of dependent personality beliefs assume themselves as needy, helpless, and weak which might lead to preference for CS. Mothers who have low levels of self-esteem believe that they have less control over their lives and have higher levels of helplessness [22]. 'Request of CS' option seems attractive to those women as it increases reliance on intervention by a "stronger figure" to lead the experience [15].

Tolin et al. observed a strong relationship between obsessive-compulsive disorder and intolerance to uncertainty [23]. Uncertain situations make obsessive-compulsive people feel distressed and lead them to find a way to restore certainty. Since childbirth is an

important moment in life that comes with huge uncertainty, the way to maintain certainty might show up as "requesting CS" for these women.

Women with passive-aggressive personality beliefs may view others as intrusive, demanding, interfering, controlling and they might have the main belief; "others interfere with my freedom of action" which might lead to CS preference.

Cluster B personality traits, except histrionic, were found to be significantly higher in the women who prefer CS which could be due to the novelty-seeking properties of the cluster. Specifically, people with borderline personality beliefs most likely to believe that they are vulnerable, deprived, powerless, unlovable, out of control, whereas narcissistic personality beliefs are presented as they are special, unique, superior, and above the rules. Similar to our study, particular mental properties including state-dependent anxiety and increased anxiety sensitivity and personality characteristics including increased levels of neuroticism and vulnerability, low levels of conscientiousness, and extraversion are associated with high fear of childbirth which may lead to CSMR [9,24].

Furthermore, we observed that as the levels of avoidant, dependent, passive-aggressive, narcissistic, borderline, paranoid, and schizoid personality beliefs increase, the FOC increases independent of the MOD. This might indicate that levels of certain personality beliefs may be associated with FOC in women which makes them more prone to request CS.

It should be noted that every person may have some of these personality beliefs to a level which is not clinically significant to create an obvious pathology, yet on the other hand, it creates an opportunity to compare the personality tendencies between groups.

Pregnancy is a journey full of uncertainty with a certain destination; the birth. Therefore, anxiety is expected to a certain extent; it declines in the second trimester and increases during the last trimester [25], which is why we handed out the questionnaires during this period. As previously mentioned, FOC is an anxiety disorder and is found to be significantly associated with certain personality traits [6] which is also a significant finding in our study. When women perceive themselves as inadequate to giving birth, they have higher levels of FOC [15] which may also be associated with personality beliefs such as dependent and avoidant.

Birth has its own challenges and difficulties; therefore, personality traits and anxiety levels may increase these difficulties which may be intervened with specific therapy modalities. Educating women about pregnancy and birth is a cost-effective and cheap way to decrease FOC [22]. Active listening, detection of cognitive bias, and myths regarding childbirth normalizing the fear response, and cognitive restructuring of irrational beliefs about the delivery process itself might be the first steps of cognitive-behavioral therapy while working with excessive FOC which can be shaped according to certain personality beliefs.

Conclusion

This study presented significant differences between women's personality beliefs and their preferred MOD which reveals the need for further studies with larger sample sizes. Understanding the approaches of women with different personality beliefs to childbirth may help healthcare professionals to provide a better and individualized approach to avoid unnecessary CS.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

[1] Opiyo N, Kingdon C, Oladapo OT, et al. Non-clinical interventions to reduce unnecessary caesarean sections: WHO recommendations. Bull World Health Organ. 2020;98(1):66–68.
[2] Betran AP, Ye J, Moller A-B, et al. The increasing trend in Caesarean section rates: global, regional and national estimates: 1990–2014. PLoS One. 2016;11(2):e0148343.
[3] Wax JR, Cartin A, Pinette MG, et al. Patient choice cesarean: an evidence-based review. Obstet Gynecol Surv. 2004;59(8):601–616.
[4] Nilsson C, Hessman E, Sjöblom H, et al. Definitions, measurements and prevalence of fear of childbirth: a systematic review. BMC Pregn Child. 2018;18(1):28.
[5] Salomonsson B, Gullberg MT, Alehagen S, et al. Self-efficacy beliefs and fear of childbirth in nulliparous women. J Psychosom Obstet Gynecol. 2013;34(3):116–121.

[6] Saisto T, Salmela-Aro K, Nurmi JE, et al. Psychosocial characteristics of women and their partners fearing vaginal childbirth. BJOG. 2001;108(5):492–498.
[7] Bhar SS, Beck AT, Butler AC. Beliefs and personality disorders: an overview of the personality beliefs questionnaire. J Clin Psychol. 2012;68(1):88–100.
[8] American Psychiatric Association, Force APAD-5 T, editors. Diagnostic and statistical manual of mental disorders: DSM-5. Arlington (VA): American Psychiatric Association; 2013.
[9] Handelzalts JE, Becker G, Ahren M-P, et al. Personality, fear of childbirth and birth outcomes in nulliparous women. Arch Gynecol Obstet. 2015;291(5):1055–1062.
[10] Wiklund I, Edman G, Larsson C, et al. Personality and mode of delivery. Acta Obstet Gynecol Scand. 2006; 85(10):1225–1230.
[11] Ryding EL, Wirfelt E, Wangborg I-B, et al. Personality and fear of childbirth. Acta Obstet Gynecol Scand. 2007;86(7):814–820.
[12] Beck AT, Beck JS. The personality belief questionnaire. Unpublished assessment instrument. Cynwyd (PA): The Beck Institute for Cognitive Therapy and Research, 1991.
[13] Butler AC, Beck AT, Cohen LH. The personality belief questionnaire-short form: development and preliminary findings. Cogn Ther Res. 2007;31(3):357–370.
[14] Bilge Y, Bilge Y. A study on the validity and reliability of the personality belief questionnaire-short form in Turkish community sample. JCBPR. 2018;8(0):1–15.
[15] Lowe NK. Self-efficacy for labor and childbirth fears in nulliparous pregnant women. J Psychosom Obstet Gynaecol. 2000;21(4):219–224.
[16] Dönmez S, Dağ H, Çelik N, et al. Turkish version of the childbirth attitudes questionnaire. Turkiye Klin J Gynecol Obs. 2014;24(4):212–218.
[17] Masciullo L, Petruzziello L, Perrone G, et al. Caesarean section on maternal request: an Italian comparative study on patients' characteristics, pregnancy outcomes and guidelines overview. Int J Environ Res Public Health. 2020;17(13):4665.
[18] Eyi EGY, Mollamahmutoglu L. An analysis of the high cesarean section rates in Turkey by Robson classification. J Matern Fetal Neonatal Med. 2019:1–11.
[19] Ghotbi F, Akbari Sene A, Azargashb E, et al. Women's knowledge and attitude towards mode of delivery and frequency of cesarean section on mother's request in six public and private hospitals in Tehran, Iran, 2012. J Obstet Gynaecol Res. 2014;40(5): 1257–1266.
[20] Fisher J, Smith A, Astbury J. Private health insurance and a healthy personality: new risk factors for obstetric intervention? J Psychosom Obstet Gynaecol. 1995; 16(1):1–9.
[21] Zar M, Wijma K, Wijma B. Pre and postpartum fear of childbirth in nulliparous and parous women. Scand J Behav Ther. 2001;30(2):75–84.
[22] Karabulut Ö, Coşkuner Potur D, Doğan Merih Y, et al. Does antenatal education reduce fear of childbirth? Int Nurs Rev. 2016;63(1):60–67.
[23] Tolin DF, Abramowitz JS, Brigidi BD, Foa EB. Intolerance of uncertainty in obsessive-compulsive disorder. J Anxiety Disord. 2003;17(2):233–242.
[24] Saisto T, Halmesmaki E. Fear of childbirth: a neglected dilemma. Acta Obstet Gynecol Scand. 2003;82(3): 201–208.
[25] Rofé Y, Littner MB, Lewin I. Emotional experiences during the three trimesters of pregnancy. J Clin Psychol. 1993;49(1):3–12.