Published in final edited form as:
Am J Perinatol. 2011 October ; 28(9): 695–702. doi:10.1055/s-0031-1280598.

Maternal Goals for Childbirth Associated with Planned Vaginal and Planned Cesarean Birth

Lieschen H. Quiroz, M.D.[1], **Joan L. Blomquist, M.D.**[2], **Deborah Macmillan, Ph.D., R.N.C., C.N.M.**[3], **Alexis Mccullough, M.S.**[4], and **Victoria L. Handa, M.D., M.H.S.**[5]

[1]Oklahoma University Health Sciences, Oklahoma City, Oklahoma [2]Department of Gynecology, Greater Baltimore Medical Center, Baltimore, Maryland [3]School of Nursing, Georgia College and State University, Milledgeville, Georgia [4]University of Toledo College of Medicine, Toledo, Ohio [5]Department of Gynecology and Obstetrics, Johns Hopkins School of Medicine, Baltimore, Maryland

Abstract

We describe maternal childbirth goals among women planning either cesarean or vaginal birth. Women in the third trimester planning cesarean or vaginal birth were asked to report up to five childbirth goals. Goal achievement was assessed postpartum. Based on free-text responses, discrete goal categories were identified. Goals and goal achievement were compared between the two groups. Satisfaction was rated on a visual analogue scale and was compared with goal achievement. The sample included 163 women planning vaginal birth and 69 women planning cesarean. Twelve goal categories were identified. Only women planning vaginal birth reported a desire to achieve fulfillment related to childbirth. Women planning cesarean were less likely to express a desire to maintain control over their own responses during childbirth and more likely to report a desire to avoid complications. The 72 women who achieved all stated goals reported significantly higher mean satisfaction scores than the 94 women reporting that at least one goal was not achieved ($p = 0.001$). Goal achievement was higher among women planning cesarean than among those planning vaginal birth (52.2% versus 23.1%, $p < 0.001$). This research furthers our understanding of women's attitudes regarding cesarean childbirth and definitions of a successful birth experience.

Keywords

Cesarean; vaginal birth; patient-centered goals; maternal satisfaction

In certain health care settings, most notably in rehabilitation and palliative care, patients are expected and encouraged to articulate treatment goals and desired outcomes. In obstetrics, patients may voice their preferences via birth plans.[1] Birth plans are currently used by women planning both vaginal and cesarean deliveries but have been most often discussed in the context of labor and vaginal delivery.

Maternal preferences are important considerations in the management of childbirth, and therefore caregivers should seek information about the values and expectations of obstetric patients. This is particularly important as obstetric providers grapple with an apparent

Address for correspondence and reprint requests: Lieschen H. Quiroz, M.D., Assistant Professor, Oklahoma University Health Sciences, 920 SL Young Blvd., WP 2430 Oklahoma City, OK 73104 (lieschen-quiroz@ouhsc.edu).

increase in planned cesarean birth.[2] Pregnant women strongly prefer a delivery that is safest for their babies and themselves.[3] Studies indicate that some women widely perceive cesarean delivery to be as safe as or safer than vaginal birth.[4–7] Indeed, some mothers request or agree to cesarean birth because of this belief.[4] However, other than an expectation of a safe birth experience, very little is known about what women who request cesarean value regarding the birth experience. In particular, it is not known whether maternal goals for childbirth differ among women who anticipate cesarean versus vaginal birth.

We previously described maternal satisfaction with childbirth among women planning either cesarean or vaginal birth.[8] In this study, we sought to describe maternal wishes, goals, and expectations for childbirth among women planning cesarean birth compared with a group of women planning vaginal birth. In contrast with other studies exploring women's reasons for choosing primary cesarean,[4–7] our focus was on goals for childbirth among women who had already selected cesarean as a mode of delivery. Our objectives were (1) to develop a framework for describing maternal goals for childbirth, (2) to contrast the goals articulated by women planning vaginal birth with those planning cesarean birth, (3) to investigate goal achievement in both groups, and (4) to investigate the relationship between goal achievement and satisfaction. To our knowledge, there are no current studies comparing maternal goals between planned vaginal and cesarean delivery. Our aim was to investigate whether choice of delivery route would be strongly associated with the type of goals expressed. We also investigated whether goal achievement would be associated with satisfaction with the birth experience in both groups.

METHODS

This cohort study was funded by the National Institutes of Health. Between June 1, 2007, and March 31, 2009, we enrolled women during the third trimester of pregnancy. At enrollment, we assessed their goals for delivery and then followed them for 8 weeks postpartum to assess their perception of goal achievement and satisfaction with the birth experience. Recruitment was limited to women planning to deliver at a single hospital in suburban Baltimore. Ethics approval was obtained for this study, and informed consent was obtained from all participants.

Study Sample

All participants were recruited during the third trimester, prior to hospital admission for delivery. Exclusion criteria included conditions considered to be clinical indications for cesarean, including multiple gestation, prior myomectomy, prior cesarean birth, known placenta previa, known fetal malpresentation, and known fetal congenital anomalies. Finally, we excluded women who delivered prior to 37 weeks and those who were not able to complete a written questionnaire in English.

The surgical schedule on Labor and Delivery was reviewed multiple times each week to identify women planning cesarean birth. All women planning cesarean who were found to be eligible were invited to participate in the study. Women planning a vaginal birth were recruited from the same obstetric practices at the time they participated in childbirth preparation classes. Each month, research team members attended randomly selected childbirth classes and approached all participants for enrollment. Those found to be ineligible (based on a screening questionnaire) were excluded.

Data Collection

Study participants completed three questionnaires. The first questionnaire, completed at the time of enrollment, addressed maternal goals for childbirth. Each woman was asked to

report up to five goals for childbirth. Specific instructions were as follows: “Think about your wishes, goals, and expectations for the birthing process (from when the process begins until the first hours after birth). Please list the goals you hope to achieve with respect to the delivery of your child. You can list anything that you hope to experience or accomplish. Be as specific as possible.” The enrollment questionnaire also included demographic information, medical history, and obstetric history.

The postpartum questionnaire was completed within 4 days of delivery. For each goal reported by that particular participant, she was asked to report if it had been achieved “completely,” “somewhat,” or “not at all.” In addition, each woman was asked to rate her satisfaction with her birth experience on a visual analogue scale,[9,10] with a score of 100 equivalent to “completely satisfied” and a score of 0 equivalent to “completely dissatisfied.” The third and final questionnaire was completed 8 weeks after delivery and was identical to the postpartum questionnaire.

Analysis

All free-text responses regarding maternal goals were organized into categories. The first step was a detailed, line-by-line review of the free-text responses. Key terms and phrases were then identified. This analysis was performed without consideration of delivery group or within-participant goal context. To establish trustworthiness and rigor, two outside experts in qualitative research and childbirth separately performed this process, and their results were used to validate the provisional categories. To improve the reliability of the analysis triangulation, peer debriefing and group consensus was used. The initial analysis was completed by a member of the research team and two outside researchers who were all blinded to the participants’ planned route of delivery. A review of the initial results showed 96% agreement on the key words, phrases, and concepts. Goals that were viewed differently by the researchers were discussed and group consensus was reached. This initial indexing of the data created 30 categories in which the 1000 goals were coded. These categories were then further refined and reduced in number. This resulted in 12 categories with 100% agreement reached by the researchers. Any difference in interpretation of the goals was discussed with the research team, and when clarification was needed, the participant was contacted. After we established a list of goal categories, each goal was assigned to a goal category. In a few cases, a single goal was felt to represent two separate constructs, and in such cases, the goal was assigned to more than one category.

The goals reported by women planning a vaginal birth were compared with the goals of those planning cesarean birth. For each goal category, Pearson chi-square test or Fisher exact test was used to compare the proportion of women reporting goals in each category. In this analysis, women who did not deliver by the planned mode of delivery were included and classified according to their planned route of birth at the time they submitted their list of childbirth goals.

In addition, we estimated the proportion of women who reported that their goals had been achieved. Each goal was classified as attained if the woman reported that the goal was “completely achieved.” Goal attainment was compared between groups using Pearson chi-square test. Goal achievement was compared between the postpartum and 8-week questionnaire using signed rank equality test for matched data.

We used linear regression to investigate whether satisfaction scores were associated with goal achievement. Specifically, we considered the mean satisfaction scores for women who reported achievement of all listed goals, compared with those who reported that at least one goal was not met. This analysis was controlled for planned route of delivery.

The sample size was calculated based on comparing the proportion of women in each group who listed a goal in each specific category. A 20% difference between groups was considered clinically relevant. A minimum of 64 planned cesarean births were required for 80% power, assuming $\alpha = 0.05$ and a 2:1 (planned vaginal birth:-planned cesarean birth) recruitment strategy. Thus, the goal was to recruit at least 64 women planning cesarean and at least 128 planning vaginal birth. The pace of recruitment was planned such that the 2:1 ratio was maintained throughout the study period. Statistical analysis was performed using Stata 10.1 (StataCorp, College Station, TX).

RESULTS

Among 292 women planning vaginal birth, 163 (56%) participated. Of 138 eligible women planning cesarean birth, 69 (50%) participated in this study. The participation rate did not differ between groups ($p = 0.26$). All 232 enrolled participants completed the enrollment (third-trimester) questionnaire. The postpartum questionnaire was completed by 156 (96%) women in the planned vaginal group and by 100% of the planned cesarean group. The 8-week questionnaire was completed by 135 (83%) women in the planned vaginal and by 55 (80%) of the planned cesarean group. The women who completed the questionnaire did not differ from those who failed to complete the questionnaire by age, race, education, marital status, or type of planned delivery.

Characteristic of the participants are shown in Table 1. Women in the planned cesarean group were older (32.3 versus 30.9 years, $p = 0.034$), less likely to be college-educated (72.4% versus 90.2%, $p = 0.009$), and less likely to be married (81.2% versus 95.1%, $p = 0.003$) than women in the planned vaginal birth group. In the planned cesarean group, 25 women (36.2%) were parous. Only three women in the planned vaginal birth group were parous (1.8%).

The 232 participants reported a total of 961 goals. Our initial analysis classified these 961 goals into 30 categories, which then were refined/simplified/reduced, resulting in 12 goal categories. Table 2 lists specific examples for each of these 12 categories: healthy baby, healthy mother, avoid complications, avoid intervention, avoid pain, short duration of childbirth, involvement of partner or family, fulfillment, bonding with the newborn, ease of recovery, internal control, and external control. “Internal control” indicates a woman’s desire to maintain control over her own responses to events during childbirth. This is in contrast to the goal for “external control,” which reflects a desire to control the environment or the actions of others.

Table 3 compares the goals reported by women planning a vaginal birth to those planning a cesarean birth. No women in the planned cesarean group had a goal involving achieving a sense of fulfillment from the childbirth experience or a desire to avoid intervention. The remaining goal categories were expressed by women in both groups, although women in the planned cesarean group were significantly more likely than women in the planned vaginal birth group to have goals concerning a desire to avoid complications (59.4% versus 29.5%, $p < 0.001$) and ease of recovery (29.5% versus 4.9%, $p < 0.001$). In addition, women in the planned cesarean birth group were significantly less likely to desire to maintain internal control (21.7% versus 46.6%, $p < 0.001$) and for the duration of the process to be short (4.4% versus 22.1%, $p < 0.001$). These differences persisted after controlling for differences in age, educational attainment, and marital status.

Women in both groups were equally likely to report goals related to “healthy mother” and “healthy baby,” the ability to bond with the baby soon after delivery and to breast-feed

successfully, avoiding pain, receiving support from partner and family, and being able to have a degree of control over the external factors surrounding their birth experience.

Because parous and nulliparous women might voice different goals, the goals for the parous women were considered separately. We found that maternal goals were largely similar between the 44 nulliparous and 25 multiparous women planning cesarean birth. However, none of the multiparous women expressed a goal regarding the participation of her partner or family members in the birth process, although 20.5% of the nulliparous women reported this goal ($p = 0.015$). Also, nulliparous women were more likely to express a desire for external control (65.9% versus 40.0%, $p = 0.037$). In fact, in the study population as a whole, the group most likely to report a desire for external control was the subset of nulliparous women planning cesarean birth. No other significant differences were noted in the goals expressed by nulliparous and multiparous women in the planned cesarean group. We were unable to consider differences in parity among women planning vaginal birth because of the small number of multiparous women in this group.

Goal attainment was similar between the immediate postpartum questionnaire and 8-week postpartum questionnaires (Table 4). Complete goal achievement varied from 100% for "healthy mother" to less than 50% for avoiding interventions, duration of childbirth, and internal control. Goal achievement was compared between groups (Table 5), although for some goals, the small number of women reporting the goal limited our power to investigate between-group differences. Women in the planned cesarean group were more likely to achieve goals related to avoiding complications (88.0% versus 71.7%, $p = 0.046$), but this difference was only marginally statistically significant. Overall, women in the planned cesarean group were more likely to report complete achievement of all stated goals (52.2% versus 23.1%, $p < 0.001$). This difference was apparently due to relatively low maternal goal achievement for goals related to avoiding intervention, labor duration, and internal control (which were met in a minority of cases). These goals were disproportionally reported by women planning vaginal birth, thus leading to lower goal achievement in that group.

We also considered goal achievement by actual mode of delivery. Comparing women who delivered by spontaneous vaginal birth, operative vaginal birth, and unplanned cesarean, the only significant difference in goal achievement pertained to the goal of avoiding interventions. That goal was more likely to be achieved in the setting of spontaneous vaginal birth (59.4%) than in the setting of operative delivery (38.5%) or unplanned cesarean (17.8%, $p = 0.001$). Goal achievement was otherwise similar across these three groups.

Of 224 women who completed the postpartum questionnaire, the median satisfaction score was 90 (range 11 to 100). Women who had completely achieved all stated goals reported significantly higher mean satisfaction scores than those who reported at least one goal that was not completely achieved ($p = 0.001$). This relationship was not modified by planned route of delivery, although women who planned cesarean birth reported higher mean satisfaction scores ($p = 0.025$). Mean satisfaction score was not associated with age, education, marital status, or parity.

DISCUSSION

The question of maternal goals for cesarean childbirth is timely, given the apparent increase in maternal choice cesarean[2] and more broadly to the growth of cesarean birth overall. The reasons women select primary cesarean have been explored by others[4–7] and may include fear of childbirth, a perception that cesarean birth is safer, and a desire to control the events surrounding birth. Our focus was not on the reasons women might choose primary cesarean

but rather on the goals and expectations of women who anticipate cesarean as a route of delivery.

We found that most goals were shared by women planning cesarean and vaginal birth. From almost 1000 goals, we identified 12 distinct goal categories. The two categories of goals not expressed by women planning cesarean birth were the goal of fulfillment related to the childbirth experience and the desire to avoid intervention. Regarding this latter goal, it is not surprising that women planning cesarean are more willing to accept intervention than women planning vaginal birth. The observation that the other goal types were shared by both groups of women suggests that there are childbirth outcomes that may be universally valued (e.g., unrelated to the anticipated mode of birth), such as the desire for a healthy baby, desire for partner and family support, and desire for external control of the birthing environment.

In the present study, despite the similarities in goals between women planning cesarean and vaginal births, we found some notable differences. As noted, women planning cesarean birth did not express a desire to achieve a sense of fulfillment from the childbirth experience. This is an interesting finding, given our recent publication noting that women planning cesarean found their birth experience to be more fulfilling.[8] Also, women planning vaginal birth were more likely to report a desire for internal control (a desire to maintain control over one's own responses to events during childbirth). These observations may reflect the view that labor requires the woman to be responsible for her own actions and behavior, and cesarean birth is a process in which the patient is more passive.

Some of our results are similar to those of Kingdon and colleagues,[3] who investigated maternal preferences among 207 primigravida women, 98% of whom were planning vaginal birth. At 36 weeks, a large proportion agreed that they preferred a birth that would be safest for mother and baby, facilitate breast-feeding, allow the mother to "feel fit and well sooner," provide a feeling that the mother is "in control," and minimize pain. These preferences are similar to some of the goals described by our participants. However, because only 4 of 207 women in that study voiced a desire for planned cesarean birth, the authors were unable to explore potential differences in childbirth goals between women planning vaginal and cesarean birth.

We found that nulliparous women planning cesarean were likely to express goals pertaining to external control (including a focus on the birth environment, relationship with caregivers, and control of the unknown). A systematic review[11] suggested that the degree to which women achieve external control during childbirth is an important determinant of childbirth satisfaction. Specifically, the relationship of the parturient with her obstetric caregivers and maternal involvement in decision making are examples of factors that impact subjective experience with childbirth.[11] Planned cesarean may be perceived as a strategy to gain control over childbirth events. Women planning cesarean are more likely than those planning vaginal birth to express fear of labor, anxiety regarding loss of control, and concerns about the potential for a lack of support from staff during birth.[12] In the present study, nulliparous women planning cesarean birth were the group most likely to report goals related to external control, consistent with other studies suggesting that external control may be a particular concern among women planning cesarean delivery for their first child.[5]

In our study population, goal achievement was strongly associated with maternal satisfaction. A similar correlation between patient satisfaction and goal achievement has been observed in women's health, pertaining to surgical outcomes and pelvic floor dysfunction.[13–15] Thus, efforts to help women attain their goals for childbirth are likely to improve maternal satisfaction with the childbirth experience. Such efforts should include an interactive discussion between women and their obstetric providers regarding childbirth

goals. Clinicians may be able to improve satisfaction by educating women before delivery regarding realistic goals[16] and by emphasizing those aspects of care most likely to lead to goal achievement. We found that women in the planned cesarean group were more likely than women planning vaginal birth to achieve all reported goals. However, this was largely due to differences in the types of goals reported by the two groups, rather than to a difference in goal achievement within goal type.

A limitation of this research is that only half of the women approached for this study were willing to participate. Women in the planned vaginal birth group were younger, more educated, more likely to be married, and more likely to be experiencing their first delivery, and it is possible that these differences may have influenced our results. Another limitation is that we intentionally recruited women at a time that they were anticipating a specific mode of delivery. As a result, we cannot confirm that the goals reported represent the maternal response to the selected route of delivery. Alternatively, the goals might represent maternal motivations for the route of delivery selected. This is inherently a limitation of cross-sectional research. Finally, this research was conducted in a single hospital and therefore these results may not be generalizable to other populations. Further study is currently underway to confirm these results in other populations.

A strength of this study is the use of open-ended questions regarding goals. Past studies regarding maternal request have focused on the reasons and beliefs why women request cesarean delivery and have not explicitly explored the specific wishes or expectations of the woman regarding the experience of the birthing process once a decision for mode of delivery has been made. Our approach allowed women to voice their own specific goals and allowed us to identify themes that may not have been considered by the research team a priori. The 12 goal categories identified in this research provide a framework that can be used by other researchers seeking to investigate childbirth goals in other settings.

In summary, we identified some universal goals as well as differences in goals and expectations between women planning cesarean versus vaginal birth. Patient satisfaction has been shown to be correlated to goal achievement,[13–15] and indeed we found that satisfaction scores were significantly higher among women who achieved their stated goals. Thus, an improved specific understanding of women's goals and preferences can inform clinical practice and assist researchers in selecting outcomes most meaningful to women. In that respect, our findings can serve as a framework for further prospective studies investigating women's definitions of a successful birth. Our findings also reaffirm the importance of listening to women's preferences regarding their birth experience regardless of their planned mode of delivery.

Acknowledgments

FUNDING

This research was supported by National Institutes of Health, R03HD055216.

Dr. Laura Kimble and Mrs. Tammy Dennis are acknowledged for their assistance with the validation of the qualitative analysis.

References

1. Penny Simkin P. Birth plans: after 25 years, women still want to be heard. Birth. 2007; 34:49–51. [PubMed: 17324178]
2. National Institutes of Health state-of-the-science conference statement: cesarean delivery on maternal request March 27–29, 2006. Obstet Gynecol. 2006; 107:1386–1397. [PubMed: 16738168]

3. Kingdon C, Neilson J, Singleton V, et al. Choice and birth method: mixed-method study of caesarean delivery for maternal request. BJOG. 2009; 116:886–895. [PubMed: 19385961]
4. Weaver JJ, Statham H, Richards M. Are there “unnecessary” cesarean sections? Perceptions of women and obstetricians about cesarean sections for nonclinical indications. Birth. 2007; 34:32–41. [PubMed: 17324176]
5. Kingdon C, Baker L, Lavender T. Systematic review of nulliparous women’s views of planned cesarean birth: the missing component in the debate about a term cephalic trial. Birth. 2006; 33:229–237. [PubMed: 16948723]
6. McCourt C, Weaver J, Statham H, Beake S, Gamble J, Creedy DK. Elective cesarean section and decision making: a critical review of the literature. Birth. 2007; 34:65–79. [PubMed: 17324181]
7. Gamble J, Creedy DK, McCourt C, Weaver J, Beake S. A critique of the literature on women’s request for cesarean section. Birth. 2007; 34:331–340. [PubMed: 18021149]
8. Blomquist JL, Quiroz LH, Macmillan D, Mccullough A, Handa VL. Mothers’ satisfaction with planned vaginal and planned cesarean birth. Am J Perinatol. 2011 March 4. [Epub ahead of print].
9. Morgan BM, Bulpitt CJ, Clifton P, Lewis PJ. Analgesia and satisfaction in childbirth (the Queen Charlotte’s 1000 Mother Survey). Lancet. 1982; 2:808–810. [PubMed: 6126674]
10. Capogna G, Alahuhtat S, Celleno D, et al. Maternal expectations and experiences of labour pain and analgesia: a multicentre study of nulliparous women. Int J Obstet Anesth. 1996; 5:229–235. [PubMed: 15321321]
11. Hodnett ED. Pain and women’s satisfaction with the experience of childbirth: a systematic review. Am J Obstet Gynecol. 2002; 186(5, Suppl)Nature. :S160–S172.
12. Wiklund I, Edman G, Andolf E. Cesarean section on maternal request: reasons for the request, self-estimated health, expectations, experience of birth and signs of depression among first-time mothers. Acta Obstet Gynecol Scand. 2007; 86:451–456. [PubMed: 17486467]
13. Cotterill N, Norton C, Avery KN, Abrams P, Donovan JL. A patient-centered approach to developing a comprehensive symptom and quality of life assessment of anal incontinence. Dis Colon Rectum. 2008; 51:82–87. [PubMed: 18008106]
14. Hullfish KL, Bovbjerg VE, Steers WD. Colpocleisis for pelvic organ prolapse: patient goals, quality of life, and satisfaction. Obstet Gynecol. 2007; 110(2 Pt 1):341–345. [PubMed: 17666609]
15. Mahajan ST, Elkadry EA, Kenton KS, Shott S, Brubaker L. Patient-centered surgical outcomes: the impact of goal achievement and urge incontinence on patient satisfaction one year after surgery. Am J Obstet Gynecol. 2006; 194:722–728. [PubMed: 16522404]
16. Hullfish KL, Bovbjerg VE, Gibson J, Steers WD. Patient-centered goals for pelvic floor dysfunction surgery: what is success, and is it achieved? Am J Obstet Gynecol. 2002; 187:88–92. [PubMed: 12114893]

Table 1

Baseline Characteristics of Women in Planned Cesarean and Vaginal Birth Groups

Characteristic	Planned Cesarean Birth (*n* = 69)	Planned Vaginal Birth (*n* = 163)	*p* Value
Age in years (mean, SD)	32.3 (4.6)	30.9 (4.5)	0.034
Primary race			
White	51 (74%)	141 (86.5%)	0.104
Black	12 (17.4%)	13 (8%)	
Asian	3 (4.4%)	6 (3.7%)	
Other	3 (4.3%)	3 (1.8%)	
Highest level of education			0.009
High school or less	19 (27.5%)	16 (9.8%)	
College degree	27 (39.1%)	67 (41.1%)	
Graduate degree	23 (33.3%)	80 (49.1%)	
Marital status			0.003
Married	56 (81.2%)	155 (95.1%)	
Unmarried	13 (18.8%)	8 (4.9%)	
Parity			0.000
0	44 (63.8%)	160 (98.2%)	
1	19 (27.5%)	3 (1.8%)	
2	6 (8.7%)	0	

Data are reported as *n* (%) unless otherwise noted. SD, standard deviation.

Table 2

Goal Categories, with Selected Examples

Goal	Specific Example
Desire to avoid complications	“No long-term complications to me or baby”; “I hope to go through the procedure with no complications to mother or baby.”
Healthy mother	“Healthy me.”
Healthy baby	“To have a healthy baby”; “To deliver a happy and healthy baby.”
Avoidance of pain	“Delivery with epidural allowing for the least amount of pain.”
Avoid intervention	“I hope I don’t need to be induced”; “I hope to avoid forceps or vacuum”; “I hope to have a natural birth.”
Duration	“Fast delivery.”
Desire for partner/family to be supportive and involved	“I hope that my husband will be patient and supportive”; “To have my husband with me at all times during the procedure.”
External control	“I want the nurses and doctors to treat me and my husband with respect and kindness”; “Comfortable atmosphere”; “Good communication with doctor/nurse.”
Internal control	“To be strong and determined throughout”; “Relaxed (no panic attacks)”; “Manage pain effectively.”
Fulfillment	“I want to feel in touch with and empowered by my body.”
Bonding/breast-feeding	“Breast-feed and bond with baby right away after the birth.”
Ease of recovery and return to normal activities	“I hope to recovery quickly from childbirth.”

Table 3

Goals Reported by Women Planning Cesarean or Vaginal Birth

Category	Planned Cesarean (*n* = 69)	Planned Vaginal (*n* = 163)	*p* Value
Desire to avoid complications	41 (59.4%)	48 (29.5%)	<0.001
Healthy mother	10 (14.5%)	14 (8.6%)	0.18
Healthy baby	31 (44.9%)	82 (50.3%)	0.45
Avoid pain	27 (39.1%)	51 (31.3)	0.25
Avoid interventions	0 (0%)	90 (55.2%)	<0.001
Duration	3 (4.4%)	36 (22.1%)	0.001
Desire for partner/family to be supportive/involved	9 (13.0%)	27 (16.6%)	0.50
External control	39 (56.5%)	75 (46.0%)	0.14
Internal control	15 (21.7%)	76 (46.6%)	<0.001
Fulfillment	0 (0%)	17 (10.4%)	0.005
Bonding/breast-feeding	24 (34.8%)	52 (31.9%)	0.67
Ease of recovery and return to normal activities	19 (27.5%)	8 (4.9%)	<0.001

Data represent the number of women reporting at least one goal from each category.

Table 4

Goal Achievement, by Goal Category, Measured Postpartum

Goal	Completely Achieved	Somewhat Achieved	Not at All Achieved	Total Goals per Category
Desire to avoid complications	77 (80.2%)	13 (13.5%)	6 (6.3%)	96
Healthy mother	23 (100%)	0	0	23
Healthy baby	107 (98.2%)	2 (1.8%)	0	109
Avoid pain	46 (59.0%)	26 (33.3%)	6 (7.7%)	78
Avoid interventions	48 (45.7%)	17 (16.2%)	40 (38.1%)	105
Duration	17 (44.7%)	14 (36.8%)	7 (18.4%)	38
Desire for partner/family to be supportive/ involved	30 (85.6%)	5 (14.3%)	0	35
External control	161 (77.4%)	32 (15.4%)	15 (7.2%)	208
Internal control	62 (49.6%)	43 (34.4%)	20 (16.0%)	125
Fulfillment	13 (81.3%)	2 (12.5%)	1 (6.3%)	16
Bonding/breast-feeding	55 (65.5%)	22 (26.2%)	7 (8.3%)	84
Ease of recovery and return to normal activities	22 (71.0%)	6 (19.4%)	3 (9.7%)	31

Table 5

Proportion of Goals Completely Achieved in Each Category, by Planned Route of Delivery

Goal	Proportion of Goals Achieved among Women Planning Cesarean, *n* (%)*	Proportion of Goals Achieved among Women Planning Vaginal Birth, *n* (%)*	*p* Value†
Desire to avoid complications	44/50 (88.0%)	33/46 (71.7%)	0.046
Healthy mother	10/10 (100%)	13/13 (100%)	—
Healthy baby	31/31 (100%)	76/78 (97.4%)	NS
Avoid pain	18/30 (60.0%)	28/48 (58.3%)	0.884
Avoid interventions	—	48/105 (45.7%)	—
Duration	3/3 (100%)	14/35 (40.0%)	0.081
Desire for partner/family to be supportive/involved	7/9 (77.8%)	23/26 (88.5%)	0.586
External control	63/77 (81.8%)	98/131 (74.8%)	0.243
Internal control	11/16 (68.8%)	51/109 (46.8%)	0.101
Fulfillment	—	13/16 (81.3%)	—
Bonding/breast-feeding	19/30 (63.3%)	36/54 (66.7%)	0.758
Ease of recovery and return to normal activities	18/24 (75.0%)	4/7 (57.1%)	0.384

NS, not significant.

*Data represent the number of times each goal was achieved, divided by the number of times each goal was expressed. Each participant may have expressed more than one goal per category. Therefore, the denominator represents the number of goals expressed in each category.

†Chi-square or Fisher exact test.