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The First Baby Study: What women would like to have known about first childbirth. A mixed-methods study

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Abstract

Background: Although prenatal care providers aim to prepare women for first childbirth, little research has explored retrospectively what birthing people would like to have known before first childbirth.

Aim: To describe women's reports of what they would like to have known before first childbirth but feel they were not told.

Methods: This is a secondary analysis of the First Baby Study, a large prospective cohort study conducted in Pennsylvania, USA. Telephone interviews were conducted with 3006 women 1 month after their first childbirth. Women were first asked: "Was there anything that you would have liked to have known before your delivery that you were not told?". If "yes" they were asked a second question: "Please tell me what you would have liked to have known before your delivery".

Analysis: A convergent mixed-methods analysis including descriptive analytics to compare characteristics of women by answers to the first question, and qualitative content analysis of women's open-ended answers to the second question.

Findings: A total of 441 women (14.7%) reported there was something they would like to have known before their first childbirth. Women described that communication with care providers was their main concern. They would have liked a better understanding of their options before birth, more agency in decision-making, and more information about the topics of their body, their birth, their baby, and what to expect beyond birth.

Conclusions: Results highlight important topics for childbirth education, and the impact of gaps in shared decision-making, patient–provider communication, and supportive care practices for first childbirth, especially where women have identified vulnerabilities.

KEYWORDS

childbirth education, continuity of patient care, pregnancy, prenatal education, shared decision-making, woman-centered care

1 | INTRODUCTION

Childbirth education (CBE) aims to help birthing people access accurate and up-to-date evidence-based information to make informed decisions about their care.[1] According to international guidelines, CBE is considered an essential component of maternity care.[2,3]

Most women access information about labor management and pain relief options by means of CBE classes,[4] however, fewer women are reportedly attending CBE.[4] Sources of information are becoming increasingly diverse with independent and online courses available.[5] Trial evidence for effectiveness of CBE in reducing rates of interventions is equivocal and interventions remain diverse in content, implementation and outcomes.[2,6,7] As attendance declines[4] and information diversifies, women may not be adequately prepared for the realities of childbirth and the early postpartum period, widening existing disparities regarding health outcomes and access to social support networks. Standardization of information may assist in filling an information gap, however, it is not clear what should be included or what would facilitate successful translation into practice.[2,8] While long reported, little has been done to investigate what women would like included in classes that are ostensibly for their benefit.

There is uncertainty about the impact that participant-level factors, CBE class characteristics, and provider-level characteristic have on women's information and knowledge gaps, as well as their perceived agency in first childbirth.[9] This mixed-methods study, as part of the First Baby Study,[10] explored qualitative responses to a retrospectively asked question about what women would have liked to have known before their first childbirth but felt they were not told. Additionally, if women responded "yes" to the first question, we examined any difference from women who responded "no," in terms of demographics, psychosocial and care provision characteristics, and maternal health outcomes. Women's retrospective experiences may provide insight into practices for successful integration of CBE or identification of vulnerable populations for whom CBE is a priority service. While the original study was reported in 2013, the robust data collection and large sample size provide high-quality data for analysis. These data have not yet been evaluated for women's experiences of CBE and what they wanted to know before having their first baby. The information remains relevant and coherent in the context of women's experiences of CBE in the digital age, as information is still lacking with respect to this inquiry.

2 | METHOD

2.1 | Study design

This paper reports on a secondary data analysis from the First Baby Study (FBS),[10] a prospective, cohort study of women at first childbirth. The primary purpose of the FBS was to investigate the association between mode of first childbirth and subsequent fecundity and fertility.[10,11]

2.2 | Participants

Participants were nulliparous, pregnant women, aged 18–35, living in Pennsylvania, USA. Women were included if they were expecting their first child, aged 18–35 years at the time of recruitment, English or Spanish speaking, and planning to give birth in a hospital in Pennsylvania.[10]

2.3 | Demographic and background measures

Data were drawn from baseline and 1-month interviews, birth certificates, and hospital discharge data. Interviews were conducted between January 2009 and April 2011. Demographic and background information, insurance, and poverty level[12] were obtained from the baseline interview (detailed in Appendix S1). Social support during pregnancy was measured, and details regarding type and number of CBE classes attended. A composite measure of maternal childbirth complications was created from hospital discharge data (Appendix S1), and participants completed measures about childbirth experience,[13] including shared decision-making,[9] childbirth-related post-traumatic stress (CR-PTSD),[14,15] postpartum PTSD (adapted from Trauma Screening Questionnaire), and childbirth experience measured using the First Baby Study Birth Experience Scale (FBS-BES; Appendix S2).

2.4 | Data analyses

A mixed-methods analysis using integrated qualitative childbirth experience telephone survey response data, and quantitative demographic, psycho-social, and obstetric data were used.

Data integration occurred at the study design, analysis, and results levels, using a convergent design, so that qualitative and quantitative results could be compared and interpreted in light of each other.[16]

Quantitative analyses were performed, including frequencies, means, and standard deviations, to describe demographic, psychosocial, and birth-related variables. We compared women who answered "yes" to the question "Was there anything that you would have liked to have known before your delivery that you were not told?" to those who answered "no", using chi-square tests or t tests where appropriate, using the Statistical Package for the Social Sciences (SPSS) for Windows Version 28,[17] (Table 1).

A qualitative content analysis was used to analyze telephone response data from the open-ended survey question. Using an inductive qualitative content analysis, the three phases of preparation, organization, and reporting were used.[13] Following the 1-month postpartum interview, women's responses were transcribed and selected as the unit of analysis.

In the preparation phase, the integrity and criticality of the text were checked through recursive and repetitive checks of the interpretation of data as outlined by Whittemore and colleagues[18] in order to make sense of the manifest content and identify the prominent codes and patterns.[13]

In the organization phase, data were further coded and re-ordered, mapping codes and concepts onto a whiteboard, and comparing codes and interpretations with the research team. We created a codebook in Excel where categories and concepts were further refined. Researchers KL and KS reviewed and coded the data using the software program NVIVO.[19] During the analysis, researchers (KL, KS) reviewed and refined the text and the codes in an iterative process to explore the relationships using an inductive approach, re-checking concordance from original coding,[13] and eventually coming to agreement on a conceptual framework with the research team (KK and JVL).

In the reporting phase, codes were clustered to create categories (represented in Figure 1). To ensure validity of the analysis, the emerging categories and interpretations of the coded data were discussed with the research team, and categories and concepts were consolidated.[13,20] Quotations are taken from the data collector's third-person transcription of women's responses, as described in the original study,[10] and this text is used to illustrate the categories and concepts, consistent with the concept of "abstraction."[21] The integration of data gives context to the women's experiences and enhances understanding of the population to whom these data relate. Women were not individually identified.

2.5 | Reflexivity statement

The author team consists of a midwife, an epidemiologist with expertise in maternal health, and two maternal health researchers and childbirth educators, working with pregnant and birthing women as allied health practitioners. The team has conducted maternity health research, with quantitative and qualitative research expertise in clinical trials, cohort studies, antenatal childbirth education, and exploring women's experiences. We employed ongoing, recursive data examination to ensure we arrived at a transparent interpretation involving robust discussions to examine our personal philosophies and any influence on the data. We actively sought to examine discrepancies in the data that challenged the categories we were constructing.

3 | RESULTS

Of the 3006 women who participated in the 1-month postpartum interview, 454 (15.1%) answered "yes" to the primary question, 2551 (84.9%) answered "no," and 1 woman answered "don't know," leaving a sample size of 3005. There were 441 valid qualitative responses to the follow-up question "what would you have liked to have known?"

Table 1 details demographic and psychosocial factors, attendance at CBE, and hospital factors (decision-making, intervention type, and obstetric outcomes). Women who answered "yes" to the question, were more likely to be older, have a college degree, report higher levels of stress during pregnancy (34.1% vs. 25.7%, $p < 0.001$), and have low social support (21.4% vs. 16.2%, $p < 0.001$). There was no difference between groups for insurance type, labor support provided, or attendance at CBE, but there was a trend toward attending fewer than three CBE sessions for women who answered "yes."

For obstetric factors, women who answered "yes," were more likely to have their labor induced (37.9% vs. 33.1%, $p < 0.05$), to experience labor longer than 19 hours (29.6% vs. 22.9%, $p < 0.02$), experience poor pain control (46.0% vs. 39.2%), complications during childbirth (35.7 vs. 25.7, $p < 0.001$), and have an instrumental vaginal birth or unplanned cesarean section (CS) (11.0% vs. 8.5% and 28.0% vs. 22.6%, $p < 0.01$). These women were less likely to report a positive birth experience ($p < 0.001$), reported lower levels of shared decision-making ($p < 0.001$), and were more likely to report symptoms of childbirth-related PTSD ($p < 0.001$; psychometrics for the scaled instruments are reported in Appendix S1).

4 | FINDINGS OF THE QUALITATIVE ANALYSIS

The main category "*tell me my options*" emerged as women's responses indicated that they lacked information,

TABLE 1 Participant background and birth-related factors overall, and in relation to response to question "Was there anything that you would have liked to have known before your delivery that you were not told?"

"Was there anything that you would have liked to have known before your delivery that you were not told?"				
Factors	**Overall *N* = 3005**	**Yes *N* = 454 (15.1%)**	**No *N* = 2551 (84.9%)**	***p*-value**
Maternal age	27.24 (4.40)	28.36 (4.35)	27.04 (4.38)	<0.001
Education level				
High school or less	501 (16.7)	56 (12.3)	445 (17.4)	<0.001
Some college or technical	803 (26.7)	97 (21.4)	706 (27.7)	
College degree or higher	1701 (56.6)	301 (66.3)	1400 (54.9)	
Marital status				
Married	2117 (70.4)	334 (73.6)	1783 (69.9)	0.114
Not married	888 (29.6)	120 (26.4)	768 (30.1)	
Maternal race/ethnicity				
White non-Hispanic	2501 (83.2)	380 (83.7)	2121 (83.1)	0.974
Black non-Hispanic	221 (7.4)	31 (6.6)	190 (7.4)	
Hispanic	166 (5.5)	25 (5.5)	141 (5.5)	
Other	117 (3.9)	18 (4.0)	99 (3.9)	
Type of insurance coverage				
Private	2312 (76.9)	362 (79.7)	1950 (76.4)	0.125
Public	693 (23.1)	92 (20.3)	601 (23.6)	
Poverty status				
Poverty	255 (8.5)	36 (7.9)	219 (8.6)	0.404
Near poverty	348 (11.6)	45 (9.9)	303 (11.9)	
Not poverty	2402 (79.9)	373 (82.2)	2029 (79.5)	
Stress during pregnancy				
Low (12–16)	1066 (35.5)	118 (26.0)	948 (37.2)	<0.001
Medium (17–20)	1123 (37.4)	181 (39.3)	942 (37.0)	
High (21–48)	810 (27.0)	155 (34.1)	655 (25.7)	
Social support during pregnancy				
Low (5–19)	510 (17.0)	97 (21.4)	413 (16.2)	<0.001
Medium (20–23)	1231 (41.0)	196 (43.2)	1035 (40.6)	
High (24, 25)	1261 (42.0)	161 (35.5)	1100 (43.2)	
Number of perinatal education classes attended				
0	575 (19.1)	74 (16.3)	501 (19.6)	0.068
1	943 (31.4)	142 (31.1)	801 (31.4)	
2	704 (23.4)	99 (21.8)	605 (23.7)	
3+	783 (26.1)	139 (17.8)	644 (25.2)	
Labor induced				
Yes	1019 (33.8)	172 (37.9)	844 (33.1)	<0.05
No	1989 (66.2)	282 (62.1)	1707 (66.9)	
Type of labor support				
Midwife	717 (23.9)	97 (21.4)	620 (24.3)	0.330
Doula	192 (6.4)	27 (5.9)	165 (6.5)	
Neither	2096 (69.8)	330 (72.7)	1766 (69.2)	

TABLE 1 (Continued)

"Was there anything that you would have liked to have known before your delivery that you were not told?"				
Factors	**Overall *N* = 3005**	**Yes *N* = 454 (15.1%)**	**No *N* = 2551 (84.9%)**	***p*-value**
Maternal complications during birth				
Yes	818 (27.2)	162 (35.7)	656 (25.7)	<0.001
No	2187 (72.8)	292 (64.3)	1895 (74.3)	
Long labor duration (19+ h)				
Yes	667 (22.2)	125 (27.5)	542 (21.2)	0.003
No	2338 (77.8)	329 (72.5)	2009 (78.8)	
Poor pain control during labor and/or delivery				
Yes	1210 (40.3)	209 (46.0)	1001 (39.2)	0.007
No	1795 (59.7)	245 (54.0)	1550 (60.8)	
Mode of birth				
Spontaneous vaginal	1875 (62.4)	251 (55.3)	1624 (63.7)	0.007
Instrumental vaginal	267 (8.9)	50 (11.0)	217 (8.5)	
Planned cesarean	160 (5.3)	26 (5.7)	134 (5.3)	
Unplanned cesarean	703 (23.4)	127 (28.0)	576 (22.6)	
Gestational age (weeks)				
Late preterm (34–37)	120 (4.0)	15 (3.3)	105 (4.1)	0.149
Early term (37, 38)	575 (19.1)	87 (19.2)	488 (19.1)	
Full term (39, 40)	1813 (60.3)	261 (57.5)	1552 (60.8)	
Late/post-term (41+)	497 (16.5)	91 (20.0)	406 (15.9)	
Shared Decision-Making Scale				
0–3 (low)	243 (8.1)	75 (16.5)	168 (6.6)	<0.001
4–5 (medium)	896 (29.8)	151 (33.3)	745 (29.2)	
6 (high)	1866 (62.1)	228 (50.2)	1638 (64.2)	
Postpartum PTSD				
Yes	227 (7.6)	65 (14.3)	162 (6.4)	<0.001
No	2778 (92.4)	389 (85.7)	2389 (93.6)	
Childbirth Experience Scale (Mean (SD))	68.64 (6.41)	66.47 (7.3)	69.02 (6.18)	<0.001
When I was in hospital to have my baby, I was treated with dignity and respect				
Strongly agree	2717 (90.4)	377 (83.0)	2340 (91.7)	<0.001
Agree	238 (7.9)	55 (12.1)	183 (7.2)	
Disagree (somewhat or strongly)	50 (1.7)	22 (4.8)	28 (1.1)	

knowledge, and understanding of their options, highlighting communication issues with clinicians. Women wanted information about their bodies, the birth, their babies, and what to expect beyond the birth. These became the category titles with each having two further concepts (Figure 1).

4.1 | Main category: *Tell me my options*

Communication issues were the main concern of respondents. Women wanted to understand their options, and thereby have greater agency in their births and receive more respectful care. Women understood that hospital policies and procedures were observed, but reported lacking knowledge and communication of these, reducing women's options and experience of care. Women reported not being informed about certain procedures occurring during pregnancy and birth and felt clear explanation before their occurrence would allow them to make informed choices and provide consent.

> [S] would have liked to have known all of the options for delivery

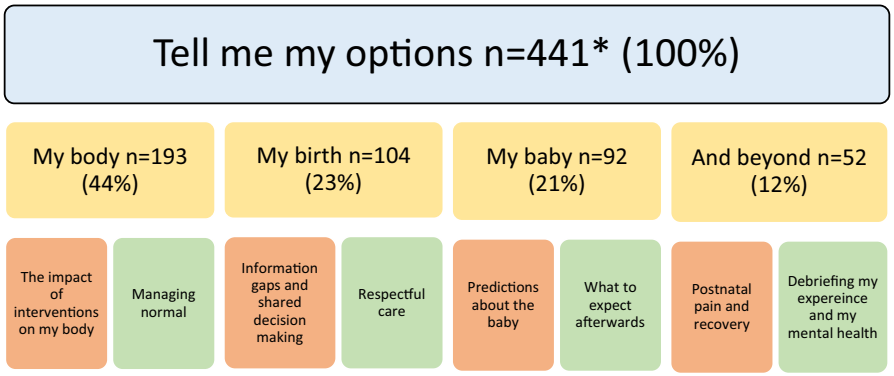

FIGURE 1 Main categories, categories, and concepts—Tell me my options. *441 valid responses to follow-up question "what would you have liked to have known?" [Colour figure can be viewed at wileyonlinelibrary.com]

The main category, *Tell me more*, describes women's desire for greater information. This mainly points to communication issues, which effectively served to limit women's choices, decision-making capacity, and agency. This category led to the emergence of four further categories that describe women's experiences in a more nuanced way; *My body; My birth*, *My baby; And beyond*. These categories led to further concepts (see Figure 1).

4.2 | First category: *My body*

The most frequent comments related to the category "*My Body*," reported by 193 women (44%). This category describes women wanting to understand the impact that common childbirth practices would have on their bodies. In the context of the quantitative results, women who answered "yes" to the main question were more likely to have induced labor, other labor interventions, and adverse events in birth, compared to those who answered "no." Women wanted to understand interventions, and their potential side effects, as well as choices for labor and opportunities for optimizing normal birth practices. This led to the emergence of two concepts: "The impact of interventions on my body" and "Managing normal."

4.2.1 | Concepts

- The impact of interventions on my body

Women reported the impact of medical interventions, commonly referring to induction of labor, epidural analgesia, and CS. They indicated being largely unaware of the process, particularly for induction of labor, noting unexpected side effects, and loss of agency, which has implications for decision-making and informed consent.

> To understand the induction process better and to have more say as to whether I would be induced or not

Women were not informed that induction of labor requires continuous electronic fetal monitoring (CEFM), which meant being connected by wires or cords to a machine, limiting freedom of movement, and normal physiology;

> That I would have been strapped to the bed and not able move

- Managing normal physiology

Women discussed being restricted in how to manage normal birth processes, such as the pushing stage of labor, that there might be options for birth positions to optimize physiology;

> Only position that she could deliver was on her back, she thought that there would be other positions that she could do to deliver the baby

4.3 | Second category: *My birth*

This category described women wanting to know more about the birth itself, 104 responses (23%), and the effect that communication and care received in the hospital had on their labor. Many women commented about gaps in information from care providers and their lack of involvement in decision-making. In this cohort, women were more likely to have experienced long labor, complications in labor, and reported symptoms of PTSD, commonly referring to the impact of nursing and obstetric care received. This led to two concepts: *Information gaps and shared decision-making*, and *respectful care*.

4.3.1 | Concepts

- Information gaps and shared decision-making

This concept referred to gaps in women's understanding of childbirth due to a lack of information or education about labor and birth.

> Knowledge ahead of the time of the different occurrences that can happen during labor and delivery

Many responses related to care providers not giving information about common procedures and limiting women's options because they did not understand the process or implications. Women identified having limited understanding of the health system, not knowing what questions to ask, or feeling unable to question those in authority.

Women wanted to visit the space where they were giving birth, understand different models of care, and their available options;

> Could have a doula or a midwife, she did not know that the insurance would pay for it

- Respectful care

"Respectful care" describes women's experiences of their treatment during labor. The lack of respectful care is highlighted by responses regarding women not participating in decision-making or providing informed consent about basic procedures;

> Was not told she was being induced

This also occurred during the labor, having major implications for informed consent;

> Information on the episiotomy (It was performed without telling [R] beforehand and it was painful.)

4.4 | Third category: *My baby*

"*My Baby"* considered how characteristics of the baby affected women's labors and postnatal experiences, 92 (20%) responses. Women in this cohort were more likely to have an induced labor and experience childbirth complications including CS and instrumental vaginal birth.

This led to the emergence of two concepts: *Wanting predictability* and *what to expect afterward*.

4.4.1 | Concepts

- Wanting predictability

It is generally accepted that childbirth contains a multitude of uncertainties, but with increasing technology and scheduling of birth, there is a growing expectation of predictability, including the baby's size, despite evidence that this increases intervention rates.

> I felt that I should not have been on the Pitocin so long and the midwife should have known that I was having a large baby.

- What to expect afterward

Women wanted more information about breastfeeding and baby care practices before birth. Women commented about the value of support received from lactation consultants, with some wishing they had accessed this support sooner, while others found the experience unsatisfactory;

> I wish I had gotten more information on breastfeeding or had taken a class;

In discussing care immediately following birth, comments again related to a lack of communication. Women wanted to be informed about the reasons why interventions were occurring, even in emergency situations;

> Would have like to have known earlier that it was decided to bring a NICU team in to take care of the baby immediately after birth as well as given more information as to why baby was taken to NICU.

4.5 | Fourth category: *And beyond*

Finally, *"And beyond"* described women's physical and emotional recovery from birth, 52 responses (11%). Women in this cohort were more likely to have experienced complications, report symptoms of PTSD, and lower perceived social support. This led to the emergence of two concepts: *Postnatal pain and recovery* and *debriefing the birth and mental health*.

4.5.1 | Concepts

- Postnatal pain and recovery

Women provided responses about the unexpected experience of pain or recovery time in the postnatal period;

How I would feel afterward. For example, [R] didn't expect to be exhausted and was unprepared for the length of time for her body to rebound after childbirth.

- Debriefing my experience and mental health

Women expressed their desire to know the effects having a baby would have on their mental and emotional health to better prepare them for the postnatal period;

I would have liked to have known about how emotional you could be after giving birth.

This highlights the value of connecting women to services and the importance of network building for social support in CBE classes.

5 | DISCUSSION

This study sought to explore responses to a retrospectively asked question about what women would like to have known regarding their first childbirth, but felt they were not told. The findings from this study support a growing body of research regarding the impact of women's limited agency in hospital-based births,[9] and the contribution of this in the emerging research on obstetric violence (OV).[21,22] OV is considered a consequence of structural violence within maternity care,[23] and includes any form of abusive and disrespectful attitudes or practices toward women during childbirth.[22] OV is deeply embedded in unequal relationships of class, gender, race, and medical power, and constitutes a major barrier to women's shared decision-making, consenting processes, and accessing appropriate services and respectful care.[21,24,25] The research highlights the impact that excessive medical interventions, as well as a lack of shared decision-making, effective communication, continuity pathways, and respectful, humanized care, have on women.[23,26,27,28] The literature identifies these as significant drivers of women's experience of birth trauma and violence, with marginalized women being particularly vulnerable.[23,26,29] The World Health Organization notes that although OV can be experienced by women as disrespectful, abusive, or neglectful treatment throughout pregnancy, women are particularly vulnerable to OV during childbirth.[22,30] The current dominant models of fragmented and unintegrated care, marked by unequal decision-making (coercion) and disrespectful care, are consistently reported as not meeting women's basic needs. Understanding women's experiences highlights the ongoing need for commitment toward integrated continuity models of care which supports and embeds CBE information and skills into routine maternity services.

The onus remains on healthcare systems to proactively design woman-centered models of care, provide supportive care practices, and promote communication and informed decision-making. Much of the information that is provided to women and birth partners in CBE, and is often summarized into documents such as birth plans or preferences, is found to be disregarded or not integrated into intrapartum care practices.[8] Notable research has described pathways to implementation of respectful evidence-based care, with a primary focus on maintaining dignity, privacy, informed choice, consent, emotional support, and freedom from harm. This includes training providers on values, changing attitudes, and improving interpersonal communication.[27,31,32] It is vital that birth settings have culturally appropriate, adequate infrastructure with sufficient organization to enable women's agency in birth, which includes observance of evidence-based practices learned in CBE.

This research has identified that women experience gaps in knowledge, information, and patient-centered care, contributing to adverse experiences of childbirth with potential long-term impacts.[33,34] This information is broadly generalizable to countries with embedded CBE in maternity care; however, the questions that remain are: how do we respond to these identified gaps? And how should it be delivered?

The gap in information, knowledge, and skills identified by women points to a need to integrate supportive care practices throughout the antenatal care pathway, such as continuity models of care, resources for shared decision-making, and woman-centered physiological approaches to birth into institutional care, without applying the burden of implementation onto women.[35] This is broader than simply expanding CBE classes and implies improved decision-making processes at every level of care, with integration of evidence-based information from all care providers in a coherent and consistent manner. If women do not understand their choices or are coerced into complying with hospital practices,[26] it will limit their agency and ability to participate in decision-making and provide informed consent. The responsibility for positive healthcare requires a re-orientation of a hospital's focus to a positive experience, not just delivery of medical interventions or the avoidance of adverse events.

The use of CBE strategies, supported by information provided at every level of antenatal care provision, using tools such as infographics, decision aids, and birth plans, to understand common procedures and options for care could be beneficial in creating some standardization for shared decision-making and consenting processes.[36,37] Addressing the fragmentation of information and responsibility for care is an important consideration when understanding gaps in women's knowledge, and it is incumbent upon institutions to support woman-centered care at every level of policy and practice. ACOG has

provided clear and unambiguous information on institutionally based practices that support woman-centered care with the aim of reducing unnecessary intervention rates in birth.[35,38] This underscores the role of institutions in structuring information and policy to deliver more salutogenic outcomes, without placing the burden of responsibility on women.[39]

5.1 | How should the information be delivered?

This analysis points to pathways for delivery of information and promotion of agency for women at birth via comprehensive evidence-based CBE programs.[7,40] Standardization of CBE content requires integration of CBE practices into routine care and institutional policies within the hospital setting.[41] However, the tension between what women think will happen from information provided in CBE and what occurs in the hospital and the early postpartum period needs to be addressed, including understanding the impact of hospital unit management and care delivery on outcomes and experiences for women.[42] While CBE remains disconnected from routine antenatal care, it is unlikely that this tension will be resolved. As discussed in our previous research,[6,8] these findings have implications for routine antenatal care and point to systems-level integration of CBE practices into routine antenatal care, supported by management and evidence-based policies and guidelines.

In this study, several important factors were shown to influence women's responses, such as low social support and scheduled induction of labor.[43] Identification of these factors in the antenatal period is entirely feasible. By targeting provision of integrated CBE and continuity of care practices, care providers can effectively support this group of women. CBE classes also provide the opportunity to create supportive social networks as one of the stated aims of CBE programs.[3,8,44] Recommendations for what can be included according to women's voices in the study have been summarized in Box 1.

The capacity for CBE to provide evidence-based information and supportive practices for pregnancy, birth, and the postpartum period is evident.[7] However, without integration into the hospital system, practicing shared decision-making, and having respectful care of women at the core, CBE will only address part of these issues.[6]

6 | STRENGTHS AND LIMITATIONS

While this study reports on data that are more than 10 years old, the information is highly relevant, and supported by emerging research on birth trauma and obstetric violence. Over the past 10 years, while research on CBE approaches has demonstrated effectiveness in various outcomes, these practices have not been widely adopted by hospital-based classes, nor integrated into hospital policies and guidelines. Additionally, women in this study tended to be well-educated, privately insured, and from a Caucasian background, which limits generalizability, but may also indicate areas of need, not apparent previously, as the respondents were drawn from a large state-wide cohort.

BOX 1 Areas that CBE should cover include.

1. Normal physiology of pregnancy and childbirth.[37,45]
2. Managing normal birth with a variety of pharmacological and non-pharmacological methods, which are included and demonstrated during classes, to support labour.[7,40,46]
3. Explanation of common interventions and expectations of hospital care, risks and benefits, and evidence-based care.[35,38,47]
4. Shared decision-making—care options and hospital procedures (autonomy).[48,49]
5. Promotion of initiation and duration of breastfeeding to enhance bonding and normal physiological processes for the postnatal period.[45,50]
6. Postnatal—caring for baby and me, and strengthening social support among participants for postnatal support.[3,45,51]

Recommendations: Public resources that may assist health professionals and parents

1. CAPEA—resources and competency standards—https://capea.org.au/
2. Childbirth Connection—http://www.childbirthconnection.org/
3. Lamaze—Healthy Birth Practices and Competencies—-https://www.lamaze.org/
4. Evidence-Based Birth—https://evidencebasedbirth.com/

7 | SUMMARY

Promoting comprehensive CBE can strengthen social support networks and inform women about physiological birth and common interventions. However, identifying risk factors, such as low social support and scheduled induction of labor, before birth is crucial. Policy and practice

changes should prioritize improving women's birthing experiences by enhancing access to affordable, evidence-based care, and postnatal services. This includes addressing contributing factors at hospital, clinician, and patient levels, engaging women in shared decision-making, and ensuring clear consenting practices. To support these outcomes, CBE must be woman centered, evidence based, and integrated into hospital policies at all levels for effective implementation.

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CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available by contacting the corresponding author.

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REFERENCES

1. Lothian J. *Does Childbirth Education Make a Difference?* . Springer; 2016:139-141.
2. Gagnon AJ, Sandall J. Individual or group antenatal education for childbirth or parenthood, or both. *Cochrane Database Syst Rev*. 2007;3:CD002869. doi:10.1002/14651858.CD002869.pub2
3. Australian Government DoH. *Pregnancy Care Guidelines. Preparing for pregnancy, childbirth and parenthood*. Australian Government; 2018. Accessed November 4th 2019.
4. Declercq ER, Sakala C, Corry MP, Applebaum S, Herrlich A. Major survey findings of listening to mothers III: new mothers speak out. *J Perinat Educ*. 2014;23(1):17-24. doi:10.1891/1058-1243.23.1.17
5. Vanderlaan J, Sadler C, Kjerulff K. Association of Delivery Outcomes with the number of childbirth education sessions. *J Perinat Neonatal Nurs*. 2021;35(3):228-236. doi:10.1097/jpn.0000000000000579
6. Levett KM, Dahlen HG. Childbirth education in Australia: have we lost our way? *Women Birth*. 2018;32:291-293. doi:10.1016/j.wombi.2018.05.007
7. Hong K, Hwang H, Han H, et al. Perspectives on antenatal education associated with pregnancy outcomes: systematic review and meta-analysis. *Women Birth*. 2021;34(3):219-230. doi:10.1016/j.wombi.2020.04.002
8. Levett K, Sutcliffe KL, Dahlen HG. Childbirth education - is it a lost opportunity for change? *Int J Birth Parent Educ*. 2020;7(2):3-4.
9. Attanasio LB, Kozhimannil KB, Kjerulff KH. Factors influencing women's perceptions of shared decision making during labor and delivery: results from a large-scale cohort study of first childbirth. *Patient Educ Couns*. 2018;101(6):1130-1136. doi:10.1016/j.pec.2018.01.002
10. Kjerulff K, Velott D, Zhu J, et al. Mode of first delivery and women's intentions for subsequent childbearing: findings from the first baby study. *Paediatr Perinat Epidemiol*. 2013;27(1):62-71.
11. Kjerulff K, Paul I, Weisman C, et al. Association between mode of first delivery and subsequent fecundity and fertility. *JAMA Netw Open*. 2020;3(4):e203076.
12. US Census Bureau. US Census Bureau Poverty. Accessed September 17, 2013. http://www/census.gov.
13. Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs*. 2008;62(1):107-115. doi:10.1111/j.1365-2648.2007.04569.x
14. Kjerulff K, Attanasio L, Sznajder K, Brubaker L. A prospective cohort study of post-traumatic stress disorder and maternal-infant bonding after first childbirth. *J Psychosom Res*. 2021;144:110424.
15. Elvander C, Cnattingius S, Kjerulff K. Birth experience in women with low, intermediate or high levels of fear: findings from the first baby study. *Birth*. 2013;40(4):289-296.
16. Fetters M, Curry L, Creswell J. Achieving integration in mixed methods designs—principles and practices. *Health Serv Res*. 2013;48(6pt2):2134-2156. doi:10.1111/1475-6773.12117
17. IBM Corp. *IBM SPSS Statistics for Windows, Version 28.0*. IBM Corp; 2021.
18. Whittemore R, Chase SK, Mandle CL. Validity in qualitative research. *Qual Health Res*. 2001;11(4):522-537. doi:10.1177/104973201129119299
19. NVivo qualitative data analysis software. Version 12. 2018.
20. Polit D, Beck CT. *Essentials of nursing research: Appraising evidence for nursing practice*. Wolters Kluwer; 2014.
21. Martínez-Galiano JM, Martinez-Vazquez S, Rodríguez-Almagro J, Hernández-Martinez A. The magnitude of the problem of obstetric violence and its associated factors: a cross-sectional study. *Women Birth*. 2021;34(5):e526-e536.
22. Šimonović D. *Report of the Special Rapporteur on Violence against Women, its Causes and Consequences on a Human Rights-Based Approach to Mistreatment and Violence against Women in Reproductive Health Services with a Focus on*

Childbirth and Obstetric Violence. United Nations General Assembly; 2019.
23. Sadler M, Santos MJ, Ruiz-Berdún D, et al. Moving beyond disrespect and abuse: addressing the structural dimensions of obstetric violence. *Reprod Health Matters*. 2016;24(47):47-55.
24. Chadwick R. Ambiguous subjects: obstetric violence, assemblage and south African birth narratives. *Fem Psychol*. 2017;27(4):489-509.
25. Zampas C, Amin A, O'Hanlon L, Bjerregaard A, Mehrtash H, Khosla R. Operationalizing a human rights-based approach to address mistreatment against women during childbirth. *Health Hum Rights*. 2020;22(1):251-264.
26. Keedle H, Keedle W, Dahlen HG. Dehumanized, violated, and powerless: an Australian survey of women's experiences of obstetric violence in the past 5 years. *Violence against Women*. 2024;30:2320-2344.
27. Bohren MA, Tunçalp Ö, Miller S. Transforming intrapartum care: respectful maternity care. *Best Pract Res Clin Obstet Gynaecol*. 2020;67:113-126.
28. Bohren MA, Vogel JP, Hunter EC, et al. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. *PLoS Med*. 2015;12(6):e1001847.
29. Kildea S, Kruske S, Barclay L, Tracy S. 'Closing the gap': how maternity services can contribute to reducing poor maternal infant health outcomes for aboriginal and Torres Strait islander women. *Rural Remote Health*. 2010;10(3):1383.
30. World Health Organization. The prevention and elimination of disrespect and abuse during facility-based childbirth: WHO Statement. 2014.
31. Downe S, Lawrie TA, Finlayson K, Oladapo OT. Effectiveness of respectful care policies for women using routine intrapartum services: a systematic review. *Reprod Health*. 2018;15(1):23.
32. Miller S, Abalos E, Chamillard M, et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *Lancet*. 2016;388(10056):2176-2192.
33. Dahlen H, Schmied V, Dennis CL, Thornton C. Rates of obstetric intervention during birth and selected maternal and neonatal outcomes for low risk women born in Australia compared to those born overseas. *BMC Pregnancy Childbirth*. 2013;13(1):100. doi:10.1186/1471-2393-13-100
34. Kjerulff K, Attanasio L, Edmonds J, Kozhimannil K, Repke J. Labor induction and cesarean delivery: a prospective cohort study of first births in Pennsylvania, USA. *Birth*. 2017;44(3):252-261.
35. ACOG. Committee opinion no. 687: Approaches to limit intervention during labor and birth. *Obstet Gynecol*. 2017;129:e20-e28.
36. Raynes-Greenow CH, Nassar N, Torvaldsen S, Trevena L, Roberts CL. Assisting informed decision making for labour analgesia: a randomised controlled trial of a decision aid for labour analgesia versus a pamphlet. *BMC Pregnancy Childbirth*. 2010;10(1):15. doi:10.1186/1471-2393-10-15
37. Buckley S. Executive summary of hormonal physiology of childbearing: evidence and implications for women, babies, and maternity care. *J Perinat Educ*. 2015;24(3):145-153.
38. ACOG & SMFM. Safe prevention of the primary cesarean delivery. Obstetric care consensus No. 1. *Obstet Gynecol*. 2014;123:693-711.
39. Levett KM, Coughlan S, Longridge S, Roumeliotis V, Adams J. Be well: a systems-based wellness intervention using mindfulness in the workplace – a case study. *J Manag Organ*. 2017;25:613-634. doi:10.1017/jmo.2017.41
40. Levett KM, Smith CA, Bensoussan A, Dahlen HG. The complementary therapies for labour and birth study making sense of labour and birth - experiences of women, partners and midwives of a complementary medicine antenatal education course. *Midwifery*. 2016;40:124-131. doi:10.1016/j.midw.2016.06.011
41. Levett KM, Smith C, Bensoussan A, Dahlen HG. Complementary therapies for labour and birth study: a randomised controlled trial of antenatal integrative medicine for pain management in labour. *BMJ Open*. 2016;6(7):e010691.
42. Plough A, Galvin G, Li Z, Declercq E, Caughey A, Shah N. The impact of labor and delivery unit management on long childbirth length of stay [27L]. *Obstet Gynecol*. 2017;129:S128.
43. Fox D, Maude R, Coddington R, et al. The use of continuous foetal monitoring technologies that enable mobility in labour for women with complex pregnancies: a survey of Australian and New Zealand hospitals. *Midwifery*. 2021;93:102887. doi:10.1016/j.midw.2020.102887
44. Lothian JA. Childbirth education at the crossroads. *J Perinat Educ*. 2008;17(2):45-49. doi:10.1624/105812408X298381
45. Olza I, Uvnas-Moberg K, Ekström-Bergström A, et al. Birth as a neuro-psycho-social event: an integrative model of maternal experiences and their relation to neurohormonal events during childbirth. *PLoS One*. 2020;15(7):e0230992. doi:10.1371/journal.pone.0230992
46. Lee N, Martensson LB, Homer C, et al. Impact on caesarean section rates following injections of sterile water (ICARIS): a multicentre randomised controlled trial. *BMC Pregnancy Childbirth*. 2013;13:105. doi:10.1186/1471-2393-13-105
47. ACOG & SMFM. *Nation's Ob-Gyns take aim at preventing cesareans*. ACOG & SMFM; 2014.
48. Downer T, McMurray A, Young J. The role of antenatal education in promoting maternal and family health literacy. *Int J Childbirth*. 2020;10:52-64. doi:10.1891/IJCBIRTH-D-20-00012
49. Edmonds J, Declercq E, Sakala C. Women's childbirth experiences: a content analysis from the listening to mothers in California survey. *Birth*. 2021;48:221-229.
50. Dyson L, McCormick FM, Renfrew MJ. Interventions for promoting the initiation of breastfeeding. *Cochrane Database Syst Rev*. 2005;2:CD001688. doi:10.1002/14651858.CD001688.pub2
51. Svensson J, Barclay L, Cooke M. Randomised-controlled trial of two antenatal education programmes. *Midwifery*. 2009;25(2):114-125. doi:10.1016/j.midw.2006.12.012

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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