A Study of Skin-to-Skin Care During Cesarean Birth: A Mother's Experience

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ABSTRACT

This study explores the experience of women who have had skin-to-skin care during cesarean birth by using a qualitative, phenomenology-based approach. Interview questions were developed and aimed to understand the common meaning of this experience by learning about women's prior concerns and expectations of skin-to-skin care during cesarean birth, and how these experiences were realized during the intervention. A purposive sample ($N = 13$) was recruited through social media. Participants had skin-to-skin care, post-cesarean birth, in the last 10 years and were interviewed via Facebook Messenger video chat. The themes that emerged revealed the importance these women placed on their skin-to-skin care experience. The results of this study reinforce the importance of advocating for and implementing skin-to-skin care during cesarean birth whenever possible.

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In the United States, having a cesarean birth is a reality for many mothers. In 2015 there were 1,272,503 cesarean births, 32% of all births in the United States (Martin, Hamilton, Osterman, Driscoll, & Matthews, 2017). This is a significant number of women who do not receive the many benefits of a vaginal birth. Therefore, it is important that health-care providers and educators in the field of obstetrics continue to search for and implement the best, evidence-based interventions for cesarean mothers. To better understand which interventions lead to positive outcomes for this patient population, it is important to explore the needs of women having a cesarean birth. Certain interventions, such as skin-to-skin care, may provide a mechanism to meet the needs of women having cesarean birth.

Skin-to-skin care, or the act of placing a diaper-clad newborn on the naked chest of the mother, has many positive outcomes for mother and newborn, both physiologically and emotionally. The moment of birth can be a very stressful time for a mother and her newborn. The intervention of skin-to-skin care can have a major impact on the transition from pregnancy to birth to post-partum. Skin-to-skin care after birth can promote newborn thermoregulation, decrease oxidative stress in the mother, and promote vital sign stabilization for both mother and newborn (Gouchon et al., 2010; Moore, Anderson, Bergman, & Dowswell, 2012; Yuksel et al., 2015). Along with these many important benefits, skin-to-skin care contributes to an increase in breast-feeding success for mothers and newborns who receive the inter-

vention immediately after birth (Moore & Anderson, 2007). These physiologic benefits are important for mothers and newborns, because they can help to ease the newborn into life and the woman into motherhood.

Skin-to-skin care for mothers having a cesarean birth, women and their newborns facing additional obstacles compared to vaginal birth, may also have emotional benefits. One important impact of skin-to-skin care is improved bonding (Moore et al., 2012). Bonding between mother and newborn, may have far-reaching implications after birth. These implications can include a strengthened maternal-child relationship and improved emotional well-being for mother and child.

It is important to understand the difference in needs of a cesarean mother compared to mothers who give birth vaginally. Cesarean mothers need to feel as if they have choices related to birth and are being heard by health-care providers (Redshaw & Hockley, 2010). Understanding these needs should encourage health-care providers to promote patient autonomy and open the lines of communication. By providing patient choices, health-care providers can make sure that patient-centered practices are the focus of care. One way to accomplish this for cesarean births is to implement skin-to-skin care. Most of the current studies available about the benefits of skin-to-skin care have been conducted on mothers and newborns who give birth vaginally. Skin-to-skin during cesarean birth can have a positive impact on maternal satisfaction and can increase maternal confidence by allowing mothers to be actively engaged and have a part in the birth process (Armbrust, Hinkson, Weizsäcker, & Henrich, 2015; Frederick, Busen, Engebretson, Hurst, & Schneider, 2015).

Unfortunately, skin-to-skin care is not routinely implemented for mothers and newborns during cesarean birth, leaving this patient population devoid of the physiological and emotional benefits routinely offered to women and newborns experiencing vaginal births. As advocates of best practice, nurse leaders and other health-care providers are seeking to find a balance between the risks and challenges of implementing skin-to-skin care immediately after a cesarean birth in the operating room and the positive outcomes that this kind of care provides to both mother and newborn. To aid in finding this balance, a greater understanding of the impact of skin-to-skin care to mothers and their children needs to be identified. This research study seeks to gain

that understanding by using a qualitative, phenomenology-based approach to better understand the common meaning and experiences of women who have had skin-to-skin care during their cesarean births. This study asks the question, “What are the experiences of mothers who have received skin-to-skin care during cesarean birth?” Interview questions were aimed at understanding the common meaning of women who have had this intervention. These questions focused on the women’s expressed concerns and expectations, if any, from before their skin-to-skin care experiences and how their experiences were realized during the intervention. With increased knowledge of the impact of skin-to-skin care for cesarean mothers and newborns, implementation of this practice might increase in hospitals providing the positive benefits of skin-to-skin care to more than one million women annually (Martin et al., 2017).

METHODOLOGY

The methods and materials used for this study were approved through the Institutional Review Board of The University of Alabama in Huntsville. This phenomenological approach was designed to better understand the experience of mothers who have had skin-to-skin care as an intervention in the operating room during their cesarean births. By using phenomenology as a theoretical framework, insight from this experience can be gained and highlighted to achieve a first-person perspective. The methods and materials developed for this study were generated with this philosophy in mind.

Testing for Content Validity and Data Collection Methodology

To ensure the credibility and effectiveness of the interview guide and data collection methods, a feasibility study was conducted. As part of this feasibility study, an interview guide was generated with the purpose of better understanding a mother’s concerns and expectations related to skin-to-skin care during cesarean births (Table 1). A Content validity index (CVI) was generated and sent to 37 experts on skin-to-skin care via the online platform Qualtrics. This CVI included every interview question that had

Skin-to-skin care after birth can promote newborn thermoregulation, decrease oxidative stress in the mother, and promote vital sign stabilization for both mother and newborn.

TABLE 1
Interview Questions

Knowledge	
1	A. What did you know about skin-to-skin care before the birth of your baby? B. How is that different from what you know now?
2	A. What do you know about the benefits of skin-to-skin care for mom immediately after birth? B. What do you know about the risks of skin-to-skin care for mom immediately after birth?
3	A. What do you know about the benefits of skin-to-skin care for your baby immediately after birth? B. What do you know about the risks of skin-to-skin care for your baby immediately after birth?
Experience	
4	A. Did you request skin-to-skin care? B. Did a nurse or doctor offer it to you?
5	A. Did you have any concerns about skin-to-skin care in the OR during your cesarean birth before the birth of your baby? If so, what were they? B. Please rate your concern on a scale from 1–10 with 1 being <i>mild worry</i> to 10 being <i>very afraid</i> .
6	How did you imagine skin-to-skin care between you and your baby was going to be like during your cesarean birth?
7	Please tell me about holding your baby skin-to-skin during your cesarean.
8	A. Did any of the concerns you mentioned previously come true during your cesarean? If so, how? B. Did any other concerning events occur?
9	A. Was the skin-to-skin experience with your baby what you expected? B. Were there other expectations met that you did not anticipate?
Post-Skin-to-Skin Care Experience	
10	A. How has having skin-to-skin care with your baby during your cesarean birth affected you, both positively and negatively? B. How has having skin-to-skin care with your baby during your cesarean birth affected your baby, both positively and negatively? C. How has having skin-to-skin care with your baby during your cesarean birth affected the relationship between you and your baby, both positively and negatively?
11	A. Has your knowledge about skin-to-skin care changed based on your experience? If so, how? B. Has your opinion about skin-to-skin care changed based on your experience? If so, how?
12	What would you tell a friend who is going to have a baby through a cesarean birth about skin-to-skin care during her birth?

been developed for the research study. The experts were asked to grade each question on a four-point Likert scale assessing for the clarity and relevance of each question. The experts were also provided with space to give additional feedback after every question. Experts also had the opportunity to provide more general feedback at the end of the survey. The CVI was calculated to establish a content validity ≥ 0.05 level of significance. A standard of 0.83 was set for each item on the scale and for the scale in its entirety (Polit & Beck, 2012). The questions that met this standard were maintained on the interview guide. The questions that fell below the standard were revised based on the feedback given by the experts.

The proposed data collection methodology for this study included Facebook Messenger video chat. It was hypothesized that using this free, easy to use platform would provide the participant with a convenient way to participate in the study. To test the data collection methods, the adapted questions were used during a trial interview with a participant meeting

the inclusion criteria via Facebook Messenger video chat. The participant was a volunteer of convenience, and the data recorded was not included for analysis. This trial interview gave insight into the successes and flaws of process, allowing changes to be made accordingly. The major changes made in response to the trial interview included rewording of the interview questions, restructuring the format of the interview itself for ease of both participant and researcher understanding, and fleshing out the practical details of how to best use the programs that would facilitate the interviews, including Facebook Messenger and the recording software, Rev.

Sample and Recruitment

Participants recruited for the study met the following inclusion criteria: 18 years of age at the time of consent, who had a cesarean birth with skin-to-skin care in the operating room occurring in the last 10 years. Recruitment of the participants occurred by advertising the study on the Facebook page of a national

cesarean birth advocacy group. The leadership of this group was contacted for permission prior to making the post. The participants self-identified with the study by sending a private Facebook message to the research team, establishing the participants interest in the study.

Data Collection

An electronic consent and demographic form was sent to the participants using the established private message stream. Once completed and returned, the consent and demographic forms were reviewed to ensure that each woman met the inclusion criteria. Each participant was sent a link to sign up for an interview time using the online scheduling platform, Doodle.

A total of 13 interviews were conducted using the video chat function of Facebook Messenger. At the date of the scheduled interview, a video call was initiated with the participant. Once connected, introductions were made and information about the study was provided. An opportunity for questions about the study and the consent form was offered. Participants were informed that the interview would be recorded using an online recording and transcription software. Interviews were initiated using the interview guide revised during the feasibility study. Word choice and question order were flexible to promote optimal flow of the conversation. Further, probing questions were included in most interviews to clarify participants' answers. The average interview time was approximately 30 minutes. Recordings were transcribed using a software application, Rev. Participants were offered the opportunity to receive a copy of their transcript before the call was terminated. No identifying information was included during the recording or transcription process to ensure participant privacy.

Data Analysis

Prior to analysis, transcriptions were reviewed, and data saturation was achieved, thus identifying an adequate sample size. The transcriptions of each interview were analyzed for theme development. Categories for themes were discussed to determine meaning. The two members of the research team received copies of each transcript. Transcripts were reviewed separately, and each researcher highlighted recurring topics and developed working themes for each category previously determined. Once completed, the researchers met and discussed their theme

development and worked together to develop themes in each category. This process served to highlight trends in the data. In addition to theme development to answer the research questions, both researchers identified additional data relating to advice from the participants and the state of skin-to-skin care in America. These findings are explained further in the results section.

Credibility

Study credibility was established in multiple ways. The interview questions and methodology used in this study were developed using a CVI, and methodology was tested before the study began. Each interview was conducted by the same person to minimize variation in interview technique. A scripted interview guide was used to ensure consistency in interviewing techniques. At random, interviews were selected to be observed by a second researcher to monitor interview consistency. During data analysis, transcripts were reviewed separately by two researchers who each generated their own results. Finally, results were compared, and a consensus was met to decrease individual bias influencing theme development.

RESULTS

All participants ($n = 13$) had experienced skin-to-skin care during cesarean birth, 61.5% of cesareans were unscheduled. The average age of the participant was 31.6 years old. Of the participants interviewed, 64.3% had more than one cesarean birth, and 21.4% of participants had a previous experience with skin-to-skin care (Table 2).

Two categories were identified in which themes could be developed. The first category developed was "Concerns and Expectations" and the second category was "Experience." Within these categories, themes were developed that exemplified the responses received from all participants.

Concerns and Expectations

The "Concerns and Expectations" category focused on the feelings that women have about skin-to-skin

Skin-to-skin during cesarean birth can have a positive impact on maternal satisfaction and can increase maternal confidence by allowing mothers to be actively engaged and have a part in the birth process.

TABLE 2
Participant Demographics

Population size	N = 13 participants
Mean age	Participant: 31.6 years Skin-to-skin child: 21.3 months
Cesarean	Scheduled: 38.5% (5 participants) Unscheduled: 61.5% (8 participants)
Breastfeeding	Still breastfeeding at time of interview: 38.5% (5 participants) Average duration for mothers no longer breastfeeding: 17.6 months
Previous births	Participants who have had: <ul style="list-style-type: none"> • Previous cesarean births: 64.3% (9 participants) • Previous skin-to-skin care experience: 21.4% (3 participants)
Geography	States where cesarean births occurred: <ul style="list-style-type: none"> • AL, AK, CA, FL, IA, MN, MT, NH, PA, WA, WI

care as an intervention during their cesarean birth. This data was collected from interview questions asking the participants to reflect on the concerns and expectations that they had related to skin-to-skin care. After analyzing the transcripts, one overarching theme was identified: *I just want to hold my baby.*

I Just Want to Hold My Baby. When generating the category “Concerns and Expectations” as a method of organizing theme development, it was anticipated that at least two themes would emerge to separately reflect the worries women had about skin-to-skin care and expectations of the intervention. Instead, a single theme emerged that exemplified both the participants’ concerns and expectations of skin-to-skin care during cesarean birth. The most common concern was that skin-to-skin care would not be offered, or requests for it would not be granted. One participant stated that her “biggest concern” was that she “would not receive skin-to-skin care.” Mothers were concerned that they would not be presented with an immediate opportunity to meet and hold their newborn. Many shared that they feared separation from the newborn and expressed that being able to hold and keep their newborn would alleviate that concern. Alternatively, when the participants were asked what they expected from skin-to-skin care during cesarean birth, most responded that they just wanted the opportunity to meet and hold their newborn. One statement made by the participant really exemplifies this theme. She said, “I just wanted to see my baby right away . . . She grew in my body for nine

months. I felt like it was wrong for someone to take her away . . . that soon.” Both from the demographic information and from the interviews themselves, it was apparent that many of the participants had experienced a previous cesarean birth in which they did receive skin-to-skin care. These women seemed the most adamant about their expectations that their birth experience should provide the special opportunity to connect with their newborn immediately and should not lead to any immediate long-term separation.

Mothers connected the intervention of skin-to-skin to the solution to have immediate contact with their newborn. The level of importance that participants placed on this expectation was made evident by the frequency with which it was discussed. One participant stated that “without skin-to-skin, you’re really missing out on that . . . feeling of, I just birthed my baby.” She continued by saying that “having skin-to-skin really helps you bond more.” Women having a cesarean birth expect skin-to-skin care to give them an opportunity to meet and bond with their newborn.

Experience

The “Experience” category provided a description of the events that occurred and emotions that were experienced while skin-to-skin during cesarean birth. During the study, the significance of the birth experience became evident. One participant emphasized, “It’s not just one day. It’s the rest of your life. It’s a huge, important day . . . that you will never forget, and it can really change you.” While providing a unique story of cesarean birth and the skin-to-skin care experience, it became evident that there was quite a variance in the events prior to and during each participant’s cesarean birth. However, despite

Many felt that skin-to-skin care helped give them a sense of control related to their birthing process.

these differences, two themes emerged that exemplified this category and the outcomes these participants attributed to the experience of skin-to-skin care. The first theme that emerged for this category was, *It made me okay with my cesarean birth*. The second theme developed from the data was, *My baby felt safe, calm, and at home*.

It Made Me Okay With My Cesarean Birth. During the interview process, it became apparent that the pregnancy journey of each of these participants was very diverse. However, a common sentiment expressed among the women was that cesarean birth, although necessary, would not have been their first choice. Many of the participants even expressed the severe disappointment they felt when they were faced with the reality that vaginal birth was no longer an option. One participant even stated that having a cesarean birth was “really hurtful . . . because you have this whole stigma of. . . ‘Did you actually give birth?’” However, she remained hopeful and shared this hope by stating, “There has to be a different way.” This sentiment of grief and disappointment at losing the chance of a vaginal birth was common among the participants.

Despite the negative feelings most of the women associated with the prospect of having a cesarean birth, a common theme emerged from the data. These participants felt the experience of skin-to-skin care during cesarean birth was powerful enough to make them okay, even happy, with the birth experience. One participant expressed that she “felt better and happier” about her cesarean birth because she “was able to participate in it.” Another went so far as to say that she had, “nothing positive . . . from [her] first birth” but with the birth that included skin-to-skin care, she now has “a very positive and happy memory that has impacted [her] entire life.” The participants in this study associated skin-to-skin care with a positive birth experience that they could accept and enjoy as their own.

Another common feeling expressed was that many felt that skin-to-skin care helped give them a sense of control related to their birthing process. As previously mentioned, having a cesarean birth was viewed unanimously as a necessary alternative to the mother’s ideal vaginal birth. Many of the women interviewed in this study stated that this change in plan made them feel “out of control.” One woman said, “You feel like you have no control at all.” These women attributed skin-to-skin care in the operating room with regaining control of birth. For example, one participant stated, “I feel like it gives women a

little bit of that . . . control back and a little bit more of that whole birth experience.” Skin-to-skin care during cesarean births allowed these women to feel in control of the birth experience.

My Baby Felt Safe, Calm, and at Home. Each participant had her own unique experiences and emotions to share. However, despite this diversity a theme began to develop that highlighted the collective experience of participants. Those involved shared that they felt that having skin-to-skin care in the operating room as an intervention during cesarean birth made their newborn feel safe, calm, and at home. Many of the participants seemed to attribute this intervention to an easier transition for their newborn into the world. One woman stated, “He’d been listening to me for the last several months . . . and even though I’m a little blurry, he gets to see mom, and feel my touch, and I know that’s helpful for him.” Many of the women also shared that skin-to-skin care helped them transition into the role of motherhood, and eased their anxiety about the health and safety of their newborn. One participant shared, “It’s very calming to actually have your baby and be able to hold them and feel them breathing . . . immediately and to not have to worry about what they are doing to my baby.” By having their newborn close, participants were able to have the peace of mind that the newborn was safe, healthy, and secure.

Another concept that was expressed often among the women was the feeling that their newborn belonged on their chest. The operating room, where a cesarean birth occurs, was described by the women of this study as a very clinical environment. These women felt that skin-to-skin care helped build a connection to their newborns. One woman stated that skin-to-skin care allowed her to have “that little piece . . . of bonding” and that it made her birth “a little less surgical and a little less clinical, and I was still able to get that very special mom and baby moment out of it, even though I was in a cold operating room.” The participants felt that having their newborn with them in the operating room was the most natural place for them to be, despite the clinical setting.

By promoting and implementing skin-to-skin care into the practice of cesarean birth, health care providers, nurses and childbirth educators can increase the satisfaction of and improve the outcomes.

Participant Advice

At the end of the interview, the participants were asked what advice they would give to a friend having a cesarean birth regarding skin-to-skin care. The answers these women gave reflected the significance these women hold for the intervention and how it affected their birth. All women indicated that they would recommend this intervention to a friend. One woman stated that she would tell her friend to “seriously consider” skin-to-skin care because “it’s going to ensure you have a very positive post-partum experience.”

Many of the women spoke about the importance of making sure that pregnant mothers “speak up” about the interventions that they want during birth. One woman stated that it was important for pregnant women facing a cesarean birth to “take your health care into your own hands.” Additional similar statements indicated the importance of requesting skin-to-skin care even if it is not a standard of care at the birth facility. A few of the women in the study even went as far as to suggest changing health-care providers or hospitals if skin-to-skin was not offered for women having cesarean births. One woman’s advice was to bring up skin-to-skin care in the operating room “right away” and if the hospital or health-care provider was not supportive of the intervention to “find a different doctor or different hospital . . . because if you don’t have a supportive doctor, a doctor that thinks it’s important, it’s not going to happen.” This sentiment was shared among a number of participants in the study.

The State of Skin-to-Skin Care in America

During this interview process, women’s stories highlighted the similarities and differences between the practice of skin-to-skin care across the nation. These women described an experience of receiving their newborn immediately or within minutes of their birth in the operating room during the completion of their cesarean birth. The babies were allowed to remain skin-to-skin for varying lengths of time based on policy and circumstance, but most were able to keep their newborn skin-to-skin during the end of the cesarean, into recovery, and upon arrival to post-partum.

A major difference noted among the women of this study happened before the cesarean birth, when women were either offered or asked about skin-to-skin care. Some women described a positive experience where they had a supportive birthing team

around them that advocated for and facilitated skin-to-skin care, sometimes with little patient input. One woman described an experience where she felt “encouraged” and shared that there were nurses there “whose sole purpose was to help” with skin-to-skin care. This participant shared that those helpful nurses held the special title of the “stork nurse.” Another woman shared a different experience. The intervention of skin-to-skin care was unknown to her, and the providers initiated it for her. She shared that she “didn’t know enough then to request it, that it was even possible . . . then he’s laid . . . on my chest.” Many women in the study had experiences like this, which then turned them into avid supporters of skin-to-skin care during cesarean birth.

On the other hand, other women described their difficulty in getting skin-to-skin during their cesarean birth. Many were forced to demand the intervention, rather than it being offered or readily accepted upon the patient’s request. One of the participants stated that she chose her hospital specifically because, in her experience as a birth photographer, she saw that many women were never given the choice. She shared that for many of her clients, skin-to-skin is “not an option. . . . It’s not even discussed. It’s not even mentioned.” She then continued to express that she was “tremendously worried despite . . . asking for it, that it wouldn’t happen.” These women also talked about the importance of having a good team of health-care providers advocating for the best outcome. One participant expressed that if a woman is “lacking that team then she’s . . . lacking confidence, and she’s lacking courage.” This woman also makes the point that women should not be expected to have to fight for health care providers who are advocates. She goes on to say that “no one would expect someone who just had major . . . surgery . . . to have to be an advocate” for themselves.

This study highlighted the difference that health-care providers and hospitals can make on a woman’s birth experience. Health-care providers need to advocate for best practice, in this case skin-to-skin, in both the prenatal and intrapartum setting. Health-care providers and organizations also need to be open to patient requests whenever they can, as long as safety is maintained. By advocating for skin-to-skin care during cesarean birth whenever possible, women, whether they know to request it or not, have the opportunity to have a positive skin-to-skin, cesarean experience.

IMPLICATIONS

Skin-to-skin care is an important intervention that can be beneficial to the experience and outcomes of both mother and newborn during a cesarean birth. Because of the positive impact skin-to-skin can have on patients, it is important that nurses and other health-care providers take the time to learn, refine, and implement it more frequently. Nurses can be advocates for their patients by promoting skin-to-skin care during cesarean births.

To best promote skin-to-skin care as an important intervention during cesarean births, nurses and other health-care providers can educate themselves on the practice and the best ways to facilitate skin-to-skin care in the operating room. This education needs to include information about both the physiologic impact of skin-to-skin care and the emotional ramifications for both women and their newborns when given a chance to hold their newborn skin-to-skin in the operating room after birth. If health-care providers increase knowledge about the intervention, then they can better educate and advocate for the best care for their patients. Learning about this intervention and how it is currently implemented across the nation can give insight to health-care providers and organizations on how to implement, refine, and advocate for this intervention.

Pregnant women need to be educated about skin-to-skin care, as well, during the prenatal period. Health-care providers, nurses, and childbirth educators have the opportunity to discuss the physiologic and emotional benefits of skin-to-skin care for vaginal and cesarean births. Many of the women in this study stated that they would not have received skin-to-skin care during their birth had they not requested, and even sometimes demanded, the intervention. This infers that prenatal education about skin-to-skin care was not offered to them. If patients are not educated on skin-to-skin care during the prenatal period then they are at a disadvantage and may be less likely to receive skin-to-skin care.

Findings from this study indicate that women consider skin-to-skin care as a positive and emotionally satisfying element of cesarean birth. Women felt more connected to their babies and more positive about cesarean birth. Both bonding with the newborn and patient satisfaction seem to be facilitated with the implementation of skin-to-skin care. Health-care providers, nurses, and childbirth educators can play an instrumental role in improving outcomes for women and their newborns by promoting, advocating, and facilitating skin-to-skin care for cesarean birth.

CONCLUSION

Skin to skin care in this study was highly identified as a positive influence on the cesarean birth experience. The women in this study had expectations that skin-to-skin care would offer them a chance to meet and hold their newborn immediately after birth. Participants in turn were fearful that this bonding opportunity would be denied. Unfortunately, many women in the United States will not have this expectation met until hospital policies are changed to offer skin-to-skin care to women having both vaginal and cesarean births. Skin-to-skin care was considered as a way to come to terms with, and even enjoy cesarean birth. Skin-to-skin care also gave participants of this study a sense of control of the birthing process. Participants identified that skin-to-skin care calms both mother and newborn by keeping the newborn safe and at home on their mother's chest. These women felt so strongly about skin-to-skin care that they would tell other women to change their health-care provider if they are unwilling to offer the intervention. By promoting and implementing skin-to-skin care into the practice of cesarean birth, health-care providers, nurses, and childbirth educators can increase the satisfaction of and improve the outcomes of more than 32% of women giving birth in the United States.

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