

Spring 2017

# Impacts of birth plans on maternal satisfaction a literature review and focus group study

Kaylyn Brooks  
*James Madison University*

Follow this and additional works at: <https://commons.lib.jmu.edu/honors201019>

 Part of the [Maternal, Child Health and Neonatal Nursing Commons](#)

---

## Recommended Citation

Brooks, Kaylyn, "Impacts of birth plans on maternal satisfaction a literature review and focus group study" (2017). *Senior Honors Projects, 2010-current*. 309.  
<https://commons.lib.jmu.edu/honors201019/309>

This Thesis is brought to you for free and open access by the Honors College at JMU Scholarly Commons. It has been accepted for inclusion in Senior Honors Projects, 2010-current by an authorized administrator of JMU Scholarly Commons. For more information, please contact [dc\\_admin@jmu.edu](mailto:dc_admin@jmu.edu).

Impacts of Birth Plans on Maternal Satisfaction

A Literature Review and Focus Group Study

---

An Honors College Project Presented to

the Faculty of the Undergraduate

College of Health and Behavioral Sciences

James Madison University

---

by Kaylyn A. Brooks

May 2017

---

---

Accepted by the faculty of the Department of Nursing, James Madison University, in partial fulfillment of the requirements for the Honors College.

FACULTY COMMITTEE:

HONORS COLLEGE APPROVAL:

---

Project Advisor: Erika Sawin-Metzler, Ph.D, R.N.  
Associate Professor, Nursing

---

Bradley R. Newcomer, Ph.D.,  
Dean, Honors College

---

Project Advisor: Karen Silveira, M.S., C.N.M.,  
W.H.N.P., R.N.  
Instructor

---

Reader: Carolyn Schubert  
Health Sciences and Nursing Librarian

---

Reader: Marjorie Scheikl, M.S.N., R.N.  
Assistant Professor, Nursing

---

Reader: Karen Jagiello, M.S.N., R.N.C.  
Assistant Professor, Nursing

---

---

PUBLIC PRESENTATION

This work is accepted for presentation, in part or in full, at James Madison University's School of Nursing Pi Mu Professional Development Day on April 4, 2017.

## Table of Contents

Preface	3
Acknowledgements	4
Introduction	5
Background	7
Methodology	10
Results	11
Pain Management	13
Surgical Intervention: Cesarean Birth and Operative Vaginal Birth	17
Environment and Health Care Providers Surrounding the Labor and Birthing Process	22
Limitations	27
Focus Group: Health Care Providers Perspectives	28
Health Care Provider and Nursing Implications	33
Sample Birth Plan	37
Conclusion	38
Summarized Evidence Table	40
Appendix 1	45
References	46

## **Preface**

This literature review was designed for the completion of an Honors Capstone Project for graduation from the Honors College at James Madison University (JMU). I am an undergraduate nursing student at JMU aspiring to become an obstetrical registered nurse. When choosing a topic for this project in the fall of 2016, I was sure that I wanted to find a topic that related to the nursing field and, in particular, obstetrical nursing. Doing research on a topic that I am passionate about was very important to me. I wanted my research to be something that I could carry with me into my chosen field for not only myself to use, but also to share with fellow nurses and any providers involved in the childbirth process. I also conducted a focus group with ten midwives to gain insight on health care providers' perspectives of birth plans and their relation to maternal satisfaction.

The idea for this project was presented to me while I was completing my clinical rotation in Women's Health on an obstetrical unit. One of my postpartum patients was very distraught about how her birth plan had changed so much over the course of her labor and birth experience. It was also evident that her nurses judged her for her birth plan choices. This experience drove me to research and learn more about birth plans and how we, as health care providers, can better support our expecting mothers and their wishes to the best of our ability.

## **Acknowledgements**

A very special thanks to my advisors of this honors thesis project, Dr. Erika Metzler Sawin and Professor Karen Silveria of the James Madison University School of Nursing, for all of the hours they spent reading over my work and meeting with me. I deeply appreciate their continuing support and encouragement through every step of this project.

To Carolyn Schubert, Professor Karen Jagiello, and Professor Marjorie Scheikl: Thank you for being readers of my project. I thank all of them for devoting their time into reviewing my project multiple times and providing me with valuable feedback.

Thank you to my mother and father. Their constant love and support drives me to achieve my dreams and they always strive to challenge myself. I love them both and thank them for supporting me throughout my college career.

Finally, a very special thank you to my fiancé. Words could never describe the deep appreciation I have for the assistance he has provided me with throughout my four years at James Madison University. The encouragement and support he gave me while I worked on this project never failed, even when life and school were challenging, and he pushed me to continue my work.

## **Introduction**

As a woman progresses through her pregnancy, she and her family face a task that can seem quite daunting: envisioning her labor and birth experience. To assist mothers with solidifying their visions, birth plans provide a medium for their desired labor and birth experiences to be laid out in a concrete format. Therefore, birth plans can impact maternal satisfaction before, during, and after the labor and birthing process (White-Corey, 2013). These visions of their desired experiences can become wide-ranging and detailed with multiple requests that cannot always be met. Some of the key aspects of a woman's birth plan include: (a) the laboring and birthing location; (b) health care providers involved or present at the birth; (c) the utilization of anesthesia or analgesia; and (d) the implementation of surgical interventions including cesarean birth.

Over the years, however, birth plans have lost value to health care providers. This is due to the fact that certain forms of birth plans "include outdated or inaccurate information" that does not coincide with the advancing technology and terminology "which can decrease the likelihood that [health care providers] will read" the birth plan at all (Mei, Afshar, Gregory, Kilpatrick, & Esakoff, 2016, p.145). Conflicts also arise when health care providers find it hard to completely comply with requests that expectant mothers set. It is the expecting and laboring mothers' responsibility to effectively communicate their desired birth plans with health care providers. If the birth plan is not discussed, tension may arise in the delivery room. Without open communication between health care providers and laboring mothers about birth expectations, certain procedures or interventions performed by providers could lead to frustrated mothers and low maternal satisfaction. Health care providers have the responsibility to educate their expecting patients about effective strategies utilized to formulate birth plans that are realistic.

Education given to expectant mothers and their partners from health care providers on birth options is vital. The information mothers and their partners receive can help them formulate a plan of labor and birth that meets their wants and needs but also remains compatible with the advancements of medicine and health care. Understanding the responsibilities of both the expectant mother and the health care provider lays the foundation for formulating a birth plan that encompasses the patient's desires and assists the health care provider in delivering holistic care, both of which generally leads to patient satisfaction.

The purpose of this thesis is to review the relationship between birth plans and maternal satisfaction. The goal is to assist with implementing changes in the health care profession to increase maternal satisfaction based on mothers' birth plans and bring attention to health care providers that education to expecting mothers on birth plans and the labor and birth process is a necessity for maternal satisfaction.

## **Background**

For decades, expectant mothers have envisioned and planned for the births of their babies based on what they believe to be most fitting for their desires and health care request; however, before the 1970s their visions and plans were not concrete documents, and were not effectively communicated to health care providers. It was not until the late 1970s when the first written birth plan was formulated and introduced by childbirth educators (White-Corey, 2013). According to Mei, Afshar, Gregory, Kilpatrick, and Esakoff (2016), a birth plan is defined as:

A document created before or during pregnancy, often through childbirth classes, that helps the mother determine her birth values, become acquainted with available options for labor, and develop a list of criteria to facilitate a supportive birth environment for herself. (p. 144)

In the 1930s the birthing environment was transferred from the home to the hospital (White-Corey, 2013). The creation of the written birth plan assisted mothers with staying abreast of the advances in medicine and care that revolves around maternity. The written birth plan was formulated to help mothers emphasize their desires and to clearly communicate these desires to their health care providers (Lothian, 2006).

According to the literature, meeting the desires and requests of laboring and birthing mothers directly relates with the satisfaction that the mothers feel after their labor and birth experience. The goal of birth plans is to help laboring and birthing mothers' have greater satisfaction with their childbirth experience (Aragon et al., 2013). With birth plans expressing mothers' desires and requests, higher levels of satisfaction can be met. Birth plans encourage participation, informed-decision making, and give women a sense of empowerment, all of which can increase the patient's satisfaction with her experience (Aragon et al., 2013). Research



conducted by Mei et al. (2016) found that “mothers who had a higher degree of fulfillment of their birth plan had significantly higher satisfaction” (p. 148). This study also found twenty-three different types of requests present amongst the mothers’ birth plans, with the average being ten requests per birth plan (Mei et al., 2016). However, birth plans that contained “higher number[s] of total requests, did not have a significant correlation with birth experience satisfaction,” meaning that when the mother’s requests exceeded ten, the lower her overall satisfaction became with each additional request (Mei et al., 2016, p.148). These results highlight that when mothers provide a birth plan with lower numbers of requests for their labor and birthing process, higher levels of satisfaction with the labor and birth experience occur. Mei et al. (2016) also stressed the likelihood of this dissatisfaction by emphasizing that a mother who included a high number of requests in her birth plan showed a high correlation with lower experience satisfaction. According to Aragon et al. (2013), the disadvantages to birth plans experienced by mothers are “negative emotions such as disappointment or dissatisfaction” (p. 981). These emotions can occur if their birth plans are not or could not be followed, especially when maternal expectations become unrealistic for the mother’s situation during the labor and birthing process (Aragon et al., 2013). However, these disadvantages can be avoided partially or even entirely.

Aragon et al. (2013) illustrates that birth plans can bring about a labor and birthing experience that is satisfying to the mother if she understands before and during the experience that unpredictable and unexpected circumstances can arise that cannot coexist with her birth plan. Because labor is so unpredictable, mothers must keep an open mind and be willing to allow their birth plan to be flexible. Education on written birth plans and the process of labor and birth for mothers by health care providers is a necessity. With education, mothers can construct birth plans that are more practical and assist in reaching individual goals. Education and open communication

provided in advance of the labor and birthing process between mothers and health care providers can help when unexpected situations arise (Aragon et al., 2013). Therefore, allowing the woman to make informed decisions and express her right to autonomy.

Templates of birth plan documents can be given to women by their health care provider or women can research different online templates that are available on the internet. Birth plan templates vary from one another; however, according to research conducted by Aragon et al. (2013), most birth plan templates contain information based on the mother's pain management, preferred interventions, control over her surroundings, and postpartum preferences.

The laboring and birthing environment, the utilization of anesthesia or analgesia for pain management, and the implementation of surgical interventions are other topics commonly included in birth plans. The environment of the labor and birthing process, including who attends the birth, tends to highly influence a mother's satisfaction because both her surroundings and health care providers can impact the extent to which her birth plan is followed. Pain management is very common in almost all birth plans due to a mother's fear of pain. If she explains her desires for how to deal with the pain, then she can feel a sense of control. Finally, laboring mothers have concerns about surgical interventions, such as cesarean birth or operative vaginal birth, and wish to avoid them if at all possible. Of course, all three of these commonly discussed topics in birth plans can change once the labor and birth experience begins and different circumstances arise. However, with proper education, mothers can create a birth plan that includes these topics while acknowledging that labor and birth are unpredictable and are evolving processes as the mother continues to progress.

## **Methodology**

Research was conducted using PubMed and CINAHL Plus databases. Search terms utilized within these databases included: birth plans, maternal satisfaction, mother satisfaction, patient satisfaction, childbirth satisfaction, pain relief, analgesia, cesarean birth, cesarean section, surgical interventions, communication, perspective, health care providers, decision making, and choice in childbirth. Due to the limited amount of research that exists on birth plans, the date of publication for found articles was limited to publications within the last ten years. Research was restricted to English-only articles; however, research was not restricted to only U.S. studies. Some research studies found occurred outside of the U.S., while others were U.S. based.

## Results

After an extensive review of the literature on the topic, it is evident that there is a dearth of research that exists on birth plans as a whole. The authors that conducted the research included in this literature review agree that more research must be done to learn more about the effectiveness of birth plans and how to improve them.

The most common topic of birth plans, that appeared throughout studies, is pain management. Pain relief is very important to most expectant mothers when considering their labor and birth experience. One study explains that mothers whose pain management interventions did not match their initial request in their birth plans were still satisfied with the alternative pain management intervention that they received (Pennell, Salo-Coombs, Herring, Spielman, & Fecho, 2011).

Surgical interventions, including cesarean birth and operative vaginal birth, were also important for mothers to include in their birth plans. There is a common myth that exists amongst health care providers: a birth plan increases your risk for a cesarean birth and poorer obstetrical outcomes (White-Corey, 2013). However, the research that exists does not support this claim. One study even found that having a birth plan increases the chance for a mother to have a vaginal birth (Afshar, Wang, Mei, Esakoff, Pisarska, & Gregory, 2016).

The health care provider present and the location throughout the birthing experience are extremely important to a mother. Research supports the fact that most mothers who have birth plans are patients of midwives, while obstetricians and general practitioners have fewer patients with birth plans. The more the provider communicates with the mother, the more she feels in control and the higher her satisfaction is with her birth experience (Cook & Loomis, 2007). The location of the labor and birth is also chosen by the mother largely based on safety, comfort,

physical environment, and the care she anticipates to receive at that specific location (Lee, Ayers, & Holden, 2016).

The research that exists convinces us that more research must be done on birth plans. In the meantime, health care providers can provide education to expectant mothers on birth plans. This education should include descriptions on the process of labor and birth and how it is unpredictable, which leaves birth plans vulnerable to changes as the process progresses. This is important for mothers to understand; however, continual support from their health care providers is helpful if situations change. It is important to keep mothers informed and included in the decision making process. Inclusion and sense of control were common reasons for mothers to create birth plans. When these two aspects are maintained, maternal satisfaction is more likely to be higher. Patient centered care is what health care providers strive for. By acknowledging and keeping the expectant mother's birth plan in mind, all health care providers involved with the mother can keep inclusion and sense of control present in the delivery room at all times.

## **Pain Management**

When mothers begin to construct their own personal birth plans during their pregnancy, and even during the early phases of labor, comfort becomes a key element. The comfort they feel with the environment they are laboring in, the health care providers that surround them, the pain they feel, and possible surgical decisions all impact the ending satisfaction that the mother expresses. Out of all of these comfort measures, pain management tends to be the most common desire that is present in nearly all women's birth plans. In fact, in Aragon et al.'s (2013) research study, pain management was included in mothers' birth plans as the most important component of the birth plan.

Research has been conducted to determine the relationship between pain management and maternal satisfaction. One study was conducted in a labor and birth unit at a large, university-based hospital to "prospectively examine the anesthesia and analgesia-related preferences, outcomes, and satisfaction with outcomes" of women within the study whom had created written birth plans (Pennell et al., 2011, p. 376). Inclusion criteria for the study were: (a) gestation beyond 34 weeks; (b) no scheduled cesarean birth patients; (c) labor was not far advanced; and (d) English was their primary language (Pennell et al., 2011). When looking at the group of women as a whole, there was not much diversity present within the cohort. Out of the 63 women who participated in the study, the statistics showed that the majority of the women were white (84.1%), had four or more years of college (90.5%), were attended by a nurse midwife (68.2%), were under the age of 35 (82.5%), and were primigravidas (58.7%) (Pennell et al., 2011). With a homogeneous cohort, it can be concluded that the results from this study could be skewed based on race, education, age, health care provider preference, and number of previous pregnancies.

The expectant mothers had written birth plans that accompanied them to help express their desires and expectations for the labor and birth of their child. The birth plans presented for each mother were prepared by the women themselves and different templates were used throughout by the 63 women; however, all 63 women included within their birth plan information on their preferences for anesthesia and analgesia (Pennell et al., 2011). By looking at the statistics of the 63 women's labor and birth experiences, pain management became very important to these women as labor progressed and the use of analgesics became highly favorable. Nearly three fourths (47 births or 74.6%) of the mothers received some form of analgesic during their labor with the most common analgesic being an epidural, which was used in 41 of the 63 births (Pennell et al., 2011). Less than ten percent of other analgesics, such as pudendal block, opioids, and local analgesics, were utilized to control the mothers' pain (Pennell et al., 2011). Therefore, the study focused on the use of the epidural and the satisfaction mothers had with it. Based on the mothers' birth plans and medical records, 33 (52.4%) of the women had requested strict avoidance of an epidural entirely; however, of those 33 women, 18 of them received an epidural analgesic (Pennell et al., 2011). Even if the mother was not given an analgesic, pain medicine in general was in high demand amongst these 63 women. Out of the 63 birth plans, 40 (63.5%) of them emphasized the avoidance of pain medication but the same 63 women's medical records revealed that 27 of those 40 (67.5%) requested and received pain medication during labor (Pennell et al., 2011). Looking at both the statistics for epidural and broad span pain medication use, one can conclude that pain management became very critical for these laboring and birthing mothers' comfort. While most of the women requested the avoidance entirely of any pain medication and epidural analgesia, most of those same women changed their minds once

they experienced the pain of child birth that is unpredictable from one mother to the next and even from one pregnancy to the next.

The other part of this study was to examine and determine the mothers' satisfaction with her labor and birth experience based on her use of analgesics. To measure birth plan satisfaction, a survey was mailed to all participants and out of the 63 women, 38 (60.3%) returned the survey completed (Pennell et al., 2011). Based on the fact that not all of the women returned a completed survey, the results of the study may not be conclusive of overall maternal satisfaction. However, the authors suggest that the women who did complete the postpartum survey are similar to the women who did not return the postpartum survey based on their labor and birth characteristics and outcomes contained within medical records (Pennell et al., 2011). Pain management and the satisfaction of how their pain was managed appeared frequently throughout the completed follow-up surveys. For 36.8% of the responders, pain management and pain medication preferences were the most important aspect of their birth plan (Pennell et al., 2011). As stated earlier, this study focused heavily on epidural use by the mothers because it was the most commonly used analgesic. Within the follow-up surveys, the authors were very interested in reviewing the satisfaction of the mothers who received epidurals. According to the mothers who responded to the postpartum survey, 24 of the 38 received an epidural and from those 24, 22 (91.7%) of them expressed satisfaction with their epidural (Pennell et al., 2011). It can be concluded that the majority of these mothers' birth plans emphasized avoiding epidural analgesia because more than half of the original 63 women requested to avoid epidurals. This goes hand in hand with the completed survey conclusion that women who create birth plans at any point during the pregnancy are satisfied with how their birth plan was used even if not all birth plan requests were fulfilled due to the unpredictable nature of labor and birth (Pennell et al., 2011).



Brown and Lumley (1998) found very similar results about maternal satisfaction: women who wrote birth plans were more likely to be pleased with the pain relief they received during labor and birth.

The completed surveys also revealed that education for mothers about birth plans and the labor and birth experience plays a key role in overall maternal satisfaction. Out of the 38 returned surveys nearly half, 17 (44.7%), stated that the mother received education from childbirth educators and childbirth class that she used to create her birth plan (Pennell et al., 2011). Another key finding from the completed surveys was that a little more than half of the women (52.6%) who replied to the survey stated that the number one reason they created a birth plan was for their own education and preparation for the labor and birth (Pennell et al., 2011). Both of these findings from a study based on anesthesia and analgesia satisfaction reveal that mothers are willing to learn and that they want to become educated about birth plans and birth itself. All of the mothers who completed the survey stated that they had some form of education that helped them create their birth plan. The majority of those same mothers who completed the survey were satisfied with the pain management they received in correlation with the analgesics given to them even though their original birth plans more than likely requested the avoidance of all forms of pain medication. This could possibly be because they received prior education that prepared them for possible birth plan changes. While this study does not openly express the importance that education plays in birth plan formulation and subsequent maternal satisfaction, it can be agreed that there is a link between education and satisfaction.

## **Surgical Invention: Cesarean Birth and Operative Vaginal Birth**

Expectant mothers have concerns about the possibility of their labor efforts not being effective enough for a natural vaginal birth, requiring an operative vaginal birth or even an unplanned cesarean birth. Mothers tend to include their concerns about surgical intervention in their written birth plans. Regardless of these concerns being outlined in their birth plans, some physicians and nurses tend to believe that mothers who have any form of a written birth plan are more at risk for a cesarean birth outcome (White-Corey, 2013). Unfortunately, when physicians and nurses believe in a strong relationship between written birth plans and cesarean births or poorer obstetric outcomes, negative attitudes can be formed towards the expectant mother with a written birth plan. These attitudes could then potentially interfere with positive, patient-centered care by causing these mothers to become “the brunt of jokes” and bringing about “outright hostility” (White-Corey, 2013, p. 269). Research does not support these beliefs or attitudes formed by health care providers. Rather, research has shown that mothers who have written birth plans are not at higher risk for a cesarean birth or poorer obstetric outcomes (White-Corey, 2013).

A study conducted by Afshar et al. (2016) investigated the relationship between mothers' preparation for labor and birth and their mode of delivering their baby. The two forms of preparation this study focused on were birth plans and child birth education classes. Both of these forms of preparation occur during the antepartum phase of labor and birth and aim to educate women about their pregnancy and how to manage their future labor (Afshar et al., 2016). This study was a retrospective cross-sectional study that included 14,630 deliveries, all of which were singleton pregnancies that were more than 24 weeks gestation (Afshar et al., 2016). Upon admission, mothers were asked if they had attended childbirth education (CBE) classes or if they

had a birth plan (Afshar et al., 2016). This information was then charted by nurses and could later be reviewed in the electronic medical record (Afshar et al., 2016).

The results of this study reveal a possible relationship between childbirth preparation, including CBE classes and birth plans. Most mothers that attend CBE classes and/or have a birth plan hope for a vaginal birth and the results of this study supports the likelihood of those mothers having a vaginal birth (Afshar et al., 2016). Out of the 14,630 deliveries, 4,668 mothers attend a CBE class and 1,749 had a birth plan (Afshar et al., 2016). Vaginal birth rates were significantly higher for women who attended a CBE class (68.4%) compared to those who did not attend a class (64.96% )(Afshar et al., 2016). Vaginal birth rates were also higher for women who had birth plans (72.6%) compared to mothers who did not have a birth plan (64.1%) (Afshar et al., 2016). These results support that patient education and preparation may impact whether or not they have a virginal birth.

The biggest strength of this study was the sample size of 14,630 deliveries (Afshar et al., 2016). However, the study does have limitations that may have impacted the results. One limitation was that only singleton pregnancies were considered for the study; therefore, results may be different for mothers carrying multiple babies (Afshar et al., 2016). Other limitations included having a higher proportion of white mothers than the national average and having a lower proportion of overweight and obese mothers than the national average (Afshar et al., 2016). Finally, the retrospective nature of the study impacts the results. Because the study is retrospective there is no way to know why health care providers chose certain modes of delivers for mothers and whether or not the mother's preferences influenced their birth (Afshar et al., 2016).

With existing evidence, there is no proof of a significant difference in rates of caesarean births or episiotomies between mothers who have written birth plans and those who do not (Aragon et al., 2013). While research and thus evidence is still limited on this topic, the majority of conducted studies have similar findings. One study conducted by Deering, Heller, McGahaa, Heaton, and Satin (2006) found that out of 67 laboring mothers who had written birth plans, 75% had a spontaneous vaginal birth, 6% had an operative vaginal birth, and 19% experienced a cesarean birth (as cited in White-Corey, 2013, p. 270).

In a different research study, a comparison study between mothers with written birth plans and mothers without birth plans, Deering, Zaret, McGaha, and Satin (2007) found no statistically significant difference between the rates of cesarean births: 17% of the mothers with birth plans versus 12% of the mothers without birth plans (as cited in White-Corey, 2103, p. 270). Even a studies in other countries have proven no significant correlation. Hadar, Raban, Gal, Yogev, and Melamed (2012) preformed a study in Israel and found that women with birth plans were less likely to have a cesarean birth as compared to women without birth plans (9.3% compared to 19.5%) (as cited in White-Corey, 2013, p. 270). Limitations of these three studies described above were not included in White-Corey's overall research.

The risk of receiving an episiotomy is another concern expectant mothers have. Deering et al. (2006) reported from their study that of mothers who requested no episiotomy, 24% had to receive this intervention (as cited in White-Corey, 2013, p. 270). However, Deering et al. (2006) stated that the mothers agreed to the intervention beforehand when their physician explained the situation with them and described the episiotomy as a necessary intervention (as cited in White-Corey, 2013, p. 270). Despite the agreement made between the mother and physician, there is a limitation to this conclusion. No further interviews were conducted by Deering et al. (2006) with

the mothers who received an episiotomy so the conclusion that the mothers agreed and were satisfied with the outcome is questionable (as cited in White-Corey, 2013, p. 270).

Research conducted by Brown and Lumley is very comparable to White-Corey's research described above. Brown and Lumley's (1998) research utilized a survey, with a response rate of 62.5%, which had been sent to mothers who were six to seven months postpartum, excluding mothers who had still births or if their baby had died. The questionnaire survey included topics about the care that the mother received during her pregnancy, labor and birth, and in postpartum (Brown & Lumley, 1998). With these questionnaire topics, the number of women with written birth plans was examined and compared to birth outcomes. Out of the completed questionnaires, 20% (270) of the mothers had created written birth plans during their pregnancy and had discussed the plan with their health care provider (Brown & Lumley, 1998). Of these 270 women, the rate of cesarean birth and operative vaginal birth was examined. It was found that fewer mothers with written birth plans experienced an operative vaginal birth: 9.6% of births to mothers with birth plans were assisted with forceps or vacuum compared to 14.9% of births to mothers without birth plans (Brown & Lumley, 1998). The study found that expectant mothers who used birth plans were slightly less likely to have an emergency cesarean birth compared to mothers who did not have birth plans; however, the slight difference was not statistically significant (Brown & Lumley, 1998). There were, however, limitations with this study possibly making the results skewed, favoring the cohort within the study. The study was under-representative of mothers who were born overseas and/or of non-English speaking backgrounds, single mothers, and women who were under the age of twenty-five (Brown & Lumley, 1998).

Aside from the information touched on above, research is limited on the relationship between surgical interventions and maternal satisfaction. This is understandable to an extent

because this topic tends to be a touchy subject for expectant and postpartum mothers. Not many mothers wish to have an operative vaginal birth or an emergency cesarean birth due to fear of the invention and the recovery process. But if the situation changes during their labor and birth experience, they are quickly forced to change their mindset, which can have a negative impact on maternal satisfaction. That is why the research found above focuses on the relationship between written birth plans and surgical interventions so that health care providers and expectant mothers know that the risks associated with birth plans and consequent surgical interventions is not statistically significant. With this information, health care providers should continue to support the mother's preferences written in her birth plan because this not only provides the mother with patient-centered care, but also is proven to increase maternal satisfaction (White-Corey, 2013). Emergency cesarean births and operative vaginal deliveries are not usually planned. Therefore, when these situations arise, health care providers must keep open communication with mothers to provide them with information and offer them choices, as it is beneficial to have the mother actively involved in decision making which can increase satisfaction with the unplanned event in their labor and birth experience (White-Corey, 2013).

## **Environment and Health Care Providers Surrounding the Labor and Birthing Process**

Early on in a woman's pregnancy, she decides on her primary health care provider who will not only provide care throughout the pregnancy, but who will also be present during her labor and birth. With this decision, the mother also considers locations for where her labor and birth will take place. Both of these considerations are defined as forms of "external control" for the mother (Cook & Loomis, 2012, p. 159). These two topics are included in the expectant mother's birth plan to communicate her wishes to her chosen health care provider and other providers who step in during the process as necessary.

An expectant mother typically has three options of health care providers to choose from when selecting who she wants to care for her during the pregnancy and the labor and birth process: a midwife, an obstetrician, or a general practitioner. Mothers will make their decision based on who they feel most comfortable with. They rely on the knowledge and expertise of the health care provider they chose while making birth decisions that will be written into their personal birth plan (Cook & Loomis, 2007). According to Brown and Lumley's (1998) research study that is described in detail in the above section, women who chose a midwife are most likely to have a birth plan while those who chose an obstetrician are least likely to develop a birth plan. Mothers who chose a general practitioner were intermediate as to whether or not they would have a birth plan (Brown & Lumley, 1998). The women whom chose midwives stated that they felt well informed and received insight from their midwives as they worked with them to construct their birth plans (Brown & Lumley, 1998). Other mothers, who did not receive care from a midwife, were more likely to have worse experiences because they did not make a birth plan or had their birth plan completely ignored by hospital staff whom followed their standard policies (Brown & Lumley, 1998).

Location of the birth is also an important choice mothers make during their pregnancy. The location of the birth is important because it largely determines the atmosphere that will surround the labor and birth process. A mother will choose her location based on the atmosphere she believes to be most comforting to her. One study found that safety and the perceived quality of care that would be provided were major factors that impacted a mother's choice of location (Lee, Ayers, & Holden, 2016). Another factor when choosing a location includes the actual physical surroundings of the location, whether that is home, a birth center, or a hospital (Lee, Ayers, & Holden, 2016). While this study was limited to high risk pregnancies that were due to inherent maternal factors, location and the surroundings are important to all expectant mothers.

In the moments leading up to and during birth, multiple people surround the mother in whichever location she has chosen. Birth plans offer a method to assist in communicating the mother's preferences to the multiple health care providers that are involved in her care (Brown & Lumley, 1998). However, as described above, labor and birth are unpredictable for every woman and expectations can be infringed on quickly if situations change. When the original birth plan expectations are altered, it is the responsibility of the health care providers present to communicate and negotiate the changes occurring with the mother in order to "foster a positive birth experience" (Cook & Loomis, 2012, p. 159). Communicating and negotiating changes to mothers' birth plans can be a challenge for some health care providers. This is because some physicians and other hospital team members work with patients based on evidence and disagree with changing their own personal routines to match the mothers' wishes outlined in their birth plan (Kaufman, 2007). This conflict of interest quickly causes decreased maternal satisfaction because the mothers' health care team is not attempting to acknowledge or negotiate what is possible in their birth plans. It is vitally important that all health care providers acknowledge



expectant mothers' birth plans and work as a team to meet her wishes as best as they possibly can to increase maternal satisfaction while maintaining safety of the mother and newborn.

One study was constructed to investigate how changes in mothers' birth plans impacted their experiences and satisfaction, especially when a transfer of care occurred with location and/or provider. The study consisted of fifteen postpartum women who were interviewed and had their answers audio recorded (Cook & Loomis, 2007). Of these fifteen women, 87% (13) had initially intended to use a midwife, one woman received care from a general practitioner, and another used an obstetrician (Cook & Loomis, 2007). As seen by the statistics of the sample, the data is limited to mainly mothers planning to be cared for by midwives during their labor and birth. This increases the probability that the results of this study are skewed; however, the transfer of care from one care provider to another was the focus of the study. As the study results unfold, one can see that a transfer from a midwife to an obstetrician is the most common transfer of care. Out of the thirteen women intending to be cared for by a midwife during labor and birth, nearly half (6) were transferred to be cared for by an obstetrician during either their pregnancy, labor, or postpartum (Cook & Loomis, 2007). And out of those six women who had to transfer care providers, three of them had originally planned a home birth but had to be transferred to a hospital for the labor and birth process (Cook & Loomis, 2007). The women in this study who had to change their birth plans and transfer providers and/or locations had mixed reviews on how they felt and their satisfaction levels after their birth experience was over. Some women, who felt that they still maintained control during the change, described the experience more positively using words such as "fantastic," "empowering," and "supported" (Cook & Loomis, 2007, p. 165). While other women who felt as if they had little to no control, felt more negative about the experience using words such as "defeated," "frustrated," and "traumatizing" (Cook & Loomis,

2007, p. 165). Based on these findings from the recordings, it was concluded that the mothers' satisfaction depended on how much control they personally felt in the situation. The positive or negative feelings depended on to what degree the initial birth plan was changed and, more importantly, "the degree of control that women [had] over the changes as they [were] happening" (Cook & Loomis, 2007, p. 165). Other research has proven this to be true as well. It has been emphasized that when changes to a woman's birth plan become necessary, the amount of control that the woman is able to maintain is critical for sustaining a positive labor and birth experience and, in turn, increasing maternal satisfaction (Cook & Loomis, 2007).

Within this study there were limitations that potentially could have skewed results. The fifteen women who participated in the study contacted the researchers themselves after learning about the study which caused the diversity of the sample to be limited based on ethnic, racial, sexual orientation, and socioeconomic backgrounds (Cook & Loomis, 2007). The study did not offer much variation on chosen health care providers or birthing locations (Cook & Loomis, 2007).

In conclusion, a mother's chosen health care provider and location are important factors of her birth plan. If one of these factors has to change, it can be difficult for the mother to cope and maintain satisfaction with her birth experience. This is why it is vital for all members of her health care team to acknowledge the mother's birth plan. Even if her plan cannot be completely followed anymore with her chosen health care provider or in the location she hoped for, it is the responsibility of her health care providers to communicate with her and include her in the decisions made to still give her some sense of control.

How a mother's health care provider is involved in the developing or current birth plan and his or her attitude on the birth plan can impact a mother's experience and satisfaction

(Brown & Lumley, 1998). As far as location, health care providers should be “respectful and sensitive” while talking with mothers about their chosen place of birth in order to not “alienate” the mother (Lee, Ayers, & Holden, 2016, p.49). All health care providers must respect a mother’s birth plans and should even encourage mothers to have concerns and expectations for their pregnancy, labor, and birth. While bearing in mind that education is necessary based on the fact that events are unpredictable. However, changes can be dealt with through open communication between the mother and health care providers to allow the mother to maintain some sense of control in order to increase her maternal satisfaction.

## **Limitations**

The major limitation found within the existing research on birth plans is that there is not a substantial amount of research present on birth plans and their components. The existing research even draws attention to the fact that, currently, little research has been conducted on birth plans. With the research that does exist, there are limitations within these studies as well. Most studies found in the current research did not contain samples of expectant mothers with very diverse backgrounds. Most groups studied were very homogenous within their respective study. There were studies that were conducted outside of the United States; however, not many studies were performed in developing countries. Within this literature review, research was based only on articles written in English. Most of the studies that exist and that were utilized contained small sample sizes.

### **Focus Group: Health Care Providers Perspectives**

To help further my research, I conducted a qualitative exploratory designed study using a focus group of midwives to discover health care providers' perspectives on birth plans and their relationship with maternal satisfaction. Dr. Erika Metzler Sawin and Professor Karen Silveira of the James Madison University School of Nursing assisted me with conducting the focus group. The research was reviewed and approved by the International Review Board (IRB) and assigned protocol number 17-0360. A total of ten Certified Nurse Midwives (CNM) were invited to join the focus group and each one signed a consent form agreeing to participate in this confidential study. Participants were assured of confidentiality and they could stop the study at any time. Before beginning the interview, the participants were informed that patients' names should not be revealed during the discussion because this would be a violation of HIPAA confidentiality requirements. The midwives experience level ranged from Registered Nurses studying to become midwives to actively practicing midwives to retired midwives. They also varied in the area in which they practiced including hospitals, birth centers, and home birth. The group was asked four IRB approved questions (see appendix 1). Each midwife was given the opportunity to respond to each question if they had an opinion or felt passionate about the topic of the question but were not forced to give an answer. Midwives could also respond to other midwives' comments. The responses were recorded with audio recorders and then transferred verbatim to a password protected computer that only Dr. Sawin had access to. I transcribed their responses to decipher which quotes were important in describing the different midwives' perspectives on the relationship between birth plans and maternal satisfaction.

The focus group discussion began with asking the midwives to describe their experiences with birth plans. From this question multiple responses were received that provided personal

definitions of birth plans. The general consensus amongst the majority of the midwives was that a birth plan should be used as and referred to as a “preference sheet” because this gives mothers the opportunity to express what they prefer throughout their pregnancy and in the time of their labor and birth. Referring to their birth plan as a “preference sheet” also allows health care providers to explain to mothers that their preferences are important and heard; however, they can also explain to the mothers that their preferences may not be possible if circumstances arise that prevent their preferences from being fulfilled. A practicing midwife also expressed the importance of explaining to the mothers that their birth plan “is not a contract” and that it is “not rigid.” It is important for expectant mothers to understand these two things because they must know that they can change things within their birth plan whenever they wish to do so. Once they make a decision on what to include in their birth plan, they also must understand that flexibility is key because no labor and birth is predictable and circumstances may change as time progresses. Another practicing midwife included that the birth plan is also helpful for health care providers in that it can be used as a “discussion tool” between the mother and the provider. This gives the health care provider the opportunity to understand what the mother’s preferences are but also “the opportunity [for the mother] to see what [the health care providers] offer.” By openly discussing both a mother’s preferences and the health care provider’s services, both parties can better understand what is preferred and anticipated during labor and birth.

The next question explored how these midwives’ practices utilized birth plans. Nearly all the midwives agreed that the birth plan should be “used prenatally.” This gives the midwife the opportunity to meet with the mother and look over her birth plan before labor and birth begins. One practicing midwife explained that a strength from going over the birth plan prenatally is that it gives the midwife the opportunity to ask the mother “how will you process things if they are

going differently than you had planned?” This gives the mother and midwife the opportunity to discuss what is truly important to the mother and what coping skills can be utilized if preferences are not able to be followed. Another practicing midwife stated that it is important to begin reviewing the birth plan prenatally so that the midwife can determine if “it [is] realistic [for] the site [the mother] chose to birth [her] baby.” If the preferences do not realistically align with the chosen location of birth, then a discussion must be held to determine what can be done that best satisfies the mother and keeps her and the baby safe. A practicing midwife who practices in a hospital setting stated that she likes to “communicate to the nurses what is on [the mother’s] preference sheet” so that the nurses can also follow the mother’s preferences within their provided care.

The third question was for the midwives to describe if they believe birth plans are good tools for patients to utilize. Once again the majority of the midwives responded that birth plans are great “tools for discussion.” One practicing midwife expanded on this idea even more. She stated that “there is some miscommunication” that exists amongst expectant mothers creating birth plans. She even gave an example that it is common for mothers to state: “I’m not going to vaccinate my baby so I’m not going to do the vitamin K.” It is important to use the birth plan as a discussion tool because misunderstandings and miscommunications like these can be cleared up or explained to expectant mothers. A Registered Nurse studying to be a midwife stated that she believes that a birth plan is “definitely a good tool but I think people need guidance of how to use it and not just ‘oh I think I’ll find something online.’” Giving mothers the guidance on how to use birth plans helps to give them legitimate information and corrects the information from online that could be incorrect or misleading.

Lastly, the midwives were asked how they felt birth plans impacted maternal satisfaction. The biggest consensus that come from the group was that to assess maternal satisfaction and to help raise the satisfaction level, it is important to talk with the mother after the birth. A practicing midwife stated that “maternal satisfaction [be] processed[ed] through postpartum.” The midwife’s statement exemplifies that maternal satisfaction is evaluated after birth has occurred. This allows for the mother to “review how her birth was.” Reviewing the birth experience is important because “processing the birth overall is helpful.” The conclusion can be made from this midwife’s comments that talking with the mother about her birth experience helps increase maternal satisfaction because she can express her feelings and possibly begin to understand why things happened the way they did. Another practicing midwife commented on how negative emotions arise when alterations in location occur. From this midwife’s personal experience “the biggest disappointment [is] when [the mother] is planning an out of hospital birth and [has] to be transferred [to the hospital].” This agrees with the research stated above in that the biggest disappointment for a laboring mother is to be transferred from her location of choice that is stated in her birth plan and, therefore, decreasing maternal satisfaction (Cook & Loomis, 2007). However, another practicing midwife commented on how mothers tend to cope with and view the events that occur that are not in accordance with their original birth plan. This midwife stated a quote that she often hears from patients after birth: “Yeah I know what I wanted but it wasn’t what I wanted in the moment.” This quote emphasis how mothers can still be satisfied with events that do not match their original birth plan because they change their mind in the moment. Since they were in control and agreed to the intervention based on how they felt, their satisfaction can still remain high. A great example of this is pain management. The pain will be unpredictable and mothers preference what they wish to have done but can quickly change their



decision once in labor. As supported by my research, most mothers are satisfied with the pain management interventions they receive because they believe they were properly educated on their choices and the intervention relieved the pain (Pennell et al., 2011). The key point that all midwives strongly agreed with was a comment that a practicing midwife made: “with time, does that woman heal from that experience not going the way she hoped for it to.” This was very important for the group because they acknowledged that it may take some time for that mother to accept the way her labor and birth went but the important aspect is if she can heal. With this in mind, the midwives expressed how maternal satisfaction may not be high for these mothers at first, but with time she can be more accepting of how her labor and birth went and potentially be more satisfied with the results.

## **Health Care Provider and Nursing Implications**

For birth plans to become more successful in promoting higher levels of maternal satisfaction, all health care professionals, including nurses, must be more open to the concept of birth plans, education, and communication about labor and birth. As stated above, it is a common myth amongst health care providers, especially physicians, that birth plans increase a mother's chance for a cesarean birth (White-Corey, 2013). This idea exists among nurses as well.

Research supports that many nurses tend to have “strong aversion[s]” towards birth plans and also believe that the birth plan will result in poorer labor and birth outcomes (Fleming, Smart, & Eide, 2011, p. 115). To correct these incorrect notions, all health care professionals, including nurses, need to review the research that exists on birth plans and become more open to working with mothers who have birth plans. Once providers have a changed mind-set, progress can be made to help mothers create birth plans with the trust, education, and communication that is received from providers and educators.

Developing trust with an expectant mother helps to build a relationship. Each mother is different and will experience a different labor and birth than other mothers. Along with her unique labor and birth, she will have her own personal “values, hopes, and fears” that she will center her birth plan around (DeBates, 2017, p. 32). A provider must know in advance these three aspects before trying to develop trust with the mother. Once the provider understands the mother's values, he or she can build a trusting relationship with the mother and provide her with the appropriate information and communication that will support her values (DeBates, 2017). Developing trust based on a mother values, providing information, and effectively communicating are all part of creating a “birth partnership” (DeBates, 2017, p. 31-32). Mothers who do develop a strong trusting relationship with their provider feel well supported when

making decisions during their labor and birth as well as trust the provider's decisions (Cook & Loomis, 2012). These mothers tend to have higher satisfaction and a more positive memory of the birth process because they were kept at the center of attention and well supported with every decision they made (Cook & Loomis, 2012).

Cook & Loomis (2012) found three factors that were closely connected to maternal satisfaction: a mother's personal knowledge, the social norms, and a flexible environment. The best recommendation that came from this study was that everyone who is on the labor and birthing team "need[s] to support women in making informed choices and negotiating these decisions during the birth process" (Cook & Loomis, 2012, p. 166). This can best be done by acknowledging the three factors stated above that relate to maternal satisfaction.

Sharing information and educating mothers is also highly important. The information should include not only labor and birth options but also facts about the physiology of labor and birth. One article suggests that a birth plan should even reflect the mother's understanding of birth physiology (White-Corey, 2013). The sharing of information and communication with mothers should begin during the mother's pregnancy and continue all the way through birth and postpartum (Cook & Loomis, 2012). Giving mothers information and communicating with them prenatally provides a calm environment instead of trying to educate a mother while she is in labor. Working with the mother prenatally allows for her to look at her options with her chosen health care provider who can help her make decisions (Kaufman, 2007). Educators also play a key role in assisting mothers prepare their birth plans. They have the opportunity to strongly express the importance of having a birth plan that is "realistic and flexible" (Kaufman, 2007, p. 48). Individuals who provide information and education to mothers on birth plans should also encourage mothers to make their birth plan as concise as possible and even consider bullet points

(Kaufman, 2007). Lastly, it is important that educators are current with their knowledge. They need to stay on top of new research that emerges, provide information based on the best evidence based practice, and be aware of their own personal bias (Kaufman, 2007).

For nurses, acknowledging a mother's birth plan is just as important as it should be to a physician or midwife. Nurses provide a good amount of care to laboring mothers and should be aware of their birth plan so that they can help the mother achieve a birth that is safe yet satisfying to her. Fleming, Smart, and Eide (2011) discovered six different themes in relation to mothers' perceptions of the nursing care they received during labor and birth: (a) providing welcome care; (b) offering choices; (c) following birth plans; (d) establishing trust and rapport; (e) being an advocate; and (f) providing reassurance and support. It is important for a nurse to provide welcoming care when the mother arrives. The mother is eager and excited to form a relationship with the nurse (Fleming et al., 2011). This relationship can begin the early stages of trust for those mothers who have birth plans. Mothers are also looking for nurses who will give them choices because choices will increase their sense of control (Fleming et al., 2011). Mothers with birth plans attempt to identify whether the nurse will acknowledge and adhere to their birth plan especially as the nurse provides the majority of care while communicating the mother's requests to the provider. (Fleming et al., 2011). This study found that most mothers felt that their nurses acknowledged and followed their birth plans, which was unexpected since current research suggests that nurses have negative attitudes towards birth plans (Fleming et al., 2011). Mothers also count on a sense of trust and rapport from their nurses. They wish to establish these two things early on because when the labor intensifies, they want to have someone to rely on (Fleming et al., 2011). An important role of a nurse is to be an advocate for patients, which remains true for the nurse of the laboring mothers. The nurse becomes the mother's advocate and

communicates to the provider what the mother needs and wants (Fleming et al., 2011). She can also advocate for the mother's birth plan. Lastly, a mother needs support and reassurance from her nurse. In this study, when a nurse provided mothers with reassurance they felt more safe and secure (Fleming et al., 2011). If a nurse can strive to provide these six things to a mother, working with her from the beginning to the end of labor and birth, then a mother's overall labor and birth experience should be something she is satisfied with.

The general consensus of the research included in this review indicates that providers and nurses must communicate and provide proper information to mothers prenatally, intrapartum, and postpartum. When mothers are communicated with and are provided sufficient enough information, they feel as if they are still in control even if things are not going as planned (Fleming et al., 2011). More research needs to be conducted on birth plans in order to continue to understand the relationship between birth plans and maternal satisfaction and how providers can better incorporate birth plans into their practice. Health care providers need to be more willing to acknowledge and adhere to a mother's birth plan in order to provide care that aligns with the mother's requests for labor and birth.

## Sample Birth Plan

Pictured below is a sample birth plan that is designed to be concise and utilizes bullet points (Kaufman, 2007, p. 51).



### Dear Hard-Working Staff of Providence L & D ...

The McKaigs have indicated the following wishes in hopes of creating the best possible birthing experience for all individuals involved:

- No routine medical interventions (including IV fluids, epidural, episiotomy, continuous EFM, etc.)
- Freedom of movement (including shower, birth ball, walking, rocking, etc.)
- Continuous emotional support (i.e., presence of husband and doula at all times)
- Freedom to eat and drink
- Labor starts on its own - without gel preps, Pitocin, etc.
- Do not offer pain medication or epidural
- 15 minutes to privately discuss any new situation or intervention
- Birth in an upright, squatting, or side-lying position
- No separation of Mother and Baby for at least 1 hour after birth

### Postpartum Wishes:

- Breastfeeding, only. In case of emergency, use cup or syringe - no nipples
- Parents to give first bath
- No eye drops - No Vitamin K injection - No immediate umbilical cutting
- If Baby goes to nursery, no separation of Father and Baby

Thank you all in advance for helping this special dream come true.  
Sincerely, Kaaren and Warren McKaig

## Conclusion

Birth plans are created by expecting mothers in hopes that their wishes and desires for labor and birth will be heard and carried out. Mothers can have positive or negative emotions tied to their birth experience depending on how their labor and birth went in comparison to their original birth plan. Positive or negative feelings depend on to what degree the initial birth plan was changed and, more importantly, “the degree of control that women [had] over the changes as they [were] happening” (Cook & Loomis, 2007, p. 165). When changes to a woman’s birth plan become necessary, the amount of control that the woman is able to maintain is critical for sustaining a positive labor and birth experience and, in turn, increasing maternal satisfaction (Cook & Loomis, 2007, p. 165).

A birth plan document provides a way for health care providers to understand the mother’s requests and provide care that is satisfying to her. This can occur if the mother understands that before and during the experience that unpredictable and unexpected circumstances can arise that cannot coexist with her birth plan (Aragon et al., 2013). However, disadvantages to birth plans experienced by mothers are “negative emotions such as disappointment or dissatisfaction” that can occur if their birth plans are not or could not be followed (Aragon et al., 2013). This occurs especially when maternal expectations become unrealistic for the mother’s situation during the labor and birthing process” (Aragon et al., 2013, p. 981). To decrease the possibility of these negative emotions, expectant mothers need proper education from their health care providers on birth and labor as a whole and on how to create a birth plan that is suitable for their birthing environment. Research shows that mothers are willing to learn and want to become educated about birth plans and birth itself (Pennell et al, 2011). The number one reason mothers create birth plans is for their own education and preparation for the

labor and birth (Pennell et al., 2011). Health care providers can help foster expectant mothers' education. This starts by health care providers striving to learn each mothers' unique values, hopes, and fears that surround her labor and birth process (DeBaets, 2017). Once the health care provider has a clear understanding of these, he or she can facilitate a conversation to begin building a relationship with that mother that includes trust and effective communication (DeBaets, 2017).

There is limited research that exists on the topic of birth plans. From this, more research needs to be conducted in order to better understand factors that impact the relationship between birth plans and maternal satisfaction. More research could also help birth plans impact maternal satisfaction in a more positive way by providing evidence to health care providers on how best to acknowledge a mother's birth plan and how to educate her after reviewing her birth plan before birth.



### Summarized Evidence Table

Authors, Date, & Level of Evidence (LOE)	Purpose	Birth Plan Topic	Sample Size & Description	Study Methods & Instruments	Results	Limitations
<p>Afshar, Y., et al. (2016).</p> <p>LOE: III</p>	<p>To investigate if mode of delivery differs between women who have birth plan, attended childbirth education (CBE) classes, or both.</p>	<p>-Caesarean birth and operative vaginal birth</p>	<p>N=14,630 deliveries</p>	<p>A retrospective cross-sectional study where women were asked upon admission if they participated in CBE or had a birth plan. The information was charted by nurses to then be abstracted from the electronic medical record at a later date.</p>	<p>-Vaginal birth rate were significantly higher for women who had attended CBE classes compared to those who did not.</p> <p>-Rates of vaginal births were higher for women who had birth plans compared to those who did not.</p>	<p>-Only singleton pregnancies more than 24 weeks gestation were included in the study</p> <p>-Higher proportion of white women than the national average</p> <p>-Lower proportion of overweight and obese women than the national average</p> <p>-This retrospective study limits the ability to know why health care providers chose certain modes of delivery and/or if the mothers' preferences</p>

						impacted the mode of delivery.
Aragon, M., et al. (2013).  LOE: VI	To understand perspectives of women, health care providers, and support persons regarding the use of birth plans.	-Caesarean birth and operative vaginal birth  -Pain management	N=122 postpartum expectant mothers whom had birth plans  N=110 health care providers and support persons	A cross-sectional questionnaire was distributed to a sample of expectant or postpartum women, health care providers, and support persons in British Columbia.	-There was no difference in rates of cesarean births or episiotomies between women who had birth plans and those who did not.  -Pain management was commonly included as the most important aspect of a mother's birth plan.	-Majority of the mothers in the study had a midwife as their primary health-care provider, mothers resided within British Columbia, the questionnaire was only available in English, study lacked demographic variables, and birth plan was not defined on the questionnaire.
Brown, S., et al. (1998).  LOE: IV	Examine the differences in social and obstetric characteristics and intrapartum experiences of women who did and did not	-Health care provider present  -Caesarean birth and operative vaginal birth  -Pain management	N=270 expectant mothers with written birth plans	Population-based survey was distributed by hospitals and home birth practitioners to mothers who gave birth in Victoria, Australia who were 6-7 months postpartum.	-Significantly fewer women who utilized birth plans had operative vaginal deliveries.  -There was no statistically significant difference in cesarean birth rates between mothers with birth plans and those without them.	-The study was under-representative of mothers who were born overseas and/or of non-English speaking backgrounds, single mothers, and women who were under

	use a birth plan.				<p>-Mother who wrote birth plans were more likely to be happy with the pain management they received.</p> <p>-Mothers were most likely to have a birth plan if they received care from a midwife and least likely with an obstetrician. Mothers with general practitioners were intermediate.</p>	the age of twenty-five.
<p>Cook, K., et al. (2012).</p> <p>LOE: VI</p>	<p>Explore how women develop their initial birth plan and how changes made to the plan affect the overall birth experiences .</p>	<p>-Environment &amp; health care provider present</p>	<p>N=15 mothers who had given birth within the past 2 years with birth plans</p>	<p>A qualitative study that included interviews in Waterloo Region, Ontario, Canada. The interviews inquired about the development of the mother's birth plan, their birth story and experiences, and reflections on what happened. Interviews were audio recorded.</p>	<p>-Majority (13) of mothers intended to utilize a midwife. Six of which had to be transferred to an obstetrician and three of those were also transferred from home to the hospital for birth.</p> <p>-These mother positive or negative attitudes and satisfaction were related to how much control and choice they had as their birth plan changed.</p>	<p>-Mothers in the study contacted the researchers themselves after learning about the study which caused the diversity of the sample to be limited based on ethnic, racial, sexual orientation, and socioeconomic backgrounds</p> <p>-The study did not offer much variation on chosen health care providers or</p>

						birthing locations  -Finally, this study occurred in the Waterloo Region located in Ontario, Canada.
Lee, S., et al. (2016).  LOE: VI	To investigate a mother's decision-making process during high-risk pregnancies.	-Environment	N=26 expectant mothers of at least 32 weeks gestation whom had high-risk pregnancies	A qualitative study that utilized interviews in a hospital maternity department in the UK. The interviews lasted from 20 minutes to 1 hour 40 minutes were and digitally reordered.	-Important factor for chosen location of birth included safety, comfort, and the perceived care they would receive.  -Another factor was the physical environment that surrounded the chosen location.	-Only included mothers had high-risk pregnancies  -No other limitations noted.
Pennell, A., et al. (2011).  LOE: IV	To describe anesthesia and analgesia-related preferences, outcomes, and satisfaction of women who used a birth plan for labor and birth.	-Pain management	N=63 expectant mothers with birth plans	A prospective cohort study examined the anesthesia and analgesia-related preferences, outcomes, and satisfaction with outcomes. The study was approved by the University of North Carolina at Chapel Hill. Data were gathered from medical records, birth plans, and a follow-up survey. Women were eligible if they were greater than 34 weeks pregnant, did not have preplanned cesarean births, and	-Preferences related to pain management are important components of birth plans.  -Women are satiated with the anesthesia and analgesia they receive during their labor and birth experience  -Women who use birth plans are generally satisfied with their birth experience even when birth plan preferences are not fulfilled.	-Majority of the mothers were white, had four or more years of college, were attended by a nurse midwife, under the age of 35, and were primigravida s.  -All mothers' primary language was English.

				were English speaking.		
White-Corey, S., (2013).  LOE: V	Present existing evidence on perinatal outcomes in correlation with mothers who have birth plans in relation to satisfaction .	-Caesarean birth and operative vaginal birth	N/A	No measurements used.	-All studies concluded that there is no statistically significant difference in rates of cesarean birth and/or operative vaginal birth between women who have birth plans and those who do not.	No limitations noted.

## **Appendix 1**

### Interview Guide

1. What is your professional experience with birth plans?
2. How does your practice use birth plans?
3. Do believe birth plans are a good tool for patients? Why or Why not?
4. How do you feel birth plans impact maternal satisfaction?

## References

- Afshar, Y., Wang, E. T., Mei, J., Esakoff, T. F., Pisarska, M.D., & Gregory, K. D. (2016). Childbirth education class and birth plans are associated with vaginal delivery. *Birth (Berkeley, Calif.)*, doi:10.1111/birt.12263
- Aragon. M., Chhoa, E., Dayan, R., Klufftinger, A., Lohn, Z., & Buhler, K. (2013). Perspectives of expectant women and health care providers on birth plans. *Journal of Obstetrics and Gynaecology Canada: JOGC= Journal D'obstetrique Et Gynecologie Du Canada: JOGC*, 35(11), 979-985. doi:10.1016/S1701-2163(15)30785-4
- Brown, S., & Lumley, J. (1998). Communication and decision-making in labour: Do birth plans make a difference? *Health Expectations*, 1(2), 106-116. doi:10.1046/j.1369-6513.1998.00023.x
- Cook, K., & Loomis, C. (2012). The impact of choice and control on women's childbirth experiences. *Journal Of Perinatal Education*, 2(3), 158-168. doi:10.1891/1058-1243.21.3.158
- DeBaets, A. M. (2017). Call to action: From birth plan to birth partnership: Enhancing communication in childbirth. *American Journal of Obstetrics and Gynecology*, 21631. e1-31. e4. doi:10.1016/j.ajog.2016.087
- Fleming, S. E., Smart, D., & Eide, P. (2011). Grand multiparous women's perceptions of birthing, nursing care, and childbirth technology. *Journal of Perinatal Education*, 20(2), 108-117. doi:10.1891/1058-1243.20.2.108
- Kaufman, T. (2007). Evolution of the birth plan. *Journal of Perinatal Education*, 16(3), 47-52.

- Lee, S., Ayers, S., & Holden, D. (2016). Decision-making regarding place of birth in high-risk pregnancy: A qualitative study. *Journal of Psychosomatic Obstetrics & Gynecology*, 37(2), 44-50. doi:10.3109/0167482X.2016.1151413
- Lothian, J. (2006). Birth plans: The good, the bad, and the future. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN/NAACOG*, 35(2), 295-303. doi:10.1111/j.1552-6909.2006.00042.x
- Mei, J. Y., Afshar, Y., Gregory, K. D., Kilpatrick, S. J., & Esakoff, T. F. (2016). Birth plans: What matters for birth experience satisfaction. *Birth: Issues in Perinatal Care*, 43(2), 144-150. doi:10.1111/birt.12226
- Pennell, A., Salo-Coombs, V., Herring, A., Spielman, F., & Fecho, K. (2011). Anesthesia and analgesia-related preferences and outcomes of women who have birth plans. *Journal of Midwifery & Women's Health*, 56(4), 376-381. doi:10.1111/j.1542-2011.00032.x
- White-Corey, S. (2013). Birth plans: tickets to the OR?. *MCN: The American Journal of Maternal Child Nursing*, 38(5), 268-275. doi:10.1097/NMC.0b013e31829a399d