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Factors That Impact Access to Vaginal Birth After Cesarean: Perceptions of Obstetric Nurses

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Factors that Impact Access to Vaginal Birth After Cesarean: Perceptions of Obstetric Nurses

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Dedication and Acknowledgements

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Factors That Impact Access to Vaginal Birth After Cesarean: Perceptions of Obstetric Nurses
Sage Hyman Bearman

Abstract

BACKGROUND: Despite evidence demonstrating the safety of a trial of labor for women with a history of cesarean, nearly half of California's birth hospitals do not support vaginal birth after cesarean (VBAC). Increasing access to VBAC can contribute to a reduction in cesarean birth and the optimization of perinatal health outcomes.

METHODS: Thematic analysis was used to identify key themes in 157 comments volunteered by obstetric nurses during a structured survey of all civilian hospitals with perinatal units in California.

RESULTS: Nurses described significant efforts of specific providers, or change agents, required to support VBAC at their institutions. A sense of pride was evident in comments from nurses who associated VBAC support with high quality care. Nurses identified insufficient anesthesia coverage, the influence of professional organizations, and lack of provider willingness as barriers to VBAC.

CONCLUSION: Clinical data support increased access to VBAC. However, many non-clinical factors at the institutional and individual level function as barriers to VBAC. More studies are needed that: 1) demonstrate the safety of VBAC in smaller community hospitals; and, 2) investigate the perceptions of emergency obstetric providers with regard to VBAC. Maternal health providers who care for women with a history of cesarean should discuss the risks and benefits associated with a trial of labor and elective repeat cesarean to support informed choice and refer patients to centers that support VBAC if their institution does not.

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Background

The cesarean birth rate in the United States has risen steadily over the last four decades and currently accounts for about one third of births. It is well acknowledged that the non-judicious use of this intervention places mothers at increased risk for adverse outcomes such as infection, hemorrhage and morbidity associated with abnormal placentation in future pregnancies (Rossi & D'Addario, 2008; Guise, et al., 2010). The perinatal health community is motivated to reduce the primary cesarean birth rate in order to optimize outcomes for both mothers and babies (Caughey, Cahill, Guise, & Rouse, 2014). While a focus on the safe prevention of the primary cesarean is critical in order to increase rates of vaginal birth, it is also imperative to pay attention to the controversial subsequent labors and births by women with a history of cesarean.

Throughout much of the 20th century, the dominant medical recommendation was rigid – "once a cesarean, always a cesarean" (Cragin, 1916). Then, in the late '80's and early '90's, studies demonstrated that women undergoing a trial of labor after cesarean (TOLAC) achieved a vaginal birth in 67%-85% of cases (Flamm, 2001; Miller, Diaz, & Paul, 1994). During this time, the rate of vaginal birth after cesarean (VBAC) in the United States rose from 3% to its peak of 28% in 1996 (MacDorman, Declerq, & Menacker, 2011). Leaders in obstetrics asserted that the most significant change in practice over the preceding generation was the rise in VBAC which eliminated an estimated 100,000 repeat cesareans (Flamm, 2001, p.90).

However, in that same period, an influential study was published that found an increased risk of uterine rupture, or separation of previous uterine scar, among women attempting TOLAC as compared to women who elected to have a repeat cesarean (McMahon, Luther, Bowes, & Olshan, 1996). Additional studies demonstrating increased rates of uterine rupture, especially in

the setting of induction and more often with the use of prostaglandins, further raised concerns about VBAC (Bennett, 1997). As a result of these findings and rising professional liability concerns, the American College of Obstetricians and Gynecologists (ACOG) revised its VBAC practice bulletin recommending that physicians and anesthesiologists be "immediately available" during a TOLAC (ACOG, 1999). This recommendation proved to be resource-prohibitive for many obstetric units and unpopular among many providers; smaller hospitals often do not staff anesthesia teams "in-house" and many physicians prefer to take call from home. As a result, the VBAC rate soon plummeted and has yet to recover. It currently hovers around eight percent in the United States and remains the lowest among the top 14 industrialized nations (MacDorman, Declerq, & Menacker, 2011); in some states less than one percent of women give birth vaginally after a previous cesarean (Cox, 2011).

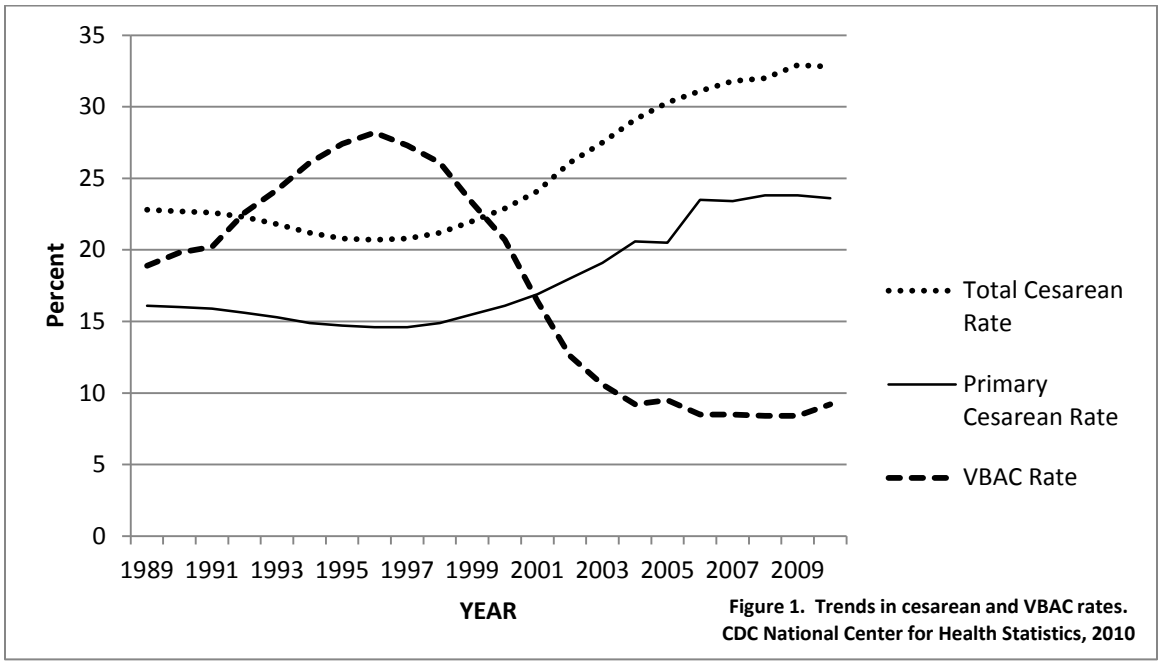

Figure 1. Trends in cesarean and VBAC rates. CDC National Center for Health Statistics, 2010

The rate of VBAC has a significant impact on the overall cesarean birth rate and warrants close attention. As seen in Figure 1., the total cesarean rate increases as VBAC decreases, even

as a reduction in primary cesarean is noted. Numerous studies and professional organizations have demonstrated that women deserve the option of a trial of labor (Korst, Gregory, Freidman, & Phelan, 2011). However, access to VBAC in this country is uncommon, which reveals the neglect of a critical strategy for the reduction of cesarean birth (Leeman, Beagle, Espey, Ogburn, & Skipper, 2013).

In 2010, the National Institutes of Health (NIH) held a consensus meeting to examine the best available data on the impact of VBAC and elective repeat cesarean on perinatal morbidity and mortality. While ethical considerations make it challenging to conduct randomized control trials comparing TOLAC and elective repeat cesarean, many high quality prospective and retrospective studies exist demonstrating that certain risks and benefits accompany both birth choices. For those choosing TOLAC after one previous cesarean, the risk of uterine rupture is 0.7%-0.9%, as compared to 0.4%-0.5% for those electing for repeat cesarean (ACOG, 2010). Additional risks and benefits for the mother and fetus accompany each decision, and proponents of VBAC maintain that a respect for patient autonomy requires access to an informed choice between the two. The NIH supports this stance as well and at the close of the consensus meeting overwhelmingly called for obstetric organizations to increase access to TOLAC. In response, ACOG published Bulletin #115, a revision of its VBAC practice bulletin and stated that "restricting access was not the intention of the college's past recommendation" (ACOG, 2010). They acknowledged VBAC as a safe option for most women with a previous cesarean and urged providers to counsel their patients about relative levels of risk and facilitate informed choice. However, the recommendation that medical staff be "immediately available" was retained due to the unpredictable nature of obstetric complications, namely uterine rupture (ACOG, 2010).

Considering the prevalence of unexpected intrapartum emergencies like cord prolapse and placental abruption, which complicate 0.3% and 0.6% of births, respectively, one can question the logic that treats the risk of uterine rupture so differently than other obstetric emergencies (Tyner & Rayburn, 2013). Some argue that access to a timely cesarean is fundamental to the practice of obstetrics and sites that are poised to respond to unexpected emergencies can appropriately care for women who desire VBAC (Bujold, 2010).

Due, in part, to the maintenance of the "immediate available" recommendation, Bulletin #115 did not result in increased rates of VBAC around the country. Barger, Dunn, Bearman, DeLain, & Gates (2013) examined the effect of the NIH consensus and resulting ACOG recommendations on VBAC availability in California and found that the access status quo remained largely unchanged with nearly half of all hospitals requiring a repeat cesarean in 2012. Although two years is a relatively short time for policy to translate into practice, VBAC rates continue to decline nationwide.

Current levels of VBAC access fall far short of facilitating the preferences of childbearing women. The third installment in the nationwide *Listening to Mothers* survey gathered data from 2400 women who gave birth between July 2011 and June 2012 (Declercq, Sakala, Corry, & Applebaum, 2014). Nearly half of women with a history of cesarean desired a VBAC and 46% of that group were denied the option. Forty percent of women who were denied a VBAC were not given a medical reason and cited unwillingness of their caregiver or the hospital as the influencing factor. Of mothers with a history of cesarean, only 14% had a VBAC for their most recent birth, the remaining 86% delivered via elective repeat cesarean. The data from *Listening to Mothers* align with findings of this study and underscore that increasing access

to VBAC is necessary to meet the needs of birthing women and uphold the provision of evidence-based care.

Given the lack of change since Bulletin #115, it appears that there are contextual factors other than obstetric outcome data and practice recommendations that currently influence VBAC rates. However, few studies to date have examined providers' perspectives regarding factors that impact VBAC access, and none have utilized the insights of those providing bedside care: obstetric nurses (Cox, 2011). This paper will offer a qualitative analysis of factors that enhance and hinder access to VBAC using a unique perspective gained through interviews with obstetric nurses at birth hospitals in California. While TOLAC and VBAC denote different populations, the participants predominantly used VBAC to describe both a trial of labor and successful vaginal birth after cesarean. As such, VBAC will be the dominant term used.

Methods

This is a thematic analysis of comments that were volunteered by participants as part of a larger cross-sectional survey of California hospitals that explored access to VBAC (Barger, et al., 2013). Between October 2011 and June 2012, the first author served as interviewer and contacted charge nurses at all 250 civilian (non-military) hospitals with a perinatal unit in the state. Each nurse provided verbal consent to participate in a brief telephone survey about the availability of TOLAC at their institution as well as related policies and staffing requirements. Participants were assured of personal and hospital level anonymity and each of the 250 contacted facilities completed the survey (response rate = 100%). The University of California, San Francisco institutional review board approved the study design.

During data collection nurses often volunteered information that expanded their responses beyond the structured twenty-item survey. Many respondents had worked on their

labor and delivery unit for more than a decade and had witnessed significant changes in VBAC policy and practice. Others worked at hospitals where VBAC policy change had recently occurred or was a controversial topic. Volunteered comments were transcribed in real time and participants were also asked at the end of the survey if they had any other reflections to share on the topic. One hundred and fifty seven participants (63% of the primary sample) volunteered comments that provide the focus of this study.

Data were analyzed in the software package ATLAS.ti.7 using thematic analysis according to the methods of Braun & Clarke (2006). Transcribed comments were analyzed by the first author over multiple readings and coded in an iterative process as first, key units of meaning were identified and coded, and later, themes were identified and named as patterns were identified in the codes. Literal interpretation of the data yielded primary themes. In addition, the underlying meaning or latent content was also considered and played a role in highlighting notable findings and sub-themes. Validation of the data was performed as contributing authors independently reviewed the coding and concurred with the identified themes.

Results

Five major themes were identified from analysis of the transcribed commentary. Two themes echoed throughout interviews with nurses from hospitals that support VBAC: change agents and VBAC pride. These themes merit further discussion to highlight the characteristics of institutions and maternity units that promote VBAC access. Three themes were identified that demonstrate barriers to VBAC: recommendations of professional organizations, insufficient anesthesia coverage, and a lack of provider willingness.

Change Agents

While surveying nurses from institutions that had recently increased access to VBAC or were on the hopeful brink of policy change, it became clear that significant effort was necessary to impact the status quo. Comments from across the sample suggest that a blend of relentless diligence, passion, and collaboration between medical teams was required to champion VBAC access. For example, individual obstetricians had a major role in changing the landscape of many hospitals in this survey:

> *Only two of our docs will do VBACs, because you know they have to stay the whole labor if they have a VBAC. But these two docs are the reason we started offering it. We just changed a couple years ago. And we'll do VBACs for moms who have had up to two previous sections. We don't have anesthesia 24/7 but they also stay on if we have a VBAC.*

It is notable that the anesthesiologists also played an important role in expanding options at this site. Without their commitment to remain in-house during a VBAC, policy change would not have been possible.

Study participants often discussed the effort that was required to begin supporting VBACs in settings where physicians were not in-house around the clock:

> *It is a very recent change that we are offering VBACs. We had some docs who felt strongly that we should. It was pretty controversial, especially because we are a level 1, but now we offer them and it's going well. Our docs don't have to be here the whole time but they need to respond within 20 minutes.*

The site in this example took a stance that was rare among the sample. Their interpretation of the ACOG recommendation that obstetricians be "immediately available" was to require a response time of 20 minutes or less. While this site lacked the level of emergency response that tertiary care facilities have, they were able to come to a decision with their obstetric and

anesthesiology staff that took into consideration the needs of their community, available resources, and interpreted guidelines in order to establish a policy that increased access to VBAC.

Participants from sites that did not yet support VBAC shared stories about hopeful change agents and also acknowledged the obstacles that stood in the way:

> *There is an OB who is passionate about changing the VBAC policy and wants to offer VBACs. But there is a lot of work he's going to have to do with administration, I'm not sure it's ever going to happen.*

These comments suggest that bureaucratic inertia plays a powerful role in limiting access to VBAC even where change agents exist.

VBAC Pride

A common theme of pride was identified in conversations with nurses who work at hospitals with high rates of VBAC. Pride in this context denotes sentiments of satisfaction or a sense of honor due to working at a hospital that supports VBAC. Offering VBAC was often equated with having a highly competent, up-to-date staff with state-of-the-art capabilities:

> *We have a fantastic CNS and strong perinatology. Our VBAC policy is very current and we know that it's okay for a woman to attempt a VBAC even if she's had two or more cesareans.*

The theme of pride also emerged in comments from nurses who believed that their hospitals had the highest VBAC success rates in the region or a long history of providing access to VBAC:

> *We have the highest success rate with VBACs in the area. Everyone is very supportive and proud of that fact. Some of our patients are VBAC'ing for the second time here. There was never a time when VBACs weren't performed here.*

An additional source of pride was ability of sites to fulfill patient request by making VBAC accessible. Participants remarked about the intersection of a particularly enthusiastic provider with the strong desire of the community to achieve a VBAC:

> *We have such a cowboy here, he wants to VBAC everyone that he can! Our community is very strong and very opinionated. They tell us they'll VBAC at home if we don't make a space for them. So our cowboy doc and most of the rest of our staff work hard to make it a welcoming place for VBACs.*

These comments indicate that the support of VBAC was associated with the provision of evidence-based and progressive care for many participants and served as a source of pride and satisfaction. While it is unclear if pride is a significant enough of a motivator for sites that do not already support VBAC but the data indicate that pride assists in the maintenance of a supportive policy.

Recommendations of Professional Organizations

Many participants mentioned the negative impact of ACOG recommendations on their sites' ability to support VBAC. Whether the recommendation itself was enough to change policy or the participant believed it influenced the stance taken by malpractice insurers, ACOG's practice bulletins in the late 90's factored heavily in participant commentary:

> *We have flipped and flopped back and forth with the ACOG recommendations. We have never stopped offering VBACs, but we have seen the numbers wax and wane based on MD support as a result of whatever ACOG is saying at that time. We require docs to be here if they are covering a VBAC, but some of the real confident ones will go home as long as they can get here in 20 minutes. It works out. But we only have a few docs who are really pro-VBAC.*

Across the sample, examples were shared that demonstrate the impact of the recommendation that physicians be "immediately available" during a TOLAC. More specifically, participants perceived a link between ACOG recommendations and the resulting threat of being dropped from malpractice insurance coverage if they lacked 24/7 in-house physician coverage. While ACOG does not define actual response time parameters, most institutions interpret "immediately available" as in-house, around the clock:

> *We used to have great success with our VBACs but then we changed because of the ACOG guidelines. I've been here 30 years. We really had such great success. Now we have a bunch of disappointed women. We just don't have the technology to meet the requirements.*

While there is an important difference between recommendations and requirements, it is often reduced to one of semantics. Recommendations of professional organizations are based in varying levels of quality of data. The ACOG recommendation cited by most participants regarding the immediate availability of emergency obstetric staff is based in level C data (professional opinion) and yet is frequently interpreted as a binding requirement.

Insufficient Anesthesia Coverage

A majority of participants (N=70, 71%) from hospitals in California that stopped offering VBAC since 2006 cited *insufficient anesthesia coverage* as the primary reason for the change in policy and practice (Barger et al., 2013). ACOG's practice bulletins retain the pivotal recommendation that providers who can perform emergency cesarean be "immediately available." While the recommendation encompasses obstetricians and anesthesiologists,

participants most often described insufficient anesthesia coverage as an obstacle to VBAC availability:

> *I got here in 2001 and we were safely VBAC'ing all sorts of women. Then when that big study came out in 2003 or 2004 our head OB laminated it and had to show it to everyone that came in because now we couldn't VBAC. Our anesthesiologists have a 30 minute response time, so that was it. We also lost our midwives around the same time. That was a rough period. Now everyone who wants a VBAC has to go over the hill, sometimes to as far as [major metropolitan area].*

Many participants hinted at the financial challenges that prevented hospitals from being staffed adequately to provide the recommended emergency obstetric care:

> *There isn't room to hire another anesthesiologist. The last year we offered VBACs there was a case when the lone anesthesiologist was busy and couldn't get to the VBAC patient. He was very upset that he was required to be in two places at once, launched a complaint, and that was how our policy changed. There was no talk of hiring another anesthesiologist since we are so small.*

While financial concerns are not mentioned directly, the size of the institution and the space on the team for a dedicated anesthesiologist imply that money is a limiting factor.

Anesthesia coverage directly impacts VBAC access and was a major theme in comments with obstetric nurses across California, but the comments also highlight geographic disparities within the state as nurses discussed their unit's inability to support VBAC:

> *We don't have 24/7 anesthesia, they are on call, so that's why we've never done VBACs. I don't know where women would go. They'd have to drive for a few hours, though. There are only 3 hospitals in this area and the two that have OB services don't do VBACs*

Women in communities without access to VBAC who desire a trial of labor often do have to drive for hours or temporarily relocate for a period of time leading up to their due date. This unfortunate reality is not exclusive to rural areas but particularly impacts such

communities. Examples like the one above repeat throughout the sample as nurses wondered where women go if they want to avoid a repeat cesarean.

Lack of Provider Willingness

Survey participants commented on the apparent disconnect between their institution's VBAC policy and the actual practice of supporting patients desiring a VBAC. The requirement that physicians remain "immediately available" was often enough to produce a *de facto* ban, even though the policy did not formally exist in many hospitals:

> *It's interesting because our policy actually says that if a woman wants a VBAC and her physician approves, it's okay, but the physicians have to agree to stay at the hospital during the entire labor and they won't do that. So everyone really thinks that our policy says no VBACs. But it's actually just that no doctors will do VBACs.*

Another participant's reflection demonstrates why the picture of VBAC access is far more complicated than a simple 'yes' or 'no' at the hospital policy level.

> *If a woman seeking a VBAC called here and asked if we do them, sure! But try calling around and finding a doc who actually will do the VBAC. That's trickier…There aren't any hospital-wide policies that tell us who can and who can't have a VBAC, that's all up to the physician.*

A lack of provider willingness was mentioned frequently across the sample, and most often revealed the perception that VBACs did not occur at many hospitals due to provider preference. However, the historical trends in VBAC access must be taken into consideration along with the fact that institution policy and malpractice considerations influence provider decisions:

> *You know, there are trends in labor and delivery. There was a time when everyone was doing VBACs, and then they stop, and then they start and it goes*

> *back and forth. But right now we're definitely in a period where we do not do VBACs. The hospital doesn't have a policy against it but we're all private OBs and none of them want to offer it.*

While many participants perceived that a lack of willingness on the part of obstetricians was the deciding factor, we have seen in comments from across the sample that the resulting picture of VBAC access is created with significant influence from other team members, institutions and organizations.

Discussion

Multiple factors impact women's access to VBAC and have resulted in varying levels of utilization over the last few decades (MacDorman, et al., 2011). The recommendations of professional organizations guide hospital policy and provider willingness affects how and if a birth option will be offered to eligible patients (Korst, et al., 2011). It can be tempting to assign fault to singular members of the care team or a specific organization, but the results of this study indicate that the actions of influential players at many levels of health care administration and policy impact the provision of care.

In order for changes in policy to succeed and translate into new practice, collaboration and compromise among stakeholders is key, especially when navigating controversial territory. While VBAC access has not expanded as hoped following the NIH consensus in 2010, positive examples of change do exist and demonstrate that even individual providers can generate the collaboration required to increase rates of VBAC. Obstetric nursing perceptions collected in this study also indicated that perinatal care providers take pride in delivering high quality, evidence-based care especially when it meets women's birth preferences.

While the process of informed choice was not identified as a key theme during the analysis of this study, it is a topic of considerable interest with regard to VBAC. The value of

shared decision making is well-acknowledged in maternity care and if utilized can lead to better health outcomes as well as improved provider-patient relationships and increased patient satisfaction (Moreau, et al., 2012; Lyerly, et al., 2007). Women with a history of cesarean face complex decisions in subsequent pregnancies and are not routinely engaged in a dialogue that clearly presents risks and benefits associated with elective repeat cesarean delivery and a trial of labor (Shorten, Shorten, & Kennedy, 2014)

> The decision for TOLAC is complex, and ultimately resides with the woman and her [care provider] after evaluating objective information to make an informed choice. Current liability issues, financial disincentives, and inability to perform a rapid emergency caesarean are significant barriers to TOLAC; however, conscientious intrapartum management of TOLAC under favourable conditions results in a high probability of a safe and successful vaginal delivery. (Scott, 2014, p.161).

Shared decision making is grossly underutilized in patient care and especially belongs in conversations about birth choices after cesarean.

Limitations

This study was limited by its obtained data from a singular member of the maternity care team, obstetric nurses. Additional research that includes the perspectives of women with a history of cesarean, obstetricians, midwives, anesthesiologists and other key providers is necessary to understand the full range of factors that impact access to VBAC. Thankfully, there is a growing body of research that focuses on the patient perspective, especially with regard to decision making processes in pregnancies that follow cesarean birth (Shorten, Shorten, & Kennedy, 2014).

Conclusion

The rate of VBAC impacts the overall prevalence of cesarean birth and serves as an indicator of the health of the maternity care system as a whole. An increase in the rate of VBAC

would promote the optimization of perinatal health outcomes by reducing morbidity and mortality associated with multiple cesareans (Guise, et al., 2010). Additionally, it would demonstrate enhanced access to birth options, respect for women's autonomy and recognition of the importance of shared decision-making and informed choice (Shorten, Shorten, & Kennedy, 2014). When the data demonstrate that an option is safe and plays an important role in optimizing outcomes, one would hope to see it utilized more frequently. Instead, in the case of VBAC, we see a disturbing trend across the country of diminishing access (Leeman, et al., 2013).

Despite mounting evidence that demonstrates the safety of TOLAC for the majority of women, the rate of VBAC is decreasing nationally. The NIH convened the 2010 consensus on VBAC to re-examine the best available evidence and called for a revision in professional guidelines in order to expand access to trials of labor after cesarean. In the face of those efforts, VBAC rates continue to decrease. Availability of emergency obstetric care stands out as a central obstacle and is complicated by facility resources (staff, operating rooms, malpractice insurance, etc.) and provider willingness (Barger, et al., 2013). The findings of this study reveal the perceived importance of individual attitudes that influence culture towards the promotion or prohibition of VBAC.

Further research is needed to expand the body of literature underscoring the safety and value of VBAC, especially from level I or II hospitals that support diverse birth options. Additionally, there is a need for high quality counseling tools (e.g. infographics and decision aids) that facilitates shared decision making between providers and women who are eligible for a trial of labor.

References

American College of Obstetricians & Gynecologists. (1999). Practice Bulletin #5. Vaginal Birth after Previous Cesarean Section.

American College of Obstetricians & Gynecologists. (2004). Practice Bulletin #54. Vaginal Birth after Previous Cesarean Section.

American College of Obstetricians & Gynecologists. (2010). Practice Bulletin #115. Vaginal Birth after Previous Cesarean Section.

Barger, M., Dunn, J., Bearman, S., DeLain, M., & Gates, E. (2013). A survey of access to trial of labor in California hospitals in 2012. *BMC Pregnancy and Childbirth*, 13:83.

Bennett, B. (1997). Uterine rupture during induction of labor at term with intravaginal misoprostol. *Obstetrics and Gynecology*, (89)832-3.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2):77-101.

Bujold, E. (2010). Impact of anesthesiologists on the incidence of vaginal birth after cesarean in the United States: role of anesthesia availability, productivity, guidelines, and patient safety. *Seminars in Perinatology*, 34(5):314-317.

Caughey, A., Cahill, A., Guise, J., & Rouse, D. (2014). Safe prevention of the primary cesarean delivery. *American Journal of Obstetrics and Gynecology.*, 2013):179-93.

Cox, K. (2011). Providers' perspectives on the vaginal birth after cesarean guidelines in Florida, United States: a qualitative study. *BioMedical Central Pregnancy and Childbirth*, 11(72).

Cragin, E. (1916). Conservatism in obstetrics. *New York Medical Journal*, 104:1-3.

Declercq, E., Sakala, C., Corry, M., & Applebaum, S. H. (2014). Major Survey Findings of Listening to Mothers(SM) III: New Mothers Speak Out: Report of National Surveys of

Women's Childbearing ExperiencesConducted October-December 2012 and January-April 2013. *Journal of Perinatal Education,* 23(1):17-24.

Flamm, B. (2001). Vaginal birth after caesarean. *Best Practice and Research in Clinical Obstetrics and Gynaecology,* 15(1):81-92.

Guise, J., Eden, K., Emeis, C., Denman, M., Marshall, N., Fu, R., . . . McDonagh, M. (2010). Vaginal birth after cesarean: new insights on maternal and neonatal outcomes. *Obstetrics and Gynecology,* 115(6):1267-78.

Gynecologists, (. A. (2010). Practice Bulletin #115. "Vaginal Birth after Previous Cesarean Delivery.".

Korst, L., Gregory, K., Freidman, M., & Phelan, J. (2011). Nonclinical factors affecting women\'s access to trial of labor after cesarean delivery. *Clinics in Perinatology,* 38(2):193-216.

Leeman, L. M., Beagle, M., Espey, E., Ogburn, T., & Skipper, B. (2013). Diminishing availability of trial of labor after cesarean delivery in New Mexico hospitals. *Obstetrics & Gynecology,* 122(2, PART 1):242-247.

Lyerly, A., Mitchell, L., Armstrong, E., Harris, L., Kukla, R., Kuppermann, M., & Little, M. (2007). Risks, values, and decision making surrounding pregnancy. *Obstetrics and Gynecology,* 109(4):979-84.

MacDorman, M., Declerq, E., & Menacker, F. (2011). Recent trends and patterns in cesarean and vaginal birth after cesarean (VBAC) deliveries in the United States. *Clinics in Perinatology.,* 38(2):179-92.

McMahon, M., Luther, E., Bowes, W., & Olshan, A. (1996). Comparison of a trial of labor with an elective second cesarean section. *New England Journal of Medicine,* 335:689-695.

Miller, D., Diaz, F., & Paul, R. (1994). Vaginal birth after cesarean: a 10-year experience. *Obstetrics & Gynecology*, 84(2):255-8.

Moreau, A., Carol, L., Dedianne, M., Dupraz, C., Perdrix, C., Laine, X., & Souweine, G. (2012). What perceptions do patients have of decision making (DM)? Toward an integrative patient-centered care model. A qualitative study using focus-group interviews. *Patient Education and Counseling*, 87(2):206-11.

Rossi, A., & D'Addario, V. (2008). Maternal morbidity following a trial of labor after cesarean section vs elective repeat cesarean delivery: a systematic review with metaanalysis. *American Journal of Obstetrics & Gynecology*, 199(3):224-231.

Scott, J. (2014). Intrapartum management of trial of labour after caesarean delivery: evidence and experience. *BJOG: An International Journal of Obstetrics & Gynaecology*, 121(2):157-162.

Shorten, A., Shorten, B., & Kennedy, H. (2014). Complexities of Choice after Prior Cesarean: A Narrative Analysis. *Birth: Issues in Perinatal Care*, epub ahead of print April 6 2014.

Tyner, J., & Rayburn, W. (2013). Emergency Cesarean Delivery: Special Precautions. *Obstetrics and Gynecology Clinics of North America*, 40(1):37-45.

Uddin, S., & Simon, A. (2013). Rates and success rates of trial of labor after cesarean delivery in the United States, 1990-2009. *Maternal and child health journal*, 7(17):1309-1314.

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