Cultural perspectives on vaginal birth after previous caesarean section in countries with high and low rates — A hermeneutic study

Abstract

Background: Caesarean section (CS) rates are increasing worldwide, an increase that is multifactorial and not well understood. There is considerable variation in the rates of vaginal birth after previous caesarean section (VBAC). Cultural differences could be one explanation of the varying rates.

Objective: To interpret cultural perspectives on VBAC.

Methods: A hermeneutic approach for analysing findings from four published qualitative studies that were part of the OptiBIRTH study, focusing on clinicians and women's views of important factors for improving the rate of VBAC. 115 clinicians and 73 women participated in individual interviews and focus group interviews in countries with low rates (Germany, Italy and Ireland) and countries with high rates (Sweden, Finland and the Netherlands), in the original studies.

Results: Three themes demonstrated how the culture differs between the high and low VBAC rate countries; from being an obvious first alternative to an issue dependent on many factors; from something included in the ordinary care to something special; and from obstetrician making the final decision to a choice by the woman. The fourth theme, preparing for a new birth by early follow-up and leaving the last birth behind, reflects coherence between the cultures.

Discussion: The findings deepen our understanding of why the VBAC rates vary across countries and healthcare settings, and can be used for improving the care for women.

Conclusion: Cultural differences are related at a structural and individual level, which influences the role of the professional , the woman and the process of decision-making.

Keywords: Vaginal birth after previous caesarean section, Hermeneutics, Caesarean section

Statement of significance

Problem or issue

The impact of culture on CS rates is an under researched area and may be a factor that is contributing to the low uptake in VBAC rates

What is already known

Worldwide, CS rates are increasing and vary between countries. VBAC is an important mechanism for reducing the CS rates. However, the rates of VBAC also vary between countries.

What this paper adds

New research on cultural perspectives on VBAC and their influence on women, professionals and the decision-making process.

Background

Globally caesarean section (CS) rates have increased over time; according to data from 150 countries, the average CS rate is 18.6%, ranging from 6% to 27.2% in the least and more developed regions, respectively. Latin America and the Caribbean region have the highest CS rates (40.5%), followed by Northern America (32.3%), Oceania (31.1%), Europe (25%), Asia (19.2%) and Africa (7.3%)[1]. Recent CS rates in OECD-countries are lowest in the Nordic countries (Iceland, Finland, Sweden and Norway), Israel and the Netherlands, with rates ranging from 15% to 17% of all live births. They were highest in Turkey, Mexico and Chile, with around one out of two live infants born by CS[2]. On a population level, CS rates above 10% are not associated with reductions in maternal and newborn mortality rates[3]. The reasons for the increase in CS rates are multifactorial and not well-understood[1-3]. Changes in maternal characteristics and professional practice styles, increasing malpractice pressure, as well as

economic, organisational, social and cultural factors have an impact[1]. A systematic review and metasynthesis of factors that influence the decision-making to perform a CS shows that clinicians' personal beliefs is a major factor, further contributed to by the influence of factors related to the health care systems, such as litigation and private health insurance, and clinicians' personal convenience or lack of skills[4]. However, it is important to note that although CS can be lifesaving for mother and child, it is major surgery, which is associated with immediate maternal and perinatal risks and may have implications for future pregnancies[1,2,5,6].

There is considerable variation in the rates of vaginal birth after previous caesarean section (VBAC) following one previous CS[7] and we know that VBAC is an important mechanism for reducing the CS rate[8,9] given that CS rates in nulliparous women are rising steadily. Based on a limited number of randomised trials comparing outcomes for women planning a repeat elective CS with those planning a vaginal birth[10], current evidence supports VBAC as a reasonable and safe option for most women[11]. VBAC is associated with a lower incidence of maternal mortality and a reduction in overall morbidities for mothers and babies[11]. Although evidence exists that for most women a VBAC is safe, practice varies significantly, with as few as 29–36% of women in Ireland, Italy and Germany experiencing a VBAC compared with 45–55% of women in Finland, Sweden and the Netherlands[7]. However recent statistics show even lower VBAC rates, 12 % in US[12] and 14 % in Australia[13]. Systematic reviews about interventions to increase VBAC rates are limited[14,15]; however, decision-aids and information programmes for women found no effects on VBAC rates but decisional conflict was decreased and women's knowledge about possible mode of birth was increased[14]. A systematic review of strategies for clinicians showed that an educational opinion leader strategy may improve VBAC rate[15].

Cultural differences could be one explanation of the varying VBAC rates, however there are few studies about cultural aspects of CS and VBAC. One study of 248 clinicians from Italy, demonstrated that professionals' roles are more important than gender in relation to attitudes to CS, with midwives being more concerned about the high CS rate than obstetricians[16]. In a setting with high CS rate even if women prefer a vaginal birth, non-medical factors influence the mode of birth in favour of CS[17]. A metasynthesis of eight qualitative studies showed that, in a culture with low rates of vaginal birth after Caesarean section (VBAC), women mainly receive information about the risk involved with a vaginal birth, and not the risks involved in repeat CS[18].

As part of the OptiBIRTH study, which developed and tested an intervention aimed at increasing VBAC rates[19], studies of clinicians and women's views of VBAC in three countries with low, and three countries with high VBAC rates were undertaken[20-23]. The findings show both similarities and differences between high and low VBAC countries related to attitudes towards VBAC in the maternity care system, the decision-making process and care during pregnancy and birth[20-23]. In order to deepen the understanding of these differences, the aim of the study reported here was to interpret cultural perspectives on VBAC.

Methods

This study has a qualitative hermeneutic design[24,25]. The hermeneutic paradigm stresses that language and action are products of socially taken-for-granted meanings inherent in being in the world with others. Epistemological conceptions of the world are determined by a web of factors made up of language, symbols, history, culture and individual situatedness[24]. New insight in clinical settings can be generated based on the hermeneutic tradition where experiences of individual patients and health care professionals as well as the cultural context

of hospitals and health care systems are focused[25]. The aim is not only to interpret action but to concentrate on the lived context within which these actions evolve and become meaningful[25]. Data in this study consisted of findings from previously published qualitative studies focusing on clinicians' and women's views of key factors of importance for improving VBAC rates[20-23]. All studies had received ethical approval from the coordinating university and all clinical sites. An overview of the papers is provided in Tables 1 and 2.

Insert Table 1 here

Settings

The original papers included in this hermeneutic analysis are based on focus group and individual interviews in six European countries Germany, Italy and Ireland (low VBAC countries) and Sweden, the Netherlands and Finland (high VBAC countries), as part of the OptiBIRTH-study[19].

The low VBAC countries: Germany, Italy and Ireland

Although these countries differ in some respects with regard to how maternity care is provided and by whom there are many similarities. All countries provide maternity care free at the point of use through the public health care system, and private models of maternity care run in parallel[22]. In Italy, obstetricians, usually in private outpatient clinics, mostly carry out the care during pregnancy. Midwives are not independent in hospitals; however, they can work autonomously outside of hospital. In Ireland, there are two midwife-led units[26,27] and one hospital DOMINO scheme (providing some home births) within the public system, and a number of self-employed midwives provide home births privately. All maternity hospitals

have Midwives' Clinics, where midwives provide antenatal care independently for low-risk women, but the majority of women are cared for in pregnancy by obstetricians. Most women in Germany have antenatal care in a private practice mostly provided by an obstetrician with support from midwifery service. Women can also choose to contract a self-employed midwife, who will undertake part of the antenatal care and will be the main care provider during birth[22]. In Italy, VBAC politics are extremely different from one region to another and often from hospital to hospital.. Therefore, opportunities such as homebirth or birth in Birth Centres depend on single region policies, acts or facilities. The key features of note are that the publicly funded model of care is predominantly medically led and women give birth, mainly, in a hospital setting in all of these countries. These factors are important when considering the national CS rate for any country, since significant variations in CS rates have been identified at the unit level, depending on whether the woman attends the public system or utilises health insurance to attend an obstetrician privately[5], which increases the CS rate[4].

In each country, women following one CS are required to attend an antenatal appointment with a consultant obstetrician to discuss the options for birth in the hospital where the birth is planned to take place. In Italy, women can request an elective CS without medical or obstetric reasons in cases such as "tocophobia". In Ireland and Germany, women can choose VBAC or elective CS after discussing individual circumstances.

The high VBAC countries: Sweden, the Netherlands and Finland

In these countries, there are similarities regarding professional responsibility but differences regarding the care organization. Maternity care in Finland and Sweden is free of charge and funded by taxes. In the Netherlands, all costs regarding maternity care are covered by health insurance. However, if low-risk women choose a midwife-led hospital birth, they must make

co-payments for the additional costs of the hospital stay. Some insurance plans cover this co-payment[20]. Midwives in all three countries have an independent role and responsibility during normal pregnancy and birth. When complications occur, an obstetrician takes over the responsibility, but the midwives remain involved in the woman's care in Sweden and Finland. In the Netherlands, independent practising midwives provide maternity care to healthy women with uncomplicated pregnancies. They refer women to obstetric-led care when there is an increased risk of complications as defined by a national guideline, developed cooperatively by all the professions involved in maternity care.

In Finland, the care during pregnancy for women with a previous CS includes regular visits to maternity health care centers. In these centers, public health nurses or midwives, as well as general practitioners (GPs), meet the women regularly. Around 36 to 37 weeks gestation, women visit the hospital clinic to make their birth plan. At this visit, they can discuss issues around mode of birth with an obstetrician. In Sweden, if a woman had a previous CSthere are no issues of concern during this pregnancy, she will be offered recommended a VBAC and be required to make regular visits to a midwife during pregnancy. Only if problems or special issues arise does the midwife consult an obstetrician. In the Netherlands, women with a previous CS birth are cared for prenatally by the midwife in primary care until 36 weeks. In this period, the midwife prepares the women for VBAC. The midwife recommends to women with a previous CS that they make an appointment with the obstetrician to talk about the upcoming birth, so they can discuss matters they are uncertain of or scared about and discuss a birth plan. Around 36 weeks, all women with a previous CS are referred to the obstetrician for further care[21].

In Sweden and Finland, almost all births occur in hospitals. Home birth is not included in the healthcare system. The home birth rate in the Netherlands is about 20%, but is decreasing[20]. Women do not have the right to have a CS performed if there are no medical or

obstetric reasons for it. However, individual circumstances – for example, intense fear of childbirth – are sometimes allowed as an indication for CS. In the Netherlands both options are available and counselling includes information on risks associated with VBAC as well as risks associated with elective CS[20,21].

Data analysis

The data analysis was a secondary analysis[28] based on four published papers focusing on clinicians and women's views of important factors for improving the rate of VBAC[20-23]. Details on data collection, methodology and analysis, in the four published papers are provided in Table 1 and findings in Table 2. In secondary analysis, the potential of re-using one's own data has been recognized[28]. This secondary analysis is a form of amplified analysis with the potential to enlarge a sample and to compare differences across the data[28].The analysis in this study focused on cultural perspectives on VBAC. All the authors read each of the four papers and common characteristics were identified that focused specifically on cultural perspectives on VBAC. In a continuous dialogic process incorporating interpretations of the results from each study, the authors went back and forth, comparing and contrasting emerging themes, leading to new conclusions, in whole and in part, in a circling hermeneutic process[24,25]. Once a subtheme and theme was identified, it was subjected to examination and contradictions were searched for in the original papers. This was a circulating, repeating process and included group work and continuous discussion until the authors reached agreement on the overall structure of the findings presented with themes and a main interpretation.

Findings

The interpretation of cultural perspectives on VBAC is presented in four themes and a main interpretation.

Insert Table 2 here

Theme: From an obvious first alternative to an issue dependent on many factors

In the high VBAC countries the cultural perspective is that vaginal birth is the obvious first alternative for women without medical reasons for CS. Clinicians in these countries are confident to use the same counselling guidelines and send signals to women that vaginal birth is the primary and safest way to give birth if no complications are present, and support women towards this normal birth goal. An obstetrician from Finland demonstrated this attitude:

> *We have here the care culture that we always target towards vaginal birth.* 20,p.4

Vaginal birth as an obvious first alternative needs a culture with good communication and teamwork between all involved. In the Netherlands VBAC is carried out at hospital under the responsibility of the obstetricians. They need to be confident that nurses and clinical midwives call them in time and inform them about progress, and that caregivers in primary care have the same opinion. In Sweden and Finland, where VBAC is carried out in hospital as the responsibility of midwives, clinicians explained how both obstetricians and midwives should co-operate and help each other.

If you have good cooperation between professionals (from primary to secondary care, then that (a high standard care) should be attainable. [20,p.12]

Women in high VBAC countries also explained that vaginal birth is the first alternative for them if no complications are present. One woman from Sweden stated; "Vaginal birth must be the basic principle" [21,p.334]. Vaginal birth is therefore just the normal thing to do unless medical complications are present, and there is little discussion about mode of birth. This was succinctly captured by a woman from the Netherlands:

I don´t think that she (the midwife) was thinking: "Well let´s discuss whether this lady wants to give birth by CS or vaginally." No I don´t believe it ever crossed her mind. We just both thought the position of the baby is right, so I´m going to give birth naturally. [21,p.334]

The women described the advantages of having a vaginal birth including a more emotional, positive, empowering and fulfilling experience, and knowing about the advantages appeared to be a motivating factor for them. The opportunity and challenge to birth physiologically following a CS was one they valued and did not want to miss and this is illustrated in the following comment:

I jumped for joy when the doctor said I could have a vaginal birth after CS, as I thought it would always be CS. [21,p.332]

However, there are concerns about VBAC being the first alternative, and some women from Sweden queried it as a cost saving initiative to the institution. Clinicians in the Netherlands mentioned legal issues as a reason for doing more CSs and this is a real issue as clinicians are sued more easily for not doing interventions than for doing unnecessary interventions[20,p.4-5].

In the low VBAC countries, VBAC is not considered as the obvious first alternative for women without medical reasons for CS as it is in the high VBAC countries. Instead, it is

dependent on many factors. Clinicians mentioned that women and their relatives have different attitudes, and all must be motivated and willing to consider the option to give birth vaginally. In addition, the influence of significant others cannot be under-estimated with regard to impact, as evidenced in the following statement:

> *Yes, quite clearly also the motivation of the partner, the woman's attending gynaecologist, the motivation of the midwife who leads the antenatal class, the motivation of female friends who have had a CS, who say that a spontaneous delivery was possible and somehow went well.*[22,p.4]

Women from the low VBAC countries support the statement that VBAC is dependent on many factors such as the attitude of the individual clinicians and the hospital. Women expressed that some hospitals are commonly known as more 'pro-VBAC' while others are 'against-VBAC'. Clinicians in the same organisation can have different opinions. One woman from Germany described her experience:

> *I had several talks to three different doctors. At the end three different opinions were offered: "we can take things as they come; 'it will be the same bad birth process as the last time'; 'it will be very easy".*[23,p.5].

Women in the low VBAC countries expressed that both midwives and obstetricians involved should have the same opinion about VBAC. They need a culture that supports VBAC and balances both positive and negative factors on VBAC and CS. A barrier that creates a negative attitude among all involved is the philosophy 'once a CS always a CS'. In media, women are exposed to an overly positive image of CS that trivialises the risk:

> *I think to establish the VBAC you also have to find arguments towards the media, that caesarean is an easy birth and celebrities choose it. It is not talked about the risks and potential complications.* [23,p.7]

Theme: From something included in the ordinary care during the birth to something special

In the high VBAC countries, VBAC is included in the ordinary care. According to the clinicians, the women should have similar care as other women but with some extra precautions. The advice and support given during the birth should be focused on motivating women and giving them confidence. To take extra precautions means to stay alert for signs of complications, but not let the complications be the main focus. Clinicians are strengthened by their own experience in caring for women during VBAC.

> *We are strengthened by watching how happy the patients are when it works, and we have the experience of how excellently women give birth, so we are strengthened by this [experience] in our care of all the other [women].*[20,p.7]

Clinicians from the high VBAC countries gave some clinical recommendations based on their expertise in VBAC. They said that professionals should adopt a positive manner, motivate and encourage the woman, be careful, listen to their intuition and take potential insights seriously and be calm and relaxed. If the woman has had a previous emergency CS, the same phase of labour where the CS was performed is critical. Clinicians should be observant and give the woman extra and focused support during this stage.[20,p.8]

Women from the high VBAC countries support the statement that VBAC is something included in the ordinary care. Most women come to the professionals with the idea that vaginal birth is the ordinary thing when there are no medical complications. During the birth, they confirm the statements from the clinicians. The women describe how calm surroundings and continuous attentive guidance from those caring for them is of importance. They want to be guided by a calm and confident midwife. The women also confirm that they need the same care as other women but with some extra precautions such as making necessary

interventions (if required) in time, and that the clinicians understand that it is the woman´s first vaginal birth:

> *The midwife's attitudes are key to how the birth succeeds*.[21,p.330]

In the low VBAC countries care during the birth for women undergoing VBAC is something special. Clinicians believe that women planning VBAC need special clinical expertise and extra resources during their birth and appropriately trained staff must be available. In Ireland, a specific ward with experts in vaginal birth has been suggested. However, clinicians from Italy were concerned that maintaining an appropriate level of competence in managing VBAC in a culture that favours sub-specialisations may be problematic in the future:

> *The patient shouldn't get to a hospital where she'll find a negative attitude to VBAC.*[22,p.5]

Clinicians mentioned that trust within the relationship between them and the woman is important for achieving a vaginal birth. Fear in both the woman and clinicians may have a negative impact, and clinicians' fear (often based on medico-legal concerns) can be transferred to the woman:

> *Fear is very negative during labour. The obstetrician's anxiety is transferred to the woman in labour, who hasn't got the will she had before labour ... after being in labour for a long time, the woman goes in the operating theatre and she hasn't achieved her goal*. [22,p.6]

Women from the low VBAC countries confirm VBAC as being something special, and writing their birth plan was important as it made their wishes visible to whoever was caring for them. They wanted all staff to know their preferences so they could be supported during the birth. Women wish to be empowered and confident with the fact that clinicians will

honour and keep to their agreed birth plan. Women also said that they needed competent and experienced clinicians around them when giving birth for the first time after a previous CS:

> *Knowing that in the hospitals where VBAC is offered, there is obstetrical staff ready to handle this sort of complications would be reassuring. Even midwives must be prepared to handle this kind of birth in a different way compared to a normal vaginal birth.*[23,p.6]

Theme: From obstetrician making the final decision to a choice by the woman

In the high VBAC countries, the obstetrician makes the final decision about vaginal birth or CS. Women should be involved in the decision-making process but women and obstetricians expressed that only professionals with medical knowledge can finally decide that a CS must be performed. Involvement with the woman is central for the decision-making process and, in some cases, based on a combination of the risk of medical complications and the characteristics of the mother, the obstetricians can make the decision to perform a CS even without medical indications:

> *We had a date for a CS, but I could change my mind and that was a relief. And I realized quite quickly that I didn't want a planned CS; I wanted to go for a vaginal birth.* [21,p.330]

The professionals in the high VBAC countries described different strategies for involving the woman in the decision-making process. Good teamwork between midwives and obstetricians and between primary care and hospitals, counselling guidelines and meetings, birth plans, making agreements with women documented in the medical records, detailed

strategy for the birth, fear of childbirth clinics, discussing birth options and keeping an open mind were such strategies:

> *We are the only three doctors having this type of face-to-face meeting. We handle the discussions similarly, and it's an advantage that no matter which doctor the woman sees, she will be treated in the same way. . . . Only the senior obstetricians have these meetings, since discussing such issues requires experience.* [20,p.6]

Women from the high VBAC countries confirmed that they were willing to participate in the decision-making process but not willing to make the final decision. According to them it can be stressful to decide by themselves and most of them were willing to follow the advice from the obstetricians for the sake of their and the baby´s health.

> *It doesn't matter how much I read, I don't have the education, I don't have the experience. Okay, it's my body, but I want someone who really knows what they are doing when they make the decision.* [21,p.334]

The women also mentioned some of the strategies for involving the woman described by the professionals. They wanted to be involved and have realistic information tailored to their individual needs. Birth plans were mentioned but they wanted discussions agreed in the antenatal period to be valued and taken seriously:

> *They just have to listen to you and keep the agreements! They of course can promise you anything . . . we will do this and that, but if in the end it didn't happen, because it was a little hectic on the ward, then you think, why did I have this appointment [at 30 weeks]?* [21,p.331]

In the low VBAC countries, shared decision-making requires provision of consistent, realistic, evidence-based and unbiased information. The information should include that VBAC is an option and that a repeat CS also is a possibility. Trust within the clinician-woman

relationship is of importance for women to achieve a VBAC. An individual plan for the woman needs to be clearly documented in her records:

> *It is very important that the plan that is made between woman and clinician is documented because of different people [on duty], different consultants, different registrars ... as we do not cover the labour ward over 24 hours with the same person/consultant.* [22,p.7]

Not all clinicians in the low VBAC countries thought that women should have an automatic right to choose their preferred option, vaginal birth or repeat CS. They suggest that midwives and the woman´s partner should also be involved in the process:

> *I think that women shouldn't have a right to choose a vaginal birth after CS. The decision should be the result of an overall evaluation, which can't exclude vaginal birth. A process of assessment of suitability is necessary, leaving flexibility for the clinician.* [22,p.4]

Women from the low VBAC countries mentioned that shared decision-making was not easy for them and they needed staff to be sensitive to their particular needs. Being left alone with the decision can be stressful. Some women prefer to follow the advice from the obstetrician:

> *According to my experience I consulted several doctors, everyone says something different, but in the end the same conclusion: 'You have to decide yourself'.* [23,p.4]

Women need correct and balanced information for the decision-making process. When they received accurate information, it helped them to be prepared for different circumstances. They need a culture that supports them and confident and competent clinicians who also support and respect their individual needs. They also need to be fearless in

challenging the belief ‘once a CS always a CS’. Reaching and keeping a mutually agreed plan for VBAC during the birth is vital:

> *When you go to your GP and then you come to clinic… you could see someone different on the team every time as well so for you to get, to build up some sort of confidence, to be… talking to someone different every time and you are just repeating yourself. And you get to the stage where you are like what is the point in me telling you because you won’t see me the next time.* [23,p.4]

Theme: Preparing for a new birth by early follow-up and leaving the last birth behind

This theme was similar for both clinicians and women in high and low VBAC countries. Clinicians from all countries mentioned different strategies in helping the women to leave the last birth behind and prepare for a VBAC. Clinicians must show interest in, and care for, women´s birth experiences. Early follow-up is an advantage, the opportunity to discuss the next birth should be taken as soon as possible, and this information should be documented in the woman´s record:

> *Well, actually, you would have to begin in prenatal care because that is when you have the first contact with the woman, perhaps even after the first CS. That you somehow make it clear to her that it does not mean that your second child also needs to come into the world by CS; you can also give birth naturally.* [22,p.5]

Fear and a traumatic previous birth experience could be a barrier for VBAC. Therefore, the clinicians mentioned strategies for handling women´s fear of birth. Trust within the clinician–woman relationship is immensely important and the decision about mode of

birth should not involve pressure or immediate decision-making. Instead, time must be given for the woman to recover from the first birth and she must know that the decision about the next birth is open and VBAC is a possibility. It is important to inform women that additional visits during their next pregnancy may be needed:

> *I just try to unravel everything that happened [that led to CS] and explain what exactly happened . . . in a way that they understand it. I believe that contributes to them feeling less anxious.* [20,p.9]

Women from all countries confirm that early follow-up is important. They should be given the opportunity to have a face-to-face meeting with an obstetrician and ask questions before leaving the hospital following a CS. The women need information about why the CS was required and the potential mode of birth next time:

> *I don't know if it is possible to be informed earlier about VBAC that would be great. But, in general, as soon as possible.* [20,p.5]

Women also confirm the need for support in leaving the previous birth experiences behind and preparing for the new. A previous traumatic birth can be a hindrance. The women need help from supportive clinicians, who listen, encourage and motivate them to leave the previous birth. Fear is a factor that can hinder VBAC but also a very positive experience of CS. Women from all countries asked for support from other women with experience of VBAC.

> *She encouraged me to believe that the second childbirth had nothing to do with the first one. . . . To let go [of the first birth] was difficult because I had a hard time imagining that things could be different.* [21,p.332]

Main interpretation

The main interpretation from the findings is that the VBAC culture in the high VBAC countries is *homogenous* related to a structural level, compared to the low VBAC countries where a more *heterogeneous* culture on an individual level exists. Furthermore, women will merely adapt to the VBAC culture in their respective countries while clinicians describe differences related to the organisation, their own role and the woman´s role. The *homogenous* cultures have the same commonly acknowledged guidelines followed by all. The *heterogeneous* cultures have various guidelines at different hospitals, and single clinicians vary in their approach.

Clinicians in the *homogenous* culture work according to a common structure related to guidelines, teamwork, and responsibility for midwives and obstetricians. All involved have the same opinion, that VBAC is the first alternative. In this 'pro-VBAC' culture, the advantages of vaginal birth are expressed to the woman. In the *heterogeneous* culture, clinicians have different views on VBAC, and work at hospitals with different approaches. Therefore, clinicians must put energy into finding the right hospitals and colleagues in order to support women who want a VBAC. In this both 'pro and against-VBAC´ culture clinicians mainly do not articulate the advantages of VBAC to women.

Women in the *heterogeneous* both 'pro and against-VBAC´ culture have more choice related to mode of birth on an individual level since they have a more obvious choice between CS and VBAC. However, they have more pressure on themselves to obtain information since clinicians mainly articulate the advantages of CS and not the advantages of VBAC. Further they have to ensure that they are attending the right 'pro-VBAC clinicians' and 'pro-VBAC' hospitals if they want a VBAC. Even if women in the low VBAC countries have an individual opportunity to choose between a vaginal birth and CS, they do not express this choice as a main issue for them. Instead, they describe the importance of a trustful relationship with the clinicians for making a choice. The women asked for unbiased and realistic information about

both risks and benefits of VBAC and CS. In the *homogenous* 'pro VBAC culture', women did not ask for information about the benefits of VBAC since they were aware of it as a natural first alternative. Instead, they asked to be listened to if they desired a CS. The women have adapted to the *homogenous* culture where they are involved in the decision-making process, but the obstetrician makes the final decision. No wishes were expressed from these women to change the system, whereas women from the *heterogeneous* culture wanted clinicians and the hospital culture to be more positive towards VBAC. Women from all countries have the same wishes for support during the pregnancy, early follow-up after the first CS, leaving the first birth experience behind, support in the decision-making process, a culture that supports VBAC, confident and supportive clinicians, and that the agreements made in pregnancy are followed during the birth.

Discussion

The findings from this study show that the VBAC culture differs between the high and low VBAC countries. An *homogenous* 'pro-VBAC' culture adapted by all involved exists in the high VBAC countries while a *heterogeneous* both 'pro and against-VBAC' culture characterise the low VBAC countries. These 'pro-VBAC' and 'pro and against-VBAC´ cultures influence maternity care, the clincians, the woman, the professional roles and the decision-making process. Even if women merely adapt to the VBAC culture they all have the same wishes for support during the pregnancy and the birth from a 'pro-VBAC' professional in a 'pro-VBAC'culture.

According to the findings from this study, to improve the VBAC rate more focus should be put on a structural level, including the professional role. These findings are supported by Betrán et al.[29] investigating underlying factors for reducing unnecessary CS in healthy women and babies. The findings shows that few interventions have been successful

and interventions to reduce overuse must be multicomponent and locally tailored, addressing women's and health professionals' concerns, as well as health system and financial factors. The importance of the professional role confirms earlier research about the professional´s attitude and information given to women related to VBAC[16-18]. Professional groups may have different views on VBAC 'pro- and against VBAC´[16], the professionals may be influenced by an ´against-VBAC´ culture in the hospital which may influence them in only presenting risks involved with VBAC[18]. These findings[16-18] can be interpreted as professionals acting on an individual level in a heterogeneous birth culture, as shown in our study.

According to our study in the heterogeneous 'pro and against-VBAC´ culture women have more choice related to mode of birth on an individual level but at the same time they have more pressure on themselves to obtain information and ensure they are attending the right clinicians and hospitals if they want a VBAC. These findings are confirmed by a meta-ethnographic study based on 20 papers from four countries, UK, US, Australia and China, questioning why the uptake of VBAC is so low[30]. Women who confidently sought vaginal birth after a CS were typically driven by a long-standing anticipation of vaginal birth, while women who sought a repeat CS were strongly influenced by a previous distressing birth experience[30]. The desire to experience a vaginal birth is a key predictor for vaginal birth according to a study from USA, but also women´s beliefs about who is in control of the birth[31]. The less the women felt that the medical profession controlled the birth the more likely they were to choose VBAC[31], which can be related to the importance of the clinicians' role and the birth culture described in our study. A meta-ethnography based on the findings of 20 studies from UK, Australia, USA[32] further confirms women´s own role for VBAC. The findings show that, for women, the experience of vaginal birth is a journey from previous CS, with different positive and negative experiences, towards their goal for a vaginal birth strongly influenced by the support they receive from professionals[32].

According to our study, in the heterogeneous birth culture in the low VBAC countries, the decision-making process is complex and women need unbiased and realistic information about both risks and benefits of VBAC and CS. The complexity and difficulties for women related to decision-making is confirmed by a study from USA based on narrative analysis. The findings show that women expressed strong emotions of fear and anxiety when they weighed birth options[33]. Interventions for supporting pregnant women´s decision-making about mode of birth after previous CS show that evidence is limited to independent and mediated decision supports[34]. Nevertheless, decision-aids significantly decrease women's decisional conflict about mode of birth, and information programmes significantly increase their knowledge about the risks and benefits of possible modes of birth[14]. There are some qualitative studies on women´s experiences of decision-making. According to a study from Canada (a low VBAC country), women were seeking control in the midst of uncertainty, and their choices were influenced by personal experience and psychosocial concerns[35]. Further, a study from Taiwan, another country with high CS rates, shows that the previous birth experience, concern about the risks of vaginal birth, evaluation of mode of birth, current pregnancy situation, information resources and health insurance all influence the decision[36].

The decision-making process in the homogenous birth culture in the high VBAC countries is different from the low VBAC by involving the woman in the decision, but the obstetrician makes the final decision. In this 'pro-VBAC culture', women did not ask for information about the benefits of VBAC since they were aware of it as a first alternative. Instead, they asked to be listened to if they desired a CS. The findings from our study shows that both clinicians and women in this ´pro-VBAC culture´ are pleased with the culture; explained by an obstetrician *A choice can only be made if the different alternatives are equally valuable*[20,p.12]. In Sweden, according to national health care laws, patients should be involved in the care, and have the right to deny suggested treatments. They have no right to

have treatments based on own wishes if there are no medical reasons for it, for example elective CS. However, individual circumstances – for example, intense fear of childbirth – are sometimes accepted as an indication for CS[37]. There are few qualitative studies from high VBAC countries. A study based on interviews with midwives and obstetricians in Sweden about decision-making for CS confirm these findings showing that believing in normal birth is the core theme. The obstetricians make the final decision but with involvement with the woman, and with midwives, and clinicians' experience has an impact[38].

You may argue that women in the ´pro-VBAC culture´ lack rights to have a CS based on their own wishes, and thereby have fewer rights as women. According to Larsen[39] the change in obstetrics related to women´s choice for CS represents a victory for women's human rights in challenging paternalistic medical decision-making, but paradoxically it extended medical control over childbirth by further displacing midwifery. However, obstetricians, midwives and pregnant women have been less empowered by the change[39].

On the health care system level the litigation aspect influences the choice of vaginal birth or CS[2,40]. This is supported by our study where clinicians from the low VBAC countries mentioned medio-legal concerns as a barrier for VBAC, now and in the future**.**

There are few studies about cultural aspects of VBAC and CS, and most are from countries with high CS and low VBAC rates[18,30-33,35]. We have not found any earlier study from high VBAC countries except for the articles included in this study[20-21], and the Swedish study about decision-making for CS[38], possibly because it is considered as a prolem worthy of study. The uniqueness of our study is that we can compare, contrast and discuss the culture in high and low VBAC countries, and its effects on women's experiences of childbirth. More research is needed from countries and maternity care settings that are 'pro-VBAC' and have high VBAC rates to act as good examples for other professionals. Further research is needed

on a structural level that can answer questions about how countries with low VBAC rates can improve.

Methodological considerations

A qualitative approach was suitable for this study because of the complexity of the studied phenomena. Use of previous studies enabled collection of information from more people at the same time from different countries and maternity care settings. Thereby we could compare, contrast and discuss the culture in high and low VBAC countries[28]. However, a limitation is that all studies based on previous research are removed from the participants' lives without an opportunity for further questions to the informants[41]. All researchers were involved in the overall OptiBIRTH study; two in all of the original papers for this study (XX, XX), two in two original papers (XX, XX), and one (XX) in none. These different experiences related to the original interviews and focus groups was an advantage related to openness to the studied phenomena[26]. However, a limitation could be that the researchers were too familiar with the original studies to see something new, which is the goal with the chosen method[24,25]. As with all qualitative research, the findings cannot be considered universal, but rather contextual and must be related to time, history and context. However, the fact that the findings are contextual does not mean that they lack relevance in other contexts. When transferring the findings, the new time, history, and context must be considered, i.e. in a circling hermeneutic process[24.25].

Conclusion

The findings from this study show cultural differences related to VBAC in high and low VBAC countries related to a structural and individual level, which influence the professional role, the role of the woman and the decision-making process. The VBAC culture in the high VBAC countries is *homogenous* ´pro-VBAC´ related to a structural level, with commonly acknowledged guidelines followed by all. In the low VBAC countries a *heterogeneous* both ´pro and against-VBAC´ culture on an individual level exists with various guidelines at different hospitals, and single clinicians vary in their approach. Furthermore, women will merely adapt to the VBAC culture in their respective countries while clinicians describe differences related to the organisation, their own role and the woman´s role. Women from all countries have the same wishes for support during the pregnancy, early follow-up after the first CS, leaving the first birth experience behind, support in the decision-making process, a culture that supports VBAC, confident and supportive clinicians, and that the agreements made in pregnancy are followed during the birth. The practical implications are that in order to improve the VBAC rate both the maternity care settings, and the individual professionals need to adopt a common 'pro-VBAC culture', it is not enough that only the professionals make this change. Further, the pressure on women in the low VBAC countries should be relieved by more explicit information about 'pro-VBAC' hospitals and clinicians in order to help them to receive a VBAC.

Authors' contributions

All authors (XX, XX, XX, XX, XX) did the analysis of the articles together, led by XX. XX drafted the manuscript. All authors commented, and agreed on, the final version.

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Conflict of interest

All authors declare no conflict of interest.

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