Why do pregnant women prefer cesarean delivery?: a qualitative study in a tertiary care center in Southern Thailand

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Abstract

Background

The increasing worldwide rate of cesarean sections is of global concern, and in recent years, cesarean deliveries upon maternal request have become both an interesting and debated issue. Hence, this study aimed to explore the maternal reasons for cesarean preference without medical indications.

Methods

A descriptive qualitative study was conducted, using an in-depth interview, with 27 pregnant women, attending antenatal care at Songklanagarind Hospital from September, 2018 to June, 2019, who preferred cesarean delivery. Data were analyzed using content analysis.

Results

Maternal reasons for cesarean preference were classified into 6 main categories including: fear of childbirth, safety concerns related to health risk perception, negative birth experience, a positive attitude toward cesarean delivery, access to biased information resources and superstitious belief in auspicious birth dates. Most women had more than one reason for choosing cesarean delivery.

Conclusion

Several reasons for cesarean delivery preference emerging from pregnant women have been elucidated. One striking reason was a superstitious belief in auspicious birth dates, which was challengeable for an obstetrician to approach. Obstetricians should explore the exact reasons why women request cesarean delivery, so as to prevent or diminish unnecessary cesarean sections.

Background

Cesarean section is a lifesaving procedure for mothers and their babies in certain circumstances; however, it can lead to adverse maternal and fetal outcomes in cases without medical indications [1, 2]. Currently, cesarean section rates have been rising globally, including in our country, Thailand. Cesarean section rates in Thailand have been significantly increasing during the past three decades from 15.2% in 1990 [3] to 32.5% in 2017 [4]. Factors contributing to this increase have been identified in previous researches, including delayed childbearing, policies promoting subsequent cesarean section, refusal to offer vaginal birth after a cesarean section, wide use of continuous electronic fetal monitoring, use of epidural analgesia, fear of malpractice liability, professional practice style, professional expectations for work-life balance, reimbursement system, financial incentives, maternal request, and lack of regulations [5–8].

Cesarean section upon maternal request is an interesting and debated issue, since it is one of the factors contributing to an elevation of cesarean section rates. The rate of this indication is not exactly known; however, it has been estimated to be 4–18% [2]. In Thailand, the Royal Thai College of Obstetricians and Gynecologists just announced the position statement against cesarean sections without medical indication, in order to control the cesarean section rates in Thailand [9]. Our institution, Songklanagarind Hospital, a referral center in Southern Thailand, does not allow cesarean sections to be performed, without medical indication. In so saying, based on the database from the Statistical Unit, Department of Obstetrics and Gynecology, Faculty of Medicine, Prince of Songkla University, the cesarean section rate has risen by about 20% over the past 20 years.

Previous qualitative researches from other countries have found that factors associated with cesarean preference were fear of pain, previous cesarean delivery, previous negative birth experiences, multiparity, socioeconomic status and maternal age [10–12]. A recent systematic review of 65 studies found that there were 6 main reasons related to the mode of delivery preference; these being: 1) maternal perception of safety; 2) fear of pain; 3) previous birth experiences; 4) encouragement and dissuasion from health professionals; 5) social and cultural influences; and 6) access to information and educational levels [13]. It is of interest to explore the reasons why some women preferred a cesarean delivery. Studies regarding this issue are limited in our country, where cesarean section rates continue to rise; therefore, we conducted this qualitative research to explore the reasons why women preferred a cesarean delivery.

Methods

This qualitative study was conducted under the research project entitled “Knowledge and attitudes of pregnant women regarding modes of delivery”, registered with the Institutional Review Board of the Faculty of Medicine, Prince of Songkla University (REC.61-177-12-4). Written informed consent was obtained from all participants before entry into the study. The participants were purposefully selected from those in the above-mentioned project, who attended antenatal care at Songklanagarind Hospital from September, 2018 to June, 2019 and reported that cesarean section was their preferential mode of delivery. They were invited to participate in this qualitative study, and were assured in regards to confidentiality and anonymity. The inclusion criteria of the main project were: 1) singleton pregnancy; 2) gestational age ≥ 20 weeks; and 3) no maternal or fetal indications for cesarean section. Exclusion criteria were women who could not read/write or understand the Thai language or having an obvious fetal anomaly.

A qualitative study was performed using an in-depth interview to explore the reasons why pregnant women preferred having a cesarean delivery. The pregnant women were individually interviewed by the third author (PM) at the antenatal clinic in the private room, in a narrative style. The conversation was opened with, “Could you please tell me the reasons why you choose to have a cesarean delivery?” If the concept was not clear, the participants were asked to explain in more detail, until the reason was clarified. Each interview lasted for 20–30 minutes. All conversations were audio-recorded, and then transcribed

verbatim by the interviewer. The material was evaluated by the first (CS) and second authors (SC), as being saturated with sufficient confidence to answer the research question.

Data analysis

Data were analyzed by the first (CS) and second authors (SC) independently, using content analysis including 4 stages, which were: 1) decontextualization, 2) recontextualization, 3) categorization, and 4) compilation [14]. Each author read through the transcripts and identified meaning units in the text, condensed meaning units and then labeled each meaning unit with a code; the codes were inductively generated. Then, themes and categories were identified. Each stage was performed and revised several times in order to verify the information. The results were then discussed to obtain a consensus. The transcripts were discussed using an editing analysis style and drafting categories based upon the empirical data. Finally, synthesis of the condensates into re-conceptualized description was performed, and approved by all authors.

Results

A total of 27 pregnant women underwent an in-depth interview. The ages ranged from 24 to 45 years, with 14 cases being nulliparous. There were 6 categories and 14 themes emerging from the analysis (Table 1). From the in-depth interviews, most women had more than one reason that had convinced them of their decision.

Table 1
Main categories and themes of maternal reasons for cesarean section

Category	Themes
I. Fear of birth	- Fear of labor pain - Fear of facing two painful events (failure of vaginal delivery and cesarean section) - Fear of harming the baby
II. Safety concern related to health risk perception	- Underlying medical diseases (diabetes mellitus, heart diseases, HIV infection, etc.) - Biological risks (advanced maternal age and obesity) - Reproductive health problem (infertility)
III. Negative birth experiences	- Inadequate pain control - Dystocia - Baby injury
IV. Positive attitude toward cesarean delivery	- Advantages of cesarean delivery - Disadvantages of vaginal delivery
V. Access to biased information resources	- Personal advice - Mass media
VI. Superstitious belief in auspicious birth dates	- Good fortune

Category 1: Fear of childbirth

Most women expressed that fear of childbirth was their main concern, even though some of them had never had the experience of childbirth before. They had a fear of labor pain, a fear of facing two painful events; firstly from failure vaginal delivery and then having to undergo a cesarean section as well as a fear of harming the baby.

"*I have a fear of pain during labor and delivery. I have heard that it is the most severe pain in one's life."*

"I have a fear of labor pain, even though I had two spontaneous vaginal deliveries, and this was my third time."

"If I try vaginal delivery, but fail, I have to undergo an emergency cesarean section, so I have to face two painful events. If I choose cesarean delivery, I will have pain from only one procedure."

"I am afraid that I could not push the baby, and the baby might be in danger."

Category II: Safety concern related to health risk perception

Some women perceived that they had significant risk factors potentially leading to an unsafe delivery as well as fetal jeopardy. These included their underlying medical diseases (such as heart disease, diabetes mellitus, etc.), biological risks (advanced age, obesity), infertility and even the perception of a big baby as a consequence of maternal diabetes mellitus. They believed that they were not healthy, and might not have enough power to push the baby out, thus resulting in injury to the baby.

"I have an underlying heart disease, I am experiencing dyspnea sometimes, so I am afraid that I cannot push the baby, or may have worsening dyspnea during pushing, and my baby will be obstructed for a long period and be unsafe."

I am getting older, and have diabetes mellitus with a history of preeclampsia from a previous pregnancy. I am afraid that I have not enough power to push."

"I have an HIV infection. I am afraid that my baby might have contact with blood or mucous in my vagina during delivery. I prefer cesarean delivery because I have heard that it reduces the risk of infection to my baby." (She had received standard antiretroviral drugs.)

"I am obese and getting older, I fear that I could not push effectively, and will have difficulty in delivery, so my baby will be in danger."

"I got married 9 years ago and just got pregnant by GIFT. I have paid a lot. I don't want to have any problem. I believe that cesarean delivery is safe for my baby."

Some women had multiple risk factors: medical diseases, advanced age, infertility, maternal perception of a big baby, and infertility, leading to the preference of a cesarean delivery.

"I have been married for 6 years, and never got pregnant. Now, I am having my first pregnancy by IVF, after 3 attempts. I am now 45 years old, and also have diabetes mellitus arising during pregnancy, furthermore I am on diet control as well as insulin injections to control blood sugar. I fear that my baby is big at the time of delivery, so I am afraid that my baby will not be safe during a vaginal delivery."

Category III: Previous negative birth experience

Previous negative birth experience also had a strong impact on some women. Traumatic birth leads to fear of giving birth in later pregnancies, as they perceived that delivery was harmful to themselves as well as their babies. Inadequate analgesia during labor is also a problem, resulting in fear of pain during the birth process.

"My first baby was delivered by vacuum extraction with much difficulty. His head was swelling, though it recovered a few days later. I don't want to have this problem again."

“I have had a bad experience of my previous pregnancy. I delivered with much difficulty, having labor pain for 2 days and was referred to the provincial hospital for cesarean section. However, cesarean section was not performed as expected. I was given drug to enhance uterine contraction for such a long period with terrible pain, though ended up with successful vaginal delivery.”

“I had severe labor pain in my first pregnancy for more than 10 hours. I requested for an analgesic drug, but the doctor did not give it to me.”

Category IV: Positive attitude toward cesarean delivery

Many women had a positive attitude toward cesarean delivery, stating that they appreciated the advantages of cesarean delivery over vaginal delivery in terms of its convenience, a short delivery time without labor pain, and so forth. Some women thought that a cesarean section was a safe procedure, without terrible pain as compared to vaginal delivery as well as less blood loss. As tubal resection can be conducted at the time of cesarean section, some women thought that it was worth to choose a cesarean delivery. Women being concerned with their fibroids, wished to also have these removed during cesarean section. On the contrary, they held the belief that vaginal delivery was an unpredictable process.

“I feel that cesarean delivery is safe for both mother and baby. Blood loss is less than vaginal delivery.”

“Cesarean delivery is faster than vaginal delivery.”

“Planned cesarean sections are convenient, the date and time can be selected, and there is no need to wait for spontaneous labor.

“I have a tumor in the womb, and I would like to have it removed at the time of cesarean section.”

“I prefer cesarean delivery because I want to have tubal resection at the same time. I do not want to have pain twice from two procedures; vaginal delivery and postpartum tubal resection.”

Category V: Access to biased information resources

Women have obtained information from either personal advice or mass media resources. Personal resources including; words, experience or advice of people, such as friends or relatives about their negative or positive experiences of delivery, may have had an influence on their decisions.

“My relative struggles with shoulder dystocia. I am afraid that I may have the same problem, so I would like to have a cesarean delivery.”

“My friend told me that she had a cesarean section with a spinal block, and it was not painful.”

Currently, people can access various sources of information very easily, including social media, such as Facebook, wherein anybody can share their experiences, ideas, or comments, and this may have an influence on the mothers’ decision. Information from television, newspapers or movies may also present

some information leading to misunderstanding about the real concepts and factors in regards to route of delivery.

"I have read comments shared on Facebook and the internet, saying that vaginal delivery is very painful."

"I have searched for information about cesarean sections, it is an alternative route of delivery with a short, painful period."

Category VI: Superstitious belief in auspicious birth dates

Some people believe in destiny, in that they believe that if their babies are born on an auspicious date and time, they will be prosperous. This is a strong ideology in some families; hence, cesarean delivery has an advantage due to this issue.

"I prefer cesarean delivery because I can set an auspicious time for my baby."

Discussion

There were several reasons emerging from women who preferred cesarean delivery. Fear of childbirth, safety concern related to health risk perception, previous negative birth experience, a positive attitude toward cesarean delivery, access to biased information resources, and superstitious belief in auspicious birth dates, were found in this study.

Almost all aspects were in accordance with previous studies [10–13, 15], except for the personal superstitious belief in auspicious birth dates, which has been found only in some Asian countries. Furthermore, in each category, some different details have been noted. For example, in the category of fear of childbirth, some participants mentioned about the risks of two painful events (labor pain and cesarean section), if they failed vaginal delivery. In regards to a positive attitude toward cesarean section, having fibroids removed during a cesarean section as an advantage of having a cesarean delivery was mentioned by some participants, this however was a misunderstanding, because this procedure may cause profound or uncontrolled hemorrhage, thus the requirement for a hysterectomy.

In this study, fear of childbirth was the most common reason for cesarean delivery preference, which was similar to previous studies [10–13, 15, 16]. In this study, women described their fear of childbirth in 3 aspects, fear of labor pain, fear of taking the risk of two painful events (failure of vaginal delivery and cesarean section) and fear of harming the baby. Fear classified in this category was the primary fear, just anxiety of women, not related to previous experiences. Providing proper recommendations for women with fear of childbirth, such as analgesia for pain relief, risks and benefits of vaginal and cesarean delivery, during antepartum care is essential.

Safety concerns related to health risk perceptions were also common in this study. Since our institution is a referral center in the South of Thailand, there have been a high proportion of complicated pregnancies in our center. Women with underlying medical diseases, advanced age, or a history of infertility, perceived

that they were high risk and felt it was unsafe for both themselves and their babies. They did not want to take any risks during the birth process. They believed that cesarean delivery was safer than vaginal delivery. Due to this issue, obstetricians should clarify any misunderstandings and the exact risks and benefits in regards to modes of delivery, as there are some serious consequences of cesarean delivery; especially placental adherence in future pregnancies. Safety concerns based on health risk perception has also been mentioned in previous studies [10, 13].

Previous studies reported that negative birth experiences have been recognized as a strong factor for cesarean preference [10–12, 17]. History of traumatic deliveries made women fear birth, and hence the request for a planned cesarean section, in order to avoid such a bad event. In our study, women expressed their feelings on how they suffered from birth experiences in three aspects, including pain control, dystocia and baby injury. Inadequate pain control during labor made women fear birth in subsequent pregnancies. This reflects quality of care during labor, as modality of pain control should be offered as well as mental support. Dystocia is associated with severe pain [18]. Traumatic birthing makes women stressful, frustrated and depressed [19]. As no one want her baby to be injured, these events can have a strong impact on cesarean preference.

One important factor is related to a positive attitude toward cesarean delivery, which might be related to a lack of health literacy. They appreciated the advantages of cesarean delivery in terms of its convenience, short delivery time, less pain, and some women believe that it is a safe procedure. They lacked the knowledge in regards to some of the serious consequences for future pregnancies; placental adherence. From our point of view, obstetrician should take the opportunity during antenatal care to counsel about both the risks and benefits of cesarean vs. vaginal deliveries. Knowledge has an influence on attitudes [20], so if they have the correct knowledge, their attitude might change. Thus, there is a need to educate pregnant women and their spouses, partners, caregivers, and family members or influential relatives about the advantages and disadvantages of different modes of delivery. To the contrary, a previous study found that most women who had a positive attitude toward normal delivery would prefer normal delivery in their present pregnancies [21]. To reduce the incidence of cesarean sections, health care providers should promote positive childbirth experiences for first time women in labor, by giving physical and emotional support during the intrapartum period.

In the era of knowledge explosion and digital disruption, people can access information very easily, so it is no wonder that pregnant women addressed clearly that the information acquired from various sources had a strong impact on their decision making. In our study, information resources were from personal advice and mass media. Words or experiences from their relatives or close friends had a strong influence on some participants' decision. Information from mass media such as television, the internet, or any kind of social media could dictate one's ideas or beliefs [15]. Perception and interpretation of the information were different among people based on their experiences, belief, critical thinking and reasoning. As it is a one-way communication, misleading information can occur. Obstetricians should therefore clarify some misbeliefs or misunderstandings for pregnant women. If women could get informative, professional and

correct information, they may change their attitudes toward mode of delivery; leading to the rate of cesarean delivery on demand decreasing.

Finally, a striking reason found in our study was a superstitious belief in auspicious birth dates. To our knowledge, this cultural preference is not found in most western populations, although superstitious belief in auspicious dates and times of delivery is quite common in Thai society, as well as Chinese families. A previous study conducted in California found a large number of Chinese births on the auspicious dates of the; 8th, 18th, and 28th day of the month, but no corresponding increase among the Whites [22]. Some people have a strong belief in destiny; wherein, they believe that birth time determines the course of their life. If they were born during an unlucky period, they would have bad luck throughout their life, this is also coupled with the belief in astrology. Parents desire to provide the best opportunity for their children, so if they can choose an auspicious time to give birth, they would do so. In concerns to this issue, it is very difficult to deal with personal beliefs and ideology, besides providing information about adverse consequences for mothers and babies for elective cesarean delivery without medical indications, one course of the action for the obstetricians is to simply decline to do cesarean delivery on maternal request due to this reason. However, it must be noted that this may lead to conflict, and/or the mother/family changing their obstetrician.

Our qualitative study contributed to additional data from pregnant Thai women, reflecting the cultural preference of our country, where either cultures or beliefs are different from that of most western populations. It is challengeable for obstetricians to approach, since such ideas and belief systems are difficult to change. Such beliefs might not relate to education level, whereas family backgrounds seem to be more influential.

The strength of this study was that we used two investigators to perform the content analysis independently, and then discussed the results to obtain consensus. This increases the research validity, because there is a risk that different researchers have disparate conclusions from the same data. Another point is that the two investigators are from different careers (obstetrician and nurse), so we were able to approach and discuss the findings from different angles to ensure the consistency in the analysis.

Previous reports have mentioned some reasons which were not found in our study, such as fear of pelvic floor injury and urinary problems [15] or encouragement from health personnel [13]. Since cesarean section on maternal request is not allowed in our institution, some women who preferred cesarean delivery and were aware of our hospital policy, might have gone to the private sector instead. Obstetricians' preference and hospital policies might have more influences on women's decisions. Some doctors prefer cesarean delivery to vaginal birth because it is faster, more convenient, and probably more profitable [8]. The limitation of our study was that it did not represent pregnant women in private sectors where cesarean delivery on demand is permitted.

Conclusion

There were many reasons for cesarean delivery preference emerging from pregnant Thai women. One striking reason was a superstitious belief in auspicious birth dates, which was challengeable for obstetricians to approach. Obstetricians should explore in detail why women request cesarean delivery, and provide effective counseling in order to decrease cesarean delivery on demand.

Declarations

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Authors' contributions

All authors were involved in study conception and design. PM had the primary responsibility for data collection. CS and SC participated in data analysis, interpretation and drafting of the results. CS prepared the manuscript and completed revisions. SC and SP provided critical feedback on all manuscript drafts. All authors have read and approved the final manuscript. CS is the guarantor.

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Availability of data and materials

Original data cannot be made available due to confidentiality of the participants.

Ethics approval and consent to participate

Approval was obtained from the Institutional Review Board of the Faculty of Medicine, Prince of Songkla University on September 4, 2018 (REC.61-177-12-4). All participants were provided information sheets about the study and all women signed written informed consent prior to the interviews.

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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