Iranian obstetricians’ views about the factors that influence pregnant women’s choice of delivery method: A qualitative study

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1. Introduction

Caesarean section (CS) has been a significant life-saving achievement in the history of medicine.1 It is also among the most commonly performed, and arguably, unnecessary procedures in childbirth.2 According to Iran’s Ministry of Health report, 35 percent of all deliveries in governmental hospitals and 60 percent in private sectors are done by CS, while only 13–20 percent of these surgeries have medical indications.3,4 Rising rates of CS have been reported in other countries. For example, the rates of CS rose in England and Wales from 2.8% in 1960 to 21.5% in 2001. The UK rate was 24.6% in 2009.5 CS is a major surgery, and when it is performed without a medical indication, the risk of mortality and morbidity in mother and child can increase.6,7 CS is also an expensive procedure. The cost of the global saving by a reduction of CS rates to 15% has been estimated to be $2.32 billion (US dollars). The saving for Iran was estimated to be $108.495,217 (US dollars).8 This issue has several individual, national and international consequences, which makes it a priority in maternity care.

The underlying causes of unnecessary CS need to be clarified. In Iran, most women routinely visit an obstetrician (OB) during pregnancy. Care during labour, birth and the postnatal period occurs in hospitals with the OB having the major responsibility for care and decision making. Women widely choose elective CS in the private sector.4

OBs have rich experiences in their every day interaction with women, and evidence suggests they are not passive decision makers. Tussing showed that CS rates vary significantly by physician experience, education, sex and board certification.5 She found that foreign medical graduates had the highest rate of CS. The way that OBs manage the women, their recommendations and decisions have a great role in the rate of CS.1,3 The objective of this qualitative study was to investigate Iranian OBs’ views on the factors that can influence the choice of delivery method by pregnant women.

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2. Literature review

Some indications cited for CS include maternal age, foetal distress, the unusual position of the fetus, obstructed labour, major antepartum haemorrhage, placenta previa, cephalopelvic disproportion, and uterine rupture.\textsuperscript{8,10–12} Recently, CS on the request of mother also has been recommended as an indication for CS. Some clinicians believe it is the right of a woman to choose her mode of delivery.\textsuperscript{13} Obstetricians are more likely to agree to a request for a non-medically indicated caesarean section than in the past. A recent study showed that 69\% of obstetricians would comply with this request.\textsuperscript{14}

In the United Kingdom 7\% of all elective caesarean sections were performed on maternal request.\textsuperscript{13} Even in situations where there were medical indications for CS, women’s preferences were strongly associated with CS rates. The diagnosis of ‘psycho-social indication’ is the most common diagnosis among women having an elective caesarean section.\textsuperscript{5}

Mosialos and her colleagues found that CS is more common among women with a higher economic status that go to private hospitals for labour and birth care.\textsuperscript{16} Fear of pain, vaginal examinations and stress are reasons that some women prefer CS.\textsuperscript{10,11} A low locus of control and poor relationships between mother, physician and midwife can also influence women to choose SC.\textsuperscript{17–19}

The CS on request does not guarantee women’s satisfaction as one study revealed that women who had a caesarean section on request were less satisfied with antenatal care and had a more negative birth experience.\textsuperscript{20} Arguably, if OBs, as key decision makers, had better relationships with women, and addressed women’s worries, they may be able to decrease the rate of elective CS. Although Some studies have shown that many physicians, especially obstetricians, prefer to give birth themselves by CS\textsuperscript{11,21} with one-third of female obstetricians in London preferring a primary elective CS for the birth of their own child.\textsuperscript{22} Health providers’ views and behaviours play a key role in mother’s preferences.\textsuperscript{16} This study was designed to investigate views and experiences of obstetricians in one city in Iran, regarding women’s choices about the mode of delivery.

3. Participants and methods

In this qualitative study, the obstetricians’ views and experiences were collected by semi-structured interviews. The research was approved by the ethical committee of Kashan University of Medical Sciences, Iran. After obtaining written consent from the participants, all the interviews were recorded and transcribed. The interviews were conducted in a clinic or hospital, based on the preferences of the obstetricians. The interviews were continued until data saturation was reached.

The study used a purposive sample of obstetricians and resident medical staff of three hospitals in Kashan city, Iran. Twenty-two obstetricians and resident medical staff work in the Kashan University of Medical Sciences hospitals. Eighteen agreed to participate in the study. The mean age of the participants was 43 years, and their mean work experience was 11 years with a range from two to 32 years. One obstetrician was male, and the rest were female (in Iran since 1980, only females are allowed to study obstetrics). Participants were asked key questions, including: “Why do some women prefer caesarean section?”, “What kind of delivery did you have and why?”, “What kind of delivery would you recommend to pregnant women and why?”

Themes were developed by a process of inductive qualitative content analysis. The data were analysed in five steps.\textsuperscript{25}

Step 1 The transcripts of the interviews were read line by line, several times to gain a sense of the whole and highlighting phrases that appear to capture the theme connected with the research question.

Step 2 Taking notes of the content area to which the highlighted phrases referred. Two authors separately extracted the basic codes.

Step 3 Grouping of the basic codes expressing similar concepts into initial categories and giving a first label. The initial codes were categorized using a process of cooperation and consensus between authors.

Step 4 Checking of category overlaps, revising the categories, to merge or to divide into new categories if necessary.

Step 5 The categories and statements related to it were given to the participants and two other obstetricians that were not participants in the study. They were asked to clarify whether categories and statements represented their real views and experiences and to write any further explanations. The extra explanations were gathered, and the categories were re-organized accordingly.

Finally, participants were able to agree that the findings really reflected their experiences and views.

4. Findings

One hundred and twenty initial codes were extracted from the transcripts. The initial codes were summarized into six categories. The categories were organized according to the factors that were related to the possible advantages and disadvantages of the CS and normal vaginal delivery (NVD). The six categories were: factors relating to women, obstetricians, delivery conditions, complications, society beliefs and health system.

4.1. Factors relating to women

According to participants, the fear of pain was the main reason that some women preferred elective CS. One participant said: “Natural childbirth is painful. Sometimes they have pain for 24 hours. The relatives, the husbands call us continuously and say why are you not doing anything. Some have negative experiences from their previous deliveries. They might have a difficult one. The first vaginal delivery is always difficult anyway. When they come, they insist on elective caesarean section. When we tell them that second delivery is much easier they don’t believe us, and if we resist, they go to another doctor” (48 years old female obstetrician).

They believed that women did not consider the CS as a major surgery. Another said: “It is interesting that people are normally afraid of any surgery except caesarean section. They come very happy with make-up and coloured-hair like they want to go to a wedding. They really put pressure to us for caesarean section” (44 years old female obstetrician).

Some obstetricians deeply believed that women should have the right to choose the kind of delivery.

“I tell them all the advantages and disadvantages and a complication of caesarean section, but this is the mother who should choose the type of delivery. Although most of the patients are not ready for making the decisions and accept the consequences” (45 years old female obstetrician).

4.2. Factors relating to obstetricians

Obstetricians noted that sometimes they have to make a rapid and accurate decision. In these cases, obstetricians mostly chose
the CS: “In a moment, we should decide for two persons. There are some difficult cases that we should decide very fast. These times we don’t get the risk and choose caesarean section” (28 years old female resident).

The long process of vaginal delivery was another factor that was quoted by some participants: “The vaginal delivery takes time; it is not like a caesarean section. The specialists prefer the caesarean section because it takes just half an hour and will be finished. In a first vaginal delivery, it starts today and finishes tomorrow” (50 years old female obstetrician).

Many obstetricians preferred or experienced CS for their own delivery. Doctors noted that elective CS was foreseeable, which is an advantage for them: “We should manage our work. The caesarean section gives us the opportunity to manage our schedules, finding someone to work instead of us, tell the hospital when we are leaving. Of course, physicians welcome this” (42 years old female obstetrician).

The stress that obstetricians endured was much higher in normal vaginal deliveries: “In a vaginal delivery you have stress from morning until the night. Why it is not progressing, how is the fetal heart rate, even when the head is seen you are not sure whether it can pass the canal? You are stressed that you may need caesarean section in the last moment” (29 years old female resident).

According to interviews, the shortage of midwives was another factor that could increase the rate of CS: “You should have a midwife for every woman, now we have a midwife for two and sometimes more than that. So we can’t monitor patients properly. If we have a drop in fetal heart rate, we can’t stay to see what happens. We choose caesarean section very fast” (42 years old female obstetrician).

The early hospitalization was another reason that made the women, and obstetrician tired: “The patient comes with one centimeter effacement; it will take a long time for the patient to get to fully dilated. She gets tired. I get tired. We don’t let the relatives to come to labour, so the relatives get tired and tell us why it is not getting over” (48 years old female obstetrician).

The obstetricians’ income was more in CS. This may seduce obstetricians to choose CS: “The caesarean section is faster and easier with more income. I can’t say that all the physicians are completely ignorant of these facts, and decide just based on the indications” (49 years old female obstetrician).

Some obstetricians deeply believed that SC was the better choice: “You can travel by a horse, and you can travel by an airplane. I think vaginal delivery is like traveling by horse. They tell us that our caesarean section rate is higher than Europe. So what, my sister had a vaginal delivery in Belgium. They almost killed her. She had severe pain for 24 hours. It was such a terrible experience that she came to Iran to have a caesarean section for her second child. We should not listen to these things. The reality is that caesarean section is faster, better, and I think with new methods it is even safer for children and women” (51 years old female obstetrician).

The cooperation between obstetricians and midwives could hasten the vaginal delivery: “The midwives are great help, and they are better in vaginal deliveries, but they should take the responsibility. If they start the delivery, and then call us in a very serious condition and put the responsibilities to us, I prefer to have a delivery from the beginning by myself” (45 years old female obstetrician).

4.3. Factors related to delivery condition

Some factors were related to labour conditions. The labour environment and its general condition were not satisfying for patients according to interviews: “Patients are not comfortable in the labour; we don’t let the relatives and husband to enter the room. During delivery, women need emotional support. Now she is among strangers who are not very friendly most of the time” (30 years old female resident).

Providing a comfortable condition might hasten the tendency of vaginal delivery: “We should have different options for women. We should have epidural anaesthesia, which provides the delivery without pain. I don’t know why they don’t use it for all the patients” (49 years old female obstetrician).

4.4. Factors related to the health system

The obstetricians noted that the health system didn’t support them in legal cases, and they didn’t receive any positive enforcement: “If a patient sues us for any reason, the first thing they ask us is why you didn’t have caesarean section. There is no positive feedback or encouragement for vaginal delivery. I had vaginal delivery for a 4,700 kilogram newborn. Nobody cares. Nobody says, thank you” (48 years old female obstetrician).

The lack of supervision was another factor: “You had 200 deliveries in a year; you can’t say that 100 of these women had small canals. Nobody accepts this. There should be some form of penalty. At the beginning, these obstetricians should receive an oral hint, and then the written one, if they continue their license should be halted” (45 years old female obstetrician).

4.5. Factors related to the social and cultural beliefs

The participants believed that CS was more acceptable and more valuable in the eyes of the people. A participant noted that: “The patient and her family are more respectful after caesarean. They feel you have done some valuable thing for them. I don’t know why. When you have a normal delivery, there is no such gratefulness. It is hurtful because normal delivery takes a long time” (50 years old female obstetrician).

Some participants even believed that CS was like a popular mode in the community: “Unfortunately the caesarean section is like a mode in the community. Her neighbour has gone to a private hospital in Tehran and had a caesarean section and made a movie from it. Now she wants the same thing here” (40 years old female obstetrician).

Obstetricians noted that: “People assume that CS is better than vaginal delivery because physicians and educated women choose it. I can’t blame people when my colleagues have had elected caesarean sections. Now almost all our obstetricians have had the caesarean section” (48 years old female obstetrician).

There was this belief among people that normal delivery is for poor people, and rich people choose CS. 

“People assume that CS is more acceptable than vaginal delivery. If someone has a normal delivery that is because she doesn’t have enough money or her husband doesn’t want to spend money for her. They say clearly that we have money, and we pay for caesarean section” (65 years old male obstetrician).

The media also can have a great influence according to interviews: “The radio and television should have an active role. They should make programs about the benefits of normal delivery. People look and believe them” (41 years old female obstetrician).

4.6. The complications of vaginal delivery and caesarean section

Normal vaginal delivery and caesarean section both have some complications and consequences, which were quoted by participants: “I had a patient. Her newborn had a shoulder dystocia during delivery, now for two years, they bring the child for physiotherapy, still the hand doesn’t move, and it has been paralyzed” (48 years old female obstetrician).

According to interviews the progresses in surgery and anaesthesia have made the CS a safe operation, and its complications have been reduced considerably: “Now the complication of
elective caesarean section is comparable with normal vaginal delivery. We don’t have morbidity, and we are doing caesarean section with the least possible trauma. Maybe in 10 years even the complications will be less than normal delivery" (51 years old female obstetrician).

The obstetricians noted that saving the life of newborn was the most important factor in making decisions.

“Previously, when I was resident, we used to say, at first we should save the mother, and she can have another pregnancy later, but now the life of the newborn is as important as the life of mother. We can’t give a dead child to the mother. If something happens to the newborn, all the family will be ruined. So if there can be a least possible risk for the fetus, we choose CS” (50 years old female obstetrician).

At the same time, the caesarean section could have serious complications such as infection, severe adhesions and complications of anaesthesia: “I don’t accept women with several caesarean sections for hysterectomy. They have severe adhesions, and we have difficult time in the operating room” (45 years old female obstetrician).

5. Discussion

Obstetricians believed that fear of pain and previous negative experiences are the reasons that many women insist on CS. At the same time, the obstetricians noted that CS was a short procedure with more income and less stress for them. People believe that CS is the better mode of delivery, and the health system does not support obstetricians in legal cases. The general environment of the labs is not satisfying and there is a shortage of the midwives in the hospitals. Midwives are not the key decision makers. Besides some obstetricians believed that CS is the best mode of delivery, and women should have the right to choose. Obstetricians believed, all these factors can explain the high rate of CS in Iran.

In a study by Saisto and colleagues, the fear of pain was the most common reason for caesarean section.24 This fear is natural and should be managed in prenatal care. A study showed that physicians could help women overcome their worries and change the decision of 38% of women, to choose a normal delivery.25 Some obstetricians believed that women have the right to choose the kind of delivery they want. Studies show that if this right of selection exists, accompanied by education and close relationship with the physician or midwife, then the rate of CS decreases.26–28 Latham suggested that even if women insist on CS the obstetrician should resist and inform the patients about the possible complications.29 Midwives should be trusted to become the first-line of decision-making. The results of 11 studies showed that there were no significant differences in overall foetal/neonatal death between women who were allocated to midwifery led care and those in medically led care.30

Obstetricians noted that women did not consider CS as a major surgery, and they were not afraid of the procedure. Bayes also showed in her research that CS is more than a routine operation for women. Rather, it is a long-anticipated and very special occasion. This research also showed that women did not receive the attention that they were expected during elective CS, which made it a traumatic experience.31

The first delivery is the most important one. If a woman chooses elective CS, the next deliveries also will be by CS, and for a long time the rate of CS will not decrease. Rossi has studied the normal vaginal delivery after CS and concluded that vaginal birth after previous caesarean is a safe procedure,32 but many obstetricians do not accept the risks.

During labour, physicians sometimes need to make rapid decisions in stressful conditions. In these situations, obstetricians prefer to choose CS. Shen said that physicians’ experiences made them select CS in stressful situations.33 The rate of personal experience of CS is higher among the physicians. One study has shown that 60% of physicians in Iran gave birth by CS.34 Physicians send this message to the community that CS is a better method.

6. Conclusion

Iran has one of the highest rates of CS in the world, although the increasing rate of CS is a global issue.8 We assume that without a medical indication, the normal vaginal delivery is the best mode of birth. Elective CS puts the mothers and their babies at higher risk of mortality and morbidity and imposes a great economic burden on the national health care system.

Many factors facilitate birth by the caesarean section. The normal vaginal delivery is a painful and long process, with low cultural acceptance and less income for physicians. If anything happens to the newborn during the normal delivery, the parents blame the physicians. Many obstetricians do not believe in the normal vaginal delivery as the best method of delivery. The midwives are in the corner and have no role in making decisions. In such a situation, there is little hope that the rate of CS in Iran will decrease rapidly.

We hope this study will help to understand, the reasons behind the high rate of CS in Iran. Several recommendations can be addressed in this issue. We recommend the Ministry of Health in Iran increase the number of midwives available to care for women. The environment for birth needs improvement, so that women are better supported during labour and birth. Anaesthetic services should be provided, so the women can have an epidural if they wish during normal labour. The public should be aware that normal birth is the best method of delivery and the potential negative consequences of birth by CS for both mothers and babies. Husbands should become involved in the process of labour. There should be educational programs for women, husbands, the community and obstetricians. Obstetricians should be encouraged to achieve a more acceptable rate of normal delivery.

This research reflects the views of obstetricians. To have a complete picture, the views of midwives and pregnant women also should be investigated. The right of the woman to choose her mode of delivery is the issue that needs more discussion and research. The satisfaction of women related to their mode of delivery, and their relationship with obstetricians also requires further study.

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References

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