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ORIGINAL ARTICLE

Exploration of Factors Influencing Maternal Choice Without Medical Indication for Caesarean Section

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ABSTRACT

Background: The rapid increase of caesarean sections has become the major public health problem. Caesarean section ratio is increasing day by day worldwide without knowing the factors with limited explanation that influence the rising trend without medical indications.
Aims: To explore the driving factors which lead to the Caesarean Section and to evaluate the maternal choice without medical indication for Caesarean Section.
Methodology: A Phenomenological qualitative approach was used with a semi structured open ended questionnaire. Sample size of ten pregnant women with a third trimester was used in this study. There was an individual in-depth interview with a time duration of 30-40 minutes. Purposive sampling technique was used in this study. Content analysis was done by using the Nvivo-10 software.
Result: Participants were recruited from the urban and rural area. Interview session was 30-40 minutes which was convenient to the participant. All the interviews were audio tapes recorded. Interpretative Phenomenological analysis revealed five major themes which are: mother personal beliefs for caesarean section, lack of knowledge to make an informed choice, cultural and social influence, fear of labour pain, non-supportive behaviour of staff and management of health care system were made from these interviews. However, critical knowledge gaps were also observed among study obstetricians, particularly with regards to the indications for and timing of elective caesarean sections.
Practical implication: The maternal choice of caesarean section without medical indications and the factors influencing the women decision-making process were complex. Therefore, these findings suggest that healthcare policy makers should attend to the factors that influence maternal choice about caesarean section and promote the normal vaginal birth among women.
Conclusion: This study identifies the personal beliefs of mothers are the major factors for taking decisions regarding caesarean section. Furthermore, relative's consultation with mother's decision-making become the main influencer to conduct the caesarean section. There is the dire need to involve the relatives during the mother's antenatal period to support them to make the timely and right decision regarding the mode of birth.
Keywords: Caesarean Section, Decision-Making, Influence, Factors, SVD, Pregnant Women

INTRODUCTION

Childbirth is a natural phenomenon which started from the time of Adam and Eve. Birth is occurring by the spontaneous way that is called Normal Vaginal delivery. In 1610, an abdominal incision was made when a mother was going to die to save the child. The first documented abdominal delivery on a woman was performed in 1610. After that abdominal delivery was subsequently tried in many ways and under many conditions which is called caesarean section.

Caesarean section is a surgical approach in which more than one incisions are made on the mother's abdomen and uterus to birth the child. Like other surgeries, Caesarean Section induces complications like wound and pelvic infection, respiratory problems, urinary infection, lung emboli, thrombosis and many other complications of anaesthesia. Caesarean Section only should be conducted when there is a danger for mother or infant's health and there is no chance of normal birth [2.] Though indications of Caesarean section delivery are limited, it has been growing day by day and increased the risk morbidity and mortality rate in mothers and child [3.]

Mortality rate due to the Caesarean Section has been reported 6:100,000 and 2: 100,000 due to vaginal childbirth. Caesarean Section is conducted repeatedly in developed as well as developing countries, especially in Asia (more than 50% births in China). Relatedly, the Caesarean Section ration in Iran increased from 5% to 10% which is the standard rate set by the World Health Organization. In Tehran, 66% of births occurred due to the Caesarean Section 4.

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Prevalence of Caesarean Section had been reported 21.1% worldwide, through which 5% reported in sub Africa and 48.5% reported in Latin America. Caesarean Section ratio has been increasing day by day in all regions of the world that are 44.9% in Eastern Asia, 34.7% in Western Asia and 31.5% in Northern Africa increasing annually[5.] 1:3 babies delivered through Caesarean Section in America. In 2020, 31.8% deliveries were conducted via Caesarean Section in the United State[6].

Caesarean Section ratio had increased by 3.7% (1990-91) to 20% in 2012-13 through which 9800 deaths occurred due the Caesarean deliveries which were conducted without medical indications 7. From the last ten years, Non-medically indicated Caesarean Section increased in Pakistan to 11.5% women from rural areas and 26.5% women from urban areas 8. Recently, a report issued by Pakistan demographic and health survey (PHDS) showed an expeditious increase of Caesarean Section from 14% (2012-13) converted to 32% in 2017-18.

Nowadays, unfortunately, Caesarean Section has become a culture to get rid from the labour pain. It badly influenced public health. Most of the Caesarean Section performed on mothers request rather than any medical indications[9]. The world prevalence of Caesarean Delivery on Mother Request is assessed to be 8–14% of all caesarean deliveries [2]. In order to prevent the dangers of vaginal delivery, the idea of elective Caesarean section in full-term pregnancy drew the media's attention about 20 years ago [10.]

Although decision-making is an intellectual procedure through which all individuals go through in their lives. Moreover, efficient decision-making requires a huge bundle of knowledge, actually, knowledge is considered as a mean and strategic tool for decision-making. During the process of decision-making, the attitude of the decision maker plays a significant role in assessment and evaluation of knowledge[8].

Every woman has rights to make decisions about their mode of delivery, decisions should be made on medical knowledge[8]. Women's decision-making regarding their mode of delivery is influenced by several factors including socioeconomic background, cultural factors and family involvement. Most of the pregnant women who depended on social support (husband/partner/ relatives) choose their mode of delivery after making the decision by the husband and family on the same day of the need for the caesarean section [11]. The family factors included husband's preference including only-child family (whether or not women or her husband was the only child in their own family), ideal number of children and choosing a lucky day for delivery. Husband's and doctor's preference or suggestion influenced the preference of a woman on delivery mode[10,11].

Other common reasons might be the style and fashion or disregard by the hospital staff to choose the Caesarean Section rather than the vaginal deliveries. Also, sexual dysfunction, vaginal trauma and lesions in the perineal area encourage the mothers to choose the Caesarean Section plan[4]. Many other factors like late approach in the provision of health care facilities, unavailability of emergency operation room, prolonged labour pain, illiteracy rate, multi number of cases with vaginal and uterine scars and tears, bad management of keeping the record about previous caesarean section has been comprise in low-income countries[12].

It is observed that women's decision-making regarding their healthcare seems not to be fully autonomous especially in developing countries. Women have been noted to have low decision- making power and this result in delays in accessing or receiving health care which contributes to the high maternal mortality [11]. In patient-initiated elective caesarean section, factors which influence the decision-making process are known from which other relatives make input or control the decision-making process[18].

Pakistan is the 5th largest contributor to global maternal mortality and 6% of the world's maternal deaths occur in Pakistan. The Caesarean section ratio has been increasing tremendously more than the standard ratio which is 5% to 10%. Most of the Caesarean Section is done only on mother request without any complication or medically indication. 8% to 14 % Caesarean section from all the caesarean deliveries are conducted on mother request[13]. Along with Maternal influences of high education and age, there are a lack of many other factors which influence pregnant women to choose the Caesarean Section [14]. This study will help to explore the trend of Caesarean Sections among child-bearing women in Pakistan and identify driving factors which are associated with the change in caesarean deliveries from past to present over time. It will also help to assess the attitude among pregnant women which influence them to make decisions about Caesarean Section without any medical indications. The aim of this study was to explore the driving factors which lead to the Caesarean Section and to evaluate the maternal choice without medical indication for Caesarean Section.

METHODOLOGY

A Qualitative Exploratory research study was carried out to Exploration of Factors Influencing Maternal Choice Without Medical Indication for Caesarean Section.

Study participant: To explore driving factors and women's attitude regarding decision making about caesarean section, in-depth interviews (IDIs) face to face interview will be conducted. IDIs was conducted with pregnant women with their 34 week to 37 week of pregnancy who visited the Govt. General Hospital, Faisalabad. Interview session done after their routine antenatal care (ANC) in a separate room of the hospital. IDI were conducted on pregnant women with their third trimester of pregnancy. Third trimester of pregnancy was chosen because mostly people made plans for their mode of birth at that time. An interview guide constructed based on the previous literature which was a semi structured open-ended questionnaire. Two basic questions were related to the research questions, others were interlinked with broader concepts. A diary, pencil and tape recorder were part of the data collection procedure. A purposive sampling method was used to select the desired participants from the targeted population. There were four participants employed and the others were housewives. Interview session was 30-40 minutes.

Data analysis procedure: The interviews were recorded, and collection of data, transcription and data analysis was done through an iterative process. Primarily transcriptions were in Punjabi or Urdu then it was translated into English before coding. After collection of the data, the retrieved data was transcribed into textual format.

Responses to semi-structured interviews were analysed by content analysis[15]. Line by line analysis of the content was done to find out open coding. After open coding, axial codes were made. Selective codes were made from the axial codes. Coding was conducted carefully, reading line by line several times with two investigators. A coding tree was constructed to see the relationship and link between the thematic text. Themes were generated from selected codes and analysed thematic data. The themes were finally supported by representative quotes from the participant's responses. The thematic data is then imported by using software. Data analysis was done by using the Nvivo-20 software.

Ethical considerations: The rules and regulations set by the ethical committee of the University of Lahore were followed while conducting the research and the rights of the research participants were being respected. Permission was taken from the participant in the form of consent form. They assure that their identity and name was kept confidential. Confidentiality and anonymity remained. They also had the choice that they were free to withdraw or quit from the study when they wanted.

RESULTS

The age of the participants ranged from 18-45 years. Five had secondary level education, two had higher secondary level education and three were illiterate. Two participants from them had a previous history of Caesarean section from a private hospital. Factors from the participant regarding caesarean section were explored using the major codes: lack of decision power, health and alive baby, precious baby, cultural and social influence, financial influence, fear of labour pain, bad behaviour of hospital staff, mother personal interest. Subsequently, all the study findings revolved around these codes and finally these codes merged into five major themes: mother personal beliefs for caesarean section, lack of knowledge to make an informed choice, cultural and social influence, fear of labour pain, non-supportive behaviour of staff and management of health care system. Finally, themes were generated to explore the factors influencing the maternal choice for caesarean section.

Mother personal beliefs for caesarean section: Both pregnant women and post history caesarean sections had their own preference regarding to choose the mode of delivery. One of the ten participants chose normal delivery. According to her *"If we live in a joint or nuclear family, you start doing things on your own on the second day of normal delivery. While you become totally dependent on the caesarean section. You remain dependent for at least a month that you need support to do work. Even you required an assistant to use the washroom. In normal delivery, you can manage your home and previous children and also can take care of your new baby on the same day of delivery. My family also favours the method which is easiest and safe. My sisters and all other family members prefer the normal delivery. That's why I decided to wait until the pain lasts".*

Every woman in our society has their own beliefs regarding the mode of delivery. One of the participants prefers the caesarean section due to the culture trend. She stated that *"I prefer the caesarean section. I heard baby delivered by the caesarean section had a healthier brain compared to the normal delivery as it is not stay in the birth canal for a long time"*

Lack of knowledge to make an informed choice: Some participants in the study had very limited knowledge about choosing the caesarean section or normal delivery and had several misconceptions about the caesarean section. They had their own perception regarding the caesarean section "It is heard that female body structure becomes loose in normal delivery. Changes from the lower part of the body structure have occurred. That's why I choose caesarean section".

Cultural and social influence: Our society and culture plays a great role in our life. Community had a great impact on us for the choice of birth mode. Community health care worker, Diamaa, labour attendant, street traditional birth attendant plays a significant role to increase the caesarean section ratio. For example, one participant chose a caesarean section because of mishandling of dia maa *"before my case, none of my family members ever attended hospital for birth purpose. As per tradition, I also went to my natal home and my mother called our family* "dia ma. During my labour pain, my baby was stuck in the birth canal and instantly she referred me to the hospital. In hospital doctors and staff rebuke us for the home delivery and faced many challenges for the procedure. They were not agreed to take the dia handled case as its going too risky for child. Consequently, caesarean section saves my child life. Trial of normal delivery induced a lot of fear inside me".

Another participant has opinion *"Normal delivery is ok for the old people in villages. Now mostly people conducted the caesarean section. If you go in a private set up, they do your caesarean section as soon as possible. Madam at home, people used to do normal delivery by hand. Now they become educated. People who are financially strong go to the private hospitals and choose a caesarean section. They thought we have a lot of money, what people think so, they went to biggest private hospitals and conducted caesarean section"*

Fear of labour pain: Prolong labour pain is the main reason for caesarean section. Every individual had his own capacity to bear the pain. Labour pain phobia in normal delivery tends to move towards caesarean section. According to one participant *"there is a one hour or half hour procedure in the caesarean section and it is completed. But normal delivery took 24 hours. It is very difficult to bear pains in normal delivery. According to my opinion, those mothers who can tolerate the pain must undergo to the normal delivery and those who can't, don't take the risk"*

Non-supportive behaviour of staff and management of health care system: There is a lot of work burden in hospitals but a shortage of staff remains constantly. Rude behaviour from staff during antenatal forced the woman to choose caesarean section.

One participant verbalised…

"*I was admitted with labour pain in this hospital at 11 am. The LHV examined me there and said that it was not labour pain but I was sweating with this extreme pain. It was very difficult to bear that pain. She did a per vaginal examination many times, it was also very painful and embarrassing. I was losing my patience but she did not speak a single word or pleasant word to me. Then I left the labour room and reached my family and begged from the caesarean section. Finally, caesarean section save me and my child life at 9 pm"*

DISCUSSION

Caesarean sections have become a trend all over the world. Rapid increase of caesarean section has become a debatable issue. World health organisation recommended the caesarean section rate should not be less than 5% and more than 10%. The percentage of caesarean sections increased by 3.2% in 1991 to 19.6% in 2018. According to the Pakistan demographic health survey in 2018, the ratio of caesarean section reached 22% in Pakistan which has an adverse impact on mothers as well as children.

Nowadays, unfortunately, the Caesarean Section has become a culture to get rid from the labour pain. It badly influenced public health. Most of the Caesarean Section performed on mothers request rather than any medical indication [9]. The world prevalence of Caesarean Delivery on Mother Request is assessed to be 8–14% of all caesarean deliveries [10].

The aim of this study was to explore the factors influencing maternal choice without medical indication for caesarean section. Mothers decisions taking towards the caesarean section mostly reflected by the family pressure, community and health care giver. Health care giver thinks only about their financial interest and their reputation despites of the medical information and knowledge. Sometimes knowledge of health care practitioners did not fulfil the guidelines and recommendations based on world health organisation level regarding caesarean section. On the other side, shortage of staff in hospitals, twenty-four-hour workload in public health sectors and limited resources shifted the patient burden towards the private hospitals. However, mother's choice and interest towards caesarean section without medical indication was also explored in this study.

Despites the culture having a strong preference towards spontaneous vaginal birth, women did not portray the negative attitude for caesarean section even though they thought that caesarean section is necessary to save the lives of mothers as well as children. The findings of this study supported another study conducted in Bangladesh in 2018 in which women prefer the caesarean section because they considered the episiotomy itself an operation. This study also shows that health care giver receiving the patients for caesarean section from their broker and it became an important reason for the non-medically indicated caesarean section. Shortage of staff and improper handling of patients in labour wards also influence the preference of caesarean section in mothers[16].

Similar to this study, mothers make decisions of caesarean section after the experience of painful sexual intercourse after the episiotomy among the women in Nigeria and Turkey. Some women also stated the bad attitude of staff in the labour room and lack of kind behaviour during labour was also the reason for the caesarean section. As every individual has its own pain tolerance capacity, every health care worker should be supportive and kind hearted towards the patients in labour pain. It encourages women to support vaginal birth[17].

A study conducted by Danna et al., supported my study. In this study findings, there was a delay in decision making for the mode of delivery, decision was taken by the husband or mother-in-law. Some women worried about mobility limitations and frustrated about the need for an assistant. Another was found in post-traumatic stress disorder because of inadequate help from husband and family. Lack of family support had a determinable effect during postnatal time[10].

In the current study, mostly participants take decisions because of social support (husband, partner, relatives). In our culture women's decision power regarding their health is not fully autonomous and it is influenced by socioeconomic background, culture factor, family and friend's involvement which delay in timely decision making.

A qualitative study conducted in Matlab is contraindicated with the current study. It was conducted in a rural sub-district in Bangladesh. Interview the participant during their 3rd antenatal visit and obstetrician from both public and private hospital [16].

In our study, only public hospitals were included and participants were only pregnant women. We did not involve the practitioner.

In the current study, the study participant was not having knowledge about the indications of caesarean section. They did not receive any medical information regarding risks and benefits about the caesarean section and normal vaginal delivery throughout their antenatal visits. Their friends, colleagues and family became the major source of information based on their own experiences. Mothers lack of knowledge about caesarean section was used by some peripheral level health care providers and their

broker to convince the women to plan caesarean section without any medical indication.

Timely decision making, empower the women to choose self- decision regarding mode of birth, fulfilment of shortage of staff by organisation, government policies base on WHO guideline for the caesarean section, proper knowledge about the indication of caesarean section during antenatal, audit for unnecessary caesarean section will help to reduce this increasing alarming trend of caesarean section. Strength of this study is adequate sample size according to the study setting, indicating that it supported the findings conducted in similar settings. It also explores the driving factors that influence the mothers to make decisions towards caesarean section. This study will help to reduce the maternal mortality rate associated with unnecessary caesarean sections.

Limitations: When we talk about strength, there are also some limitations. This study is not generalised as it was conducted in only one study setting due to the time constraints. Phenomenological qualitative study design was used based on purposive sampling which may create some bias. This study was conducted only in public health sectors. Whereas, the private sectors contribute a huge role to increase the caesarean section rate. Sample size was small as it is taken in a specific area of Faisalabad. It must be enough to cover a district at least.

CONCLUSION

This study identifies the personal beliefs of mothers are the major factors for taking decisions regarding caesarean section. Furthermore, relative's consultation with mother's decision-making become the main influencer to conduct the caesarean section. There is the dire need to involve the relatives during the mother's antenatal period to support them to make the timely and right decision regarding the mode of birth. The results of these studies can help the mothers and health care providers to acknowledge their duties and role at the time of decision for caesarean section or spontaneous vaginal delivery, and also can make some interventional studies to reduce the burden of unnecessary caesarean section in Pakistan.

Recommendations: Interventional and educational programmes should be introduced for the mothers during antenatal care on the advantages and disadvantages of caesarean section. Relatives should be involved throughout the pregnancy to know the mother's conditions, it will be helpful to make decisions regarding mode of birth. Psychosocial couple based programmes, training workshops of childbirth for mothers and couples, training to relax the mothers by nurses and psychological sessions and workshops for the fear of labour pain should be introduced by the Government to reduce the caesarean section rate. All the organisation was aware about the bad behaviour and lacking of the staff in the hospital. So, emphasise on the educational programme to the staff working in the Gynae and Labour Room department to provide a comfortable environment. Encourage the hospital health care staff to take part in all the refresher activities for the better and excellent output arranged by the government and organisations.

Conflict of interest: Nothing to declare

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