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Medicalization of Reproduction: Understanding the Dynamics of Increasing Trend in C-section Rates among the Women of Lahore, Pakistan

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Abstract

Background: C-section (CS) can be a lifesaving practice for both the mother and the infant when medically indicated. However, unnecessary CS may lead to higher medical risks for both the mother and the baby.

Objective: This study explores the factors contributing to growing rates of the caesarean section (C-section) in Pakistan.

Methods: Qualitative research design was adopted for this study and in-depth interviews were conducted with 20 post C-section women and five gynaecologists at government tertiary care hospitals and private hospitals in Lahore.

Results: The caesarean section (C-section) rates in Pakistan has increased from 3.2% in 1990 to 20% in 2018. Data analysis shows that six medicalization factors contributed to higher C-section rates: 1) Financial incentives and time convenience, 2) Marketing of C-section, 3) Maternal request for C-section, 4) Self-medication, 5) Lack of second opinion, and 6) Quality of care at public and private health facilities.

Conclusions: Thematic analysis showed that financial incentives of doctors, poor quality of care at public health care facilities and lack of second opinion were the significant factors for increasing trends of C-section. Whereas gynaecologists argued that the maternal request for C-section and self-medication were the major contributors of rising rates of C-Section in Pakistan. There is a dire need to create awareness among women related to the risk factors associated with unnecessary CS, while medical community also needs to be sensitized about the ethical obligations and implications related the medical practice. This would assist in minimising the rates of CS and unnecessary elective surgeries.

KEYWORDS: Medicalization of childbirth, C-section, Normal vaginal delivery, Self-medication.

Introduction

In the past several decades, diverse efforts have been made for global safe motherhood to ameliorate adverse maternal outcome and increasing interventions improve the quality of care during labor and childbirth [1]. Medical advancements in prenatal care reduced the maternal and neonatal mortality rates globally but the disproportionate use of these inventions in low risk births led to the medicalization of childbirth. In recent years, growing trend of over medicalization has been observed in changing childbirth from a natural, normal, women-centred process to a surgical procedure, mainly via C-section in previous years [2].

C-section (CS) can be a lifesaving practice for both the mother and the infant when medically indicated [3]. However, unnecessary CS may lead to higher medical risks for both the mother and the neonates [4]. Research shows C-section (CS) without medical indication is associated with a higher risk of perinatal morbidity and mortality [5]. The World Health Organization (WHO) advises the CS rate to be 15% or even less to balance out the benefits and risks associated with CS [6]. Despite the recommendation and risks attributed to CS, global CS rate keeps rising at an alarming pace, mainly in high and middle-income countries [7]. In Pakistan, the CS rate increased from 3.2% in 1990 to 20% in 2018, with urban areas rates as high as 25%, and the country is amongst the ten leading countries, where CS is responsible for 59% of the global maternal mortality [9-10].

While there could be clinical reasons to perform C-section, studies found a higher trend of CS to be associated with non-clinical factors. The rising CS rates are consistently related to delivery by private health providers, and thus often motivated by financial incentives [11-13]. The higher cost of CS as compared to Normal vaginal

delivery (NVD) in lower and middle-income countries including Pakistan encourages privately owned hospitals in promoting CS [14-15]. However, studies also reveal that physician-related factors, including time convenience and financial incentives, are significant determinants of CS [16-17].

The non-clinical factors responsible for the increasing trend of CS also include maternal request to perform CS. Maternal request can be motivated by several non-medical factors including fear of NVD, less pain-bearing tendency, and cultural acceptability of CS [18]. A study conducted in the UK shows that doctors consider maternal request as the most significant factor driving CS rate [19]. Moreover, data from Bangladesh and India suggest that social class plays an important role in women's perception about the selection of mode of delivery, as mothers belonging to higher economic status have a higher tendency to elective C-section [20-21].

The contemporary research also reveals that doctors' referral is a significant determinant of the expected women's choice to perform a C-section, particularly in Pakistan, whereas doctors also perform CS without any medical indication for financial and time incentives, as well as to get surgical experience [22-23].

This study aims to explore the medicalization factors contributing to the growing rates of CS in Pakistan. C-section has been normalized in Pakistan society, the current study might help to sensitise the females which could lead in altering people's perception about C-section and could also be instrumental to inform future policies to reduce the burden of unnecessary C-sections.

Methods

Study Design and Participants

An exploratory qualitative study was conducted at two major tertiary care hospitals (Jinnah hospital and Sheikh Zayed hospital) and private clinics located across three different areas (Gulshan-e-Ravi, Faisal town Model town) in Lahore, Pakistan. Convenient sampling was used to select research participants (post-CS women and gynaecologists). The inclusion criterion for post-CS women was that all the females who had at least one C-section during last one-year. The sample comprised women from diverse socioeconomic backgrounds.

Data Collection

Primary data were collected through 25 in-depth interviews with 20 post-CS women, and 5 gynaecologists. The participation in the study was voluntary and consent was obtained from the participants. The data collected until saturation achieved.

Data Analysis

Data were analysed using a thematic analysis approach with deductive coding. Data from all recorded interviews were transcribed into text, and initial codes were generated. After that, patterns were identified from the data and codes were categorized according to their relevance. Then a final list of key themes were generated.

Results

The researchers selected 25 respondents and divided them into two categories i.e. Post-CS women (category I) and Gynaecologists (category II). Five major themes emerged from the data that are discussed below (Table 1).

Table 1: List of themes and major codes

Themes	Major codes
1. Financial incentives and time convenience	▪ Doctors wanted to save their time and earn more money through C-section.
2. Marketing of CS	▪ Different marketing agents play their role in normalizing C-sections such as private hospitals, gynaecologists, family members, friends, and mass media.
3. Maternal request for CS	▪ less pain-bearing tendency among expected women.
4. Self-medication	▪ Use of painkillers to manage headache without consulting a doctor.
5. Lack of second opinion	▪ Patients and their families did not go to any other doctor for taking the second opinion.
6. Quality of care at public and private health facilities	▪ Poor quality of care and negative attitude of the medical staff at public hospitals.

Financial incentives and time convenience

Majority of the respondents from category I were of the view that financial drivers and time convenience are behind the rising rate of CS. As per a respondent: "Doctors do so just to save their time and earn money. The expense at the second time was 70,000 on the operation."

All the Gynaecologists (category II of respondents) mentioned financial incentives as a reason for the higher CS rate in the private sector. They also emphasized that doctors prefer C-sections to save time in both public and private health sectors. One of the gynaecologists stated: “Doctors want to save their time; they are not willing to spend 16 to 17 hours with one case in case of normal delivery. Moreover, they want to earn money as well.”

Another gynaecologist remarked: "Some private doctors are also involved in the increasing trend of CS because they suggest their patients to go for C-section just to get money from them."

The responses from both the categories of the study participants suggested that financial motivation and time incentives are the important factors contributing to the higher rate of CS, while the financialization of health prevents lowering CS rates. CS allows the doctors to exercise control over the timing of the delivery, so that they can have more time for personal and professional activities.

Marketing of C-Section

Another factor contributing to the trend of C-sections is marketing. Private clinics, gynaecologists, and patients are responsible for the marketing of CS. Multiple packages are framed for C-section by private health sectors that create a desire among expected women to be treated. The intent behind this is to attract the patients and seek money. As per a respondent, “I consulted a Gynaecologist at a Private hospital who is no longer there but was considered a good surgeon at that time.” Further, she said, “The treatment at Private hospitals is satisfactory but we have to pay a hefty amount to get these facilities and satisfaction.”

Other marketing agents that are playing a leading role in the marketing of CS are family members and friends. Another respondent said, “I went to a private clinic on my sister’s suggestion, as she also had all her cases over there.” Another respondent stated: “My husband’s friend suggested him to take me to a private hospital and we were really satisfied over there.”

Through in-depth interviews, it was found that social media play a role in the marketing of private hospitals and gynaecologists, but patients do not find any truth in these advertisements. As per a respondent, “All are fake and there is no reality behind these advertisements. The one and the only reason behind all this is seeking money,” Another respondent mentioned: “My family and I do not believe in these advertisements. It is just another way to get money.”

From above responses, it is concluded that private hospitals, gynaecologists, family members and friends are the leading marketing agents for C-sections. Private hospitals offer different packages to attract patients. Despite knowing fact that only intent behind this is to earn more money, people still prefer private hospitals because of hygienic atmosphere, cooperative staff and other facilities. Moreover, it was also revealed that majority of respondents do not believe in advertisements related to C-section. All these facts indicate that social media is trying to act as a marketing agent for C-sections to provide benefits to the medical industry.

Maternal request for CS

Maternal request for CS is also identified as a driver for higher CS rate in Pakistan. Women viewed CS as an "easy way out" of the labor pain and safer than Normal Vaginal Delivery (NVD). As per a respondent (who belonged to higher socio-economic class): “I thought I could not bear pain of normal delivery, so asked doctor to do the operation.”

Another respondent (a middle aged educated woman) stated: “My case would be a normal one, but I forced doctor to do operation. I was not able to bear pain of normal delivery. The doctor gave me time to think again, but I stickled on that and didn’t change my mind.”

The Gynaecologists also reported increase in maternal request for CS, without any medical indication. “The expected women these days are not able to bear the labor pain, so they electively go for CS.” Further, she said, “These days women are scared of pain of normal delivery because they are not healthy. They did not take proper diet during their pregnancy and then suffer the complications at delivery time.”(Gynaecologist).

Another gynaecologist stated: "Elites mostly go for C-section because they have wealth power."
This theme concludes that unhealthy diet and lazy lifestyle of the expected women are the reasons that they do not tend to bear the pain of NVD. Therefore, they prefer CS. It was found that CS is more prevalent among women with a higher level of education and socio-economic class.

Self-medication
Through in-depth interviews, it was found that most respondents (from category I) were using medicines without getting advice from the doctors. According to some participants, consulting a doctor for the routine issues such as headaches is not necessary therefore, they treat themselves either with homemade remedies or by taking painkillers (mainly Aspirin, Panadol, and Paracetamol).

As per a respondent: "I did not consult any doctor during normal issues as I used to treat myself with natural homemade remedies."

Another respondent stated: "I just take care of my diet [and] do some work at home, but in case of normal issues like headache I take Panadol or Paracetamol." She further explained, “I just followed my parents as they also used to take these medicines.”

Some respondents stated that they were using medicines because they already knew that doctor would prescribe the same. In the words of a respondent, “I avoid using pain killers and just take rest or take tea to relax. I use Panadol if I have severe headache, because most of the doctors suggest it.”

All the Gynaecologists were against self-medication and stated that it may create complications that lead to a higher risk for women to have a CS.

"Self-medication is also a reason for rising C-section rates."(Gynaecologist)
Another Gynaecologist stated: "Women who do not consult doctors during their pregnancy, at last go to hospitals when they feel complications, then doctors do not have any other option except CS, just to save their lives."

The above responses depict that the trend of self-medication has been normalized in such a way that expected women do not even realize that it may develop lethal complications for them as well as for their babies.

Lack of second opinion
The study shows that trend of taking a second opinion is not common in our society. It mainly depends on level of education and public awareness. Women do not investigate reasons behind C-section and just follow doctors. In this study, none of respondents went for second opinion either because they trusted the doctor's suggestion or because doctor created hype and did not give them time to think.

One of the respondents recorded response when being asked about second opinion, “I did not get second opinion and trusted doctor because that was first baby. My husband and I didn’t want to take risk. Two other respondents stated: “I was very scared at that time and didn’t want to take any risk.”

“At that moment, doctors created hype and didn’t give us time to even think about anything else.”
The above responses indicated that patient and her family face a critical situation at the time of delivery. Some doctors also exploit this situation to make a case for C-section. The patient and her family want to save the two lives, therefore, they accept the doctor's suggestion without any investigation. Summing up, there is a dire need to aware people about importance of a second opinion.

Quality of care at public health care facilities
All the respondents were agreed on the point that public hospitals cost much less as compared to private hospitals. However, in public hospitals quality of patient care is not satisfactory. The respondents who visited public hospitals had modest financial means. People from high socioeconomic status prefer to go to private hospitals.

As per a respondent: “Doctors are qualified at public hospitals, but they don’t take proper care of patients. On the other hand, private hospitals are expensive, but they treat patients very carefully.”

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As per another respondent: "I didn't visit any government hospital because doctors at government hospitals are not caring and helpful; the issue of hygiene is also there. However, in private hospitals, the doctors take proper care of the patients."

Another respondent stated: "Public hospitals are for the poor who cannot afford expenses of private hospitals. But private hospitals are best. In some cases, doctors at private hospitals force patients to go for C-section just to generate money."

Responses showed that private health facilities are better in quality. Staff over there is also cooperative. Although they charge high prices, the healthcare at most private health facilities is of a significantly higher standard than provided by public hospitals. In addition, the commercialization of maternal health has facilitated upsurge in C-section rates.

Discussion

This study demonstrates that financial drivers and time convenience are amongst the major determinants contributing to rising rates of caesarean deliveries. Most respondents indicate that the commercial nature of private health facilities prevents doctors from lowering the rate of C-sections. Huge amount is charged for a C-section including the cost of medication, laboratory tests, and hospital stay. These findings are consistent with data from other developing countries like India which show that CS rate is three times higher in private health sectors as compared to public hospitals [24]. The results also show that doctors prefer CS to save their time in both public and private health sectors, as this allows them to exercise control over the timing and duration of the delivery, so that they can have more time for personal and professional activities. In line with the present study, studies also reveal that physician-related factors, including time convenience and increase in leisure time are significant determinants of CS [16-18].

Medicine has become more of a corporate scene in Pakistan, particularly in private sector. The study showed that private hospitals offer different packages to entertain the patients and make a normal case as C-section on purpose with a full-fledge package to earn money. Family members and friends were identified as leading marketing agents playing a significant role in normalizing CS [23]. Media have commercialized packages and comfort related to CS. This creates a false image among expected women as high risks associated with CS have not been revealed. This is not to say that C-section should not be performed in any circumstance; in fact, it can save lives in case of some pregnancy-related complications. Government should make legislative measures to address this rising trend of C- section.

Non-clinical factors responsible for the growing trend of CS also include maternal request and perceived convenience. It has been observed that expected women perceived C-section to be a safer choice than normal vaginal delivery, without having sufficient knowledge/ understanding of the risks associated with it. Furthermore, the present study also shows that CS is more prevalent in women with a higher level of education. Different studies are present that identify a positive relationship between the maternal level of education and elective CS perception, suggesting that maternal demand for CS plays an important role, particularly amongst women with a higher level of education [19, 22]. It shows that mothers' higher education is associated with a higher likelihood of caesarean deliveries. High cost of CS is sometimes considered as a higher social status symbol. Most of the research participants believed that caesarean was mainly selected by the rich and those from higher economic status since would be considered more prestigious. Such perception might be adding to the higher trend of caesarean deliveries. Studies conducted in Bangladesh and India also show that social class plays an important role in women's perception about the selection of mode of delivery, as mothers belonging to higher economic status have a higher tendency to opt for C-section [20-21]. Another possible reason behind the rising rate of CS is self-medication that is a significant medical challenge. Expected women are often excluded from clinical trials for the fear of harm to the mother or the developing foetus, Therefore, the safety of drugs used during pregnancy has not been well-established [25-26]. As expected women face several minor and acute ailments during the gestational period, such as headache, pain, nausea, and heartburn, self-medication is a common practice among expected women to manage and treat these minor ailments. Apparently, many women are unaware that self-medication can result in various structural and functional abnormalities to the foetus or might lead to miscarriage [27-28].

The current study also depicts lack of a second opinion as a vital contributor to an escalation in CS rates. Majority of the respondents reported that decision-making about the mode of delivery usually rests with the doctor. Some of the expected women did not challenge doctors' decisions because they believed doctors to be more knowledgeable. Another reason reported for not taking a second opinion is that some doctors created panic

at the time of delivery and did not give them time to even think about it. As an expected mother and her family face a critical situation at the time of delivery, some doctors take advantage of that situation and create hype while emphasizing going for a caesarean delivery. In almost all such cases, the patient and her family accepted the doctor's decision without any investigation as they wanted to save the two lives. The educated and uneducated people come side by side in this situation. Therefore, people must be aware of the importance of taking a second opinion to avoid unnecessary CS.

The responses from research participants further revealed that the quality of care they received in public health facilities was poor. In the present study, some respondents identified the negative attitude of health care providers as a reason that prohibits them to visit a public health facility. They felt that they were disregarded and ignored by the medical staff. Though all the respondents agreed that healthcare costs are lower in public health sectors than in private health sectors, but the poor quality of care and unsatisfactory conditions in public hospitals were identified as the reasons behind people's preference for visiting private hospitals despite the exorbitant costs.

Conclusions

The findings of the study suggest that the health system in Pakistan should provide some clear guidelines to the health care providers for carrying out CS. This will help in reducing CS rates in both private and public health facilities in Pakistan. Furthermore, there is a dire need to create awareness among women related to the risk factors associated with unnecessary CS.

Ethical Consideration

The research was conducted according to the ethical guidelines of institutional review board of University of the Punjab and informed verbal consent had been taken from all the research participants, and their confidentiality and anonymity were strictly ensured.

Consent for publication: yes

Availability of data and material: yes

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