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Mothers Lived Experiences of Caesarean Section: A Qualitative Study among Mothers in Semi-Urban Areas of Bangladesh

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Abstract

The commercialisation of health services has led to an increasing rate of unnecessary caesarean deliveries in developing countries like Bangladesh. This rising rate of unnecessary caesarean section (CS) is a serious concern, and it is associated with numerous short and long-term complications in both maternal and child health. This study aimed to explore the CS mother's direct experiences with the immediate and long-term physical effects of CS. Twenty-two participants were selected from the Naya Bazar area, Sylhet City Corporation, which included mothers, fathers, traditional birth attendants and community health care providers. A qualitative research approach was adopted, and in-depth interviews and key informant interviews were conducted to focus on the experiences of caesarean mothers. The interviews were conducted face-to-face and analysed thematically. Various short and long-term physical risks were found following CSs. Four important physical consequence themes emerged from the analysis: Medicinal and breastfeeding difficulties, pain and wound complexity, urinary incontinence, and experiences following a CS. Some of the immediate consequences of the post-caesarean period impacted the mother's ability to care for their child and the lack of mobility. Short and long-term consequences and physical pain impacted them over a long period. Unnecessary CSs can have short and long-term complications that need to be addressed. It is crucial to raise awareness about the potential consequences of CS for both the mother and the child, which would contribute to Sustainable Development Goals 3 (SDGs 3), ensuring well-being amongst the mother and the child.

Keywords: Caesarean Section; Caesarean Mothers; Consequences; Impacts; Complications; Experiences; Sustainable Development Goals 3 (SDGs 3); Semi-Urban Areas; Bangladesh

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Introduction

A caesarean section (CS) is a crucial surgical procedure performed during pregnancy and is considered a secure alternative to natural childbirth. It is the most common significant operation globally and is growing in popularity (Choudhary et al., 2024). Over the past decade, the global rate of caesarean deliveries has doubled to 21%, with a 4% yearly growth. This rate is higher in a few developed countries, and rapid growth has been observed in developing countries (Boerma et al., 2018; Nagy & Papp, 2021; WHO, 2021). Over the past 15 years, CS rates in Latin American and Caribbean countries have increased significantly, averaging 44%, while the figures remain low in sub-Saharan Africa (Boatin et al., 2021). In South Asia, CS delivery has almost doubled compared to the last decade, increasing from 7.2% to 18.1%. Compared to South Asian countries, Bangladesh has a higher CS ratio, with its utilisation of CS growing significantly in the country. In the last two decades, the rate of CS delivery has undergone an almost tenfold increase. CSs increased significantly from 3.5% in 2004 to 45% in 2022 (Khan et al., 2018; Dhakal-Rai et al., 2022; BDHS, 2022). There has been a rapid increase in medically unjustifiable and unnecessary overseas caesareans, although a certain percentage is acceptable for reducing maternal and child mortality.

However, according to the World Health Organization, the acceptable ratio of CSs is 10–15%, and more than 15% are considered medically unjustified (Chien, 2021).[1] Furthermore, the rising number of unnecessary CSs is a matter of concern (Sichitiu et al., 2021). There are many reasons contributing to this trend, and the rise of CS deliveries is often specific to individual countries and cultures. The rise of CS delivery is mainly due to clinical practices, socio-economic conditions, changes in maternal demography such as age, BMI (De Vries et al., 2022), and women's request to avoid labour pain and fear of high risk (Carlos & Jorgelina, 2022), convenience in scheduling, and a perceived reduction in trauma for the baby (WHO, 2021). However, CS has a significant impact on mothers' mental and physical health, which is associated with numerous short and long-term maternal and infant health complications (Sandall et al., 2018; Zbiri et al., 2018). Postpartum complications for caesarean mothers include pain, wound infection, chest and postpartum depression, cystectomy, back pain, pelvic organ prolapses, miscarriage, abdominal distention, and urinary rupture. Long-term consequences include small bowel obstruction, menstrual bleeding, cramps, chronic discomfort, incontinence, sexuality problems, and subfertility. A history of Previous CS experience increases the risk of uterine rupture (Hossain et al., 2022; Yang & Sun, 2017; Sandall et al., 2018). Medicinal side effects significantly impact mothers' and infants' well-being, including higher obesity risk, allergic disease susceptibility, and impact on neonatal gut microbiota and immune development (Mueller et al., 2015; John et al., 2024). CS mothers also undergo lower rates of breastfeeding initiation or delay (Hobbs et al., 2016). Urinary tract infection with prolonged catheter use and surgical site infection are common CS complications (Li & Cui, 2021). Where another common postpartum concern is back pain that may last long after childbirth, back pain may be exacerbated by demographic factors, age and occupation, parity, BMI, and weight gain during pregnancy, but the evidence is inconsistent (Mannion et al., 2015). During the first CS, women are frequently unaware of the complications associated with major abdominal surgery. In contrast, women who have undergone multiple caesareans assess the quality of their recovery based on their pain levels (Kealy et al., 2010; Weckesser et al., 2019). However, past studies focused on medicine-related difficulties of CS mothers, post-

[1] Though it is a global guideline, it has been criticised and controversial because the CS rate can be higher or lower in every individual country depending on other factors such as healthcare infrastructure, socioeconomic factors, cultural practice, and epidemiological context (Betran et al., 2016).

caesarean depression, and specific consequences such as urinary infection, abdominal rupture, and infant health complications, and most of the studies are population-based data, and medical record reviews. Nevertheless, very few studies have been published on the postpartum physical consequences of CS, especially in the context of Bangladesh. Therefore, this study aimed to explore the CS mother's direct experiences with the immediate and long-term physical effects. This study followed the biocultural theoretical approaches to understand the short- and long-term physical experiences of mothers who have caesarean delivery. The biocultural approach explored the individuals' health experiences from the participant's point of view, and this approach opened the underlying mechanism of individuals' behaviour and experiences (Oths, 1999). For this, we also adopted Scheper-Hughes and Lock's (1987) *three-bodies framework* of understanding the sickness of the body, as it views the body as a social and cultural construct, particularly in the context of mothers. As discussed above, we again argue that the caesarean section affects both body and mind immediately after the caesarean delivery and has long-term physical consequences. We discuss the methodological issues in the next section.

Methodology

This study uses a qualitative approach consisting of semi-structured, in-depth interviews with local caesarean mothers to explore the CS mothers' direct experiences with the immediate and long-term physical effects of CS. Data were collected from the Naya Bazar area, located in Sylhet City Corporation, a northeastern region of Bangladesh. This study site was purposively selected because it is located on one side of the City Corporation and is newly included as an additional ward. This area has high internal migration, especially involving low and middle-income groups from different parts of Bangladesh. The nearby private medical hospital and a few private clinics and hospitals prioritise healthcare, and the facilities are easily accessible. The community clinic/city record book and Traditional Birth Attendant (TBA) were used to reach the study participants. The study site was selected due to higher internal migration in this area and has greater diversity than other parts of the city. This study was conducted between April and September 2023.

Sample Size and Sampling Strategies

Twenty-two samples were collected, including ten caesarean mothers, five husbands, three TBA, and four physicians, purposively based on different characteristics, with 15 in-depth interviews conducted. Three interviews were eliminated due to the similarity in findings. Two individuals declined to participate, citing personal and professional obligations as the primary reasons for their unavailability. The interviewers visited a community in the selected study site and then spoke with household family members to identify potential caesarean mothers of various ages. Face-to-face interviews were conducted in the participant's home environment, with the participants being alone during the interview. Most interviews were conducted while their children were asleep. So that mothers can share their experiences at a convenient time and focus on the conversation without destruction. Three caesarean mothers whose CS delivery period was six months and four with delivery periods of six to 12 months. The ages of the selected caesarean mothers ranged from 21 to 40 years since most women give birth between 18 and 35 years old due to social and cultural factors.

Data Collection Techniques and Procedures

Four team members were involved in the conceptualisation to finalise the manuscript writing. Among them, three anthropology graduate students collected field data, rechecked transcripts, and formal analysis, and writing the background, methodology, and manuscript, while the team supervisor was engaged in the conceptualisation, methodology, data analysis, and writing of the manuscript. Among these three graduate students, one was a female who conducted the interviews with the mothers due to maternal concerns, while the other two participated in informal discussions with the husband and other household heads.

Each researcher had training and experience in qualitative research. Before the interview, the interviewer took the time to establish a strong rapport with the participants. During the fieldwork, we were overt about the research and informed participants of the purpose of the study. To achieve the research objectives, the participants were intentionally selected. The interviews were conducted in Bangla, the mother tongue of both the interviewers and interviewees. During fieldwork, the interviewers took notes and recorded the interviews in audio format using their mobile phones. Before data collection, the interviewers took the time to build a good rapport with participants and explain the purpose of the study. In-depth interviews were used to understand better the experiences of individuals who had undergone a CS. Mothers who underwent a CS were interviewed to understand their perspectives on their experiences and physical consequences. Interviews were conducted conveniently using a flexible semi-structured guideline, allowing a comprehensive understanding of the participants' experiences. All interviews were audio recorded and transcribed verbatim. To translate and transcribe interviews, a multi-step process was employed to ensure accuracy and fidelity to participants. Each interview lasted for approximately 48 to 60 minutes.

Data Analysis

We transcribed the audio data verbatim and translated it into English immediately following the interviews. For this, we read the transcription independently several times to familiarise ourselves with the data. An identification code was employed to manage the gathered interview data. An open code list was generated using NVIVO software following the study aims and interview guidelines as a continuous process. We then maintained communication if any new code or issue emerged for discussion, clarification, or potential inclusion in the code list. When completing the code list, all the researchers sat together to make clusters of coded data and finalise the sub-themes and major themes following thematic analysis (Braun & Clarke, 2012). The data from participants and methods were triangulated to increase validity and reliability (Noble & Smith, 2015). After finalising the themes, the study participants validated the data (Heale & Twycross, 2015).

Ethical Considerations

This study received ethical approval from the departmental ethical committee of Anthropology, Shahjalal University of Science and Technology, Sylhet, Bangladesh. We ensured the voluntary status of participants and outlined the benefits before conducting each interview while confirming that their participation would not harm them.

Results

The sociodemographic characteristics of the participants are shown in Table 1. For the In-Depth Interviews (IDIs), the female participants were between 21 and 40 years old, male participants were between 25 and 50 years old, and for Key Informant Interviews (KIIs), physicians and TBAs were 30 to 50 years old. Among the ten female participants, five had undergone CS for the first time, three for the second time, and two for the third time. Seven mothers who experienced their last CS delivery within 0 to 8 months and three mothers from 9 to 18 months were interviewed. The majority (n=6) of the CS choices were elective, whereas (n=4) mothers decided for emergency. Three mothers attended primary education, and the other seven completed secondary education. Most of the women are housewives, two teachers, and one housemaid.

Medicinal Aftereffects

The data revealed that caesarean mothers experienced various difficulties after CS delivery—particularly concerning the effects of over-the-counter medications and abdominal pain limiting their mobility. Most caesarean mothers shared similar problems, such as severe weakness and frequently falling asleep due to the anaesthesia received during the CS.

Table 1: Characteristics of the Study Participants			
Characteristics	**Qualitative Sample** (n = 22)	**Method**	
		IDIs	**KIIs**
Gender n (%):			
Female	10	10	
Male	5	5	
Physician	4		**4**
TBA	3		**3**
Age in years			
Female range	21–40	**KIIs range**	**30–50**
Male range	25–50		
Education:			
Primary education	3		
Completed secondary	7		
Occupation:			
Housewife	7		
Teacher	2		
Housemaid	1		
Number of children:			
Single	2		
Double	5		
Triple	3		
Last CS delivery:			
0 to 8 months	7		
9 to 18 months	3		
Number of CS deliveries:			
Single			
Double	5		
Triple	3		
	2		
Types of CS			
Elective	6		
Emergency	4		
Source: Primary Research			

One mother stated in the IDI:

> After having a caesarean section, I did not feel normal; I was sleepy all the time for approximately five days and unable to speak (New mother, aged 22).Similarly, another caesarean mother said:
> I could not see properly because my mind was spinning. This continued until I returned home, when the doctor instructed me to rest more.

Caesarean mothers also face difficulties remembering things typically after C-section delivery compared to their pre-C-section time. They may temporarily forget many things, but they typically return to normal once the side effects of the anaesthesia wear off.

During KIIs, one Community physician mentioned that:

> Due to anaesthesia caesarean, mothers forget many things. Mothers often struggle with cognitive dysfunction in memory and recalling information for several days.

Additionally, most CS women undergo a range of initial discomforts, such as abdominal incision pain, breastfeeding challenges, and urinary troubles. These issues often impede their mobility and ability to perform regular daily tasks.

Breastfeeding Difficulties

Breastfeeding provides long-term health benefits for both mother and infant. Our data reveal that most caesarean mothers had difficulty with breastfeeding due to medicinal effects, lower milk supply, first-time baby delivery, emergency CS, antepartum stress, physical discomfort, and physical weakness. Mothers who delivered their first baby by CS mostly received their breast milk supply after a few days, while others did not receive milk because of the antibiotic effect on their bodies. They felt weak and slept most of the time.

A caesarean mother stated:

> I experienced three days of unconsciousness due to the anaesthesia. I struggled with breastfeeding and had trouble with sitting and sleeping. My elder sister breastfed my baby for three days, and after that, I was able to breastfeed my baby.

During the interviews, the participants mentioned that they had to use a pump to get enough milk for their newborn babies. First-time caesarean mothers needed this assistance, as recommended by their healthcare provider, although they found it painful.

A caesarean mother shared:

> After the C-section, the baby was not getting milk. There was no natural milk supply, so the doctor used a pump to increase milk flow after four days.

Most women shared that they had to move their bodies back and forth to breastfeed. So, it was difficult for them to put the baby on their laps, and they experienced discomfort during breastfeeding. After the CS, the breast contains impurities and needs to be cleaned. In some cases, the baby sleeps a lot after birth and has weak milk-sucking ability. Sometimes, they felt irritated and in pain when the baby started suckling.

One respondent expressed her difficulties:

> My family members tried to breastfeed the baby because I could not hold it or speak at that time. It was taking time for the milk to flow. The baby also could not suckle on its own. The breast was dirty. It needed to be cleaned. I had many problems like this.

Almost every woman reported difficulties with breastfeeding their babies. CSs had a significant impact on breastfeeding initiation. However, women who delivered by emergency CS reported more breastfeeding difficulties than those who went through a planned CS.

Urinary Incontinence

Incontinence in women following a CS can vary from moderate to severe. The results of our study indicated that women who had CSs experienced urine incontinence. During a CS, a tube is pushed into the urinary tract; it must remain for the following four days. Most women experience pain and infection in the urinary tract. After removing the tube, there is often a burning sensation and infection.

One mother stated:

> In my urinary tract, there was much pain and burning caused by the tube. It created an infection that lasted for many days.

Almost all caesarean mothers faced problems like sleeping and being uncomfortable when sitting or moving. They had to continue taking medicine for urinary pain relief. In contrast, mothers experiencing normal delivery shared that doctors pushed medicine into their vaginas when they did not have labour pains but suffered furthermore and needed to give birth by CS.

A caesarean mother expressed:

> Doctors injected medicine into my vagina to intensify labour. However, a tube was inserted into my urinary tract during my

> C-section. I had trouble with the tube and medicine many days after the C-section.

The caesarean delivery tube is used for blood, water, and urinary flow. Urinary pain made it difficult for the mothers to sleep, move, or perform daily tasks. Most caesarean mothers had problems with urine flow, urination, and infections after they delivered their babies via CS.

Pain and Wound Complexity

Abdominal Wound Complexity

Women undergoing CSs encountered various challenges stemming from abdominal incisions, suffering for an extended period of time. Based on the analysis of primary data, it was evident that abdominal incisions significantly impacted the mobility, infant care, self-care, and everyday activities of women who had undergone caesarean deliveries. Several immediate consequences of abdominal incisions following caesarean delivery limited their mobility. They could not even rest on the opposite side of the bed, preventing the infant from nursing properly.

One caesarean mother shared:

> At first, I had much pain in my stomach, which made it hard to move from one side of the bed to the other. I could not get my baby to drink milk because of this.

Another caesarean mother said:

> I used to hurt all the time where the stitches were. The fear of pain stopped me from walking. I have not moved much for about one and a half months.

Most women could not perform their duties for an extended period. They performed their duties or cared for the infant while supine or seated carefully in the chair. Additionally, they were unable to carry heavy objects because of their abdominal incisions.

During an IDI, one mother shared:

> Even after a few days, I was unable to move due to the pain, but after that, I could perform a variety of tasks, even in a chair and lying on the bed.

The presence of long-lasting scars resulting from abdominal cuts might psychologically impact individuals.

One mother mentioned:

> The large stitches caused scarring, which looks awkward, and the scars remain long.

Back Pain

A significant proportion of women undergoing a caesarean delivery experienced considerable discomfort due to back pain. The postoperative period following a CS often commences a few days after the surgical procedure and extends over a prolonged duration. The prevalence of pain tends to rise significantly when individuals engage in strenuous physical labour, maintain prolonged periods of sedentary behaviour, or adopt a supine or side sleeping position.

During an IDI, one mother said:

> After giving birth, I felt normal for a month. Later, the pain began to grow slowly. I could not sleep well at night due to the pain and spent several days reclining on a pillow.

Another caesarean mother shared:

> I often had mild pain at the site where the anaesthesia was administered and consequently could not lie down in a position.

The caesarean mothers also faced various problems doing their work at home. During the IDI, one caesarean mother shared her situation.

She said:

> The place where the anaesthesia was given used to hurt a lot. I could not work for a long time because of this. Also, it was hard to sit on a regular commode.

Experience Following CS

Fear of Death

Each mother who underwent a CS delivery had an unforgettable experience. During this period, mothers encountered numerous difficulties as

part of the CS process. Consequently, most of the women were afraid of having a CS.

One mother expressed her feelings:

> I was scared and cried during the operation thinking about the abdominal cut and thought I would not survive.

During IDI, another mother shared:

> I was afraid about the baby's delivery and wondered whether I would be able to survive at all.

Immediate Reaction

From our data, caesarean mothers experienced relief from labour pain shortly after the anaesthesia was administered for the CS. Some mothers knew the surgical team's activities during the CS, such as feeling pressure and movement, even though the anesthesia prevented them from feeling any pain.

One mother shared her experience:

> First, my clothes were changed, and then I lay on the bed while they injected me. The lower part of my body was completely paralysed, and I could not move. I did not know what happened later.

After regaining consciousness, mothers mentioned they felt pain with movement. However, they also reported experiencing a sensation of shininess in the eyes. One mother explained her feelings:

> I felt a little pain in the place where I was cut, and it hurt more afterwards.

Most caesarean mothers had similar experiences regarding maternal emotions after a CS. After the CS, all mothers noticed significant changes in their bodies. According to our data, everyone mentioned that after delivery, their stomachs had grown, and they experienced an accumulation of fat in the abdominal area. This weight gain and stomach expansion left them feeling heavy and uncomfortable.

One mother explained:

> I realised that my stomach had increased. After having a baby, the stomach does not decrease. Fat accumulates, and the stomach becomes very heavy.

Distress of Infant Separation

When a woman finally lays eyes on her newborn, the difficulties she endured during pregnancy seem like a distant memory. However, mothers experiencing caesareans often have a different experience. They are unconscious or slumbering during the post-delivery period due to the effects of surgery and anaesthesia and cannot move around for a few days. For these mothers, the experience of seeing their newborn immediately after childbirth is blighted.

During the IDI, a caesarean mother shared her experience of not seeing her baby immediately after birth.

She shared:

> During the surgery, I was given anaesthesia. Because of this, I could not say anything after the baby's delivery. They told me I had a baby boy, but I could not speak.

Another caesarean mother said:

> I was suffering a lot, especially about not seeing the baby, and my condition was such that I could not even get out of bed.

Older Physical Outlook

Mothers who have had a caesarean section experience physical changes such as appearing to age more quickly, changes in facial appearance, and physical weakness. These kinds of changes appeared soon after delivery.

A community physician stated:

> Women who deliver by c-section become physically weak. They cannot do any heavy work due to abdominal cuts, and even physical breakdowns stay for a long time.

Another physician said:

> C-sections create facial appearance old. I noticed they become quickly older than those women who give vaginal birth.

Physical outlook makes them more vulnerable both physically and mentally. In the meantime, the effect of C-section on a caesarean mother creates barriers to comfortable movement.

Table 2: Relevant Quotations from Study Participants Relating to the Physical Consequences of Caesarean Mothers

Themes	Sub-themes	Comments from Study Respondents
Medicinal and Breastfeeding Difficulties	**Medicinal Aftereffects**	▪ **After the caesarean, I was unconscious for about three days. An injection, like anaesthesia, was given to me. It affected my body so much that I was unconscious for about three days.** ▪ **After the anaesthesia had been administered, my body became paralysed, and I experienced a severe seizure, which had never happened before. Despite regaining consciousness, I was drenched in sweat and unable to perform any activities.** ▪ **After the CS, I experienced a headache and tingling sensation in my body, which prevented me from working or moving properly.** ▪ **Because of the anaesthesia used during the surgery, mothers tend to be very weak for some time afterwards. Consequently, the body is weak initially and often feels drowsy (KII).**
	Breastfeeding Difficulties	▪ **At first, I could not breastfeed; moving from side to side was tough. There was much pain in the incision area. It would have been helpful if someone had assisted in feeding him with milk. I could not easily understand. After two days, I was able to move a little.** ▪ **No, he did not get milk at first. The baby does not get any milk for four days. At the time of release, the doctor performs a checkup and says the baby will get milk, but the mother must use a pump.** ▪ **My sister was there; the baby was always with her. She would try to feed the baby, but I could not say or do anything. I just had to look on.** ▪ **The doctor said to feed the baby after an hour, but the milk did not come, and I was not in a good position to breastfeed the baby at that time.** ▪ **For the first three or four days, my baby did not get any breast milk. I was not in good health; I could not sit or move. There was always a feeling of sleepiness, mostly caused by the anaesthesia.** ▪ **After a caesarean, breastfeeding is difficult in the beginning but gradually gets better. In the beginning, it happened, but not getting much milk now is much less exceptional (Community Health Provider).**

Pain and wound complexity	**Back Pain**	▪ **At first, it was fine; there was no pain. Later, the pain started slowly, and I could not sleep properly because of it.** ▪ **Sometimes, the neck and back hurt so much. The pain in the neck was excruciating, while there was none at the site of the anaesthesia. The pain in the back was unbearable.** ▪ **When I woke up in the morning, I felt like my whole body was jammed due to back pain. I am suffering from back pain.** ▪ **She suffered a lot due to back pain and still has occasional back pain problems (Husband-1).** ▪ **Our baby is almost a year and a half. Even so, she still gets a lot of back pain from time to time, although the first three months were very painful (Husband-3).** ▪ **Back pain is most common. Everyone I spoke to experienced back discomfort, and it was rare to find anyone without back pain (Community Health Provider).**
	Abdominal Wound Complexity	▪ **My stitches tingled constantly. I could not walk properly for approximately six months because of the pain.** ▪ **After having a baby, only the stitching area hurt for a long time.** ▪ **There was itching at the suture site. It was a bit itchy and burning at times but would improve with massaging.** ▪ **After the sutures were removed, there was an infection at the closure site. It slowly got better after taking medicine. Of course, it still hurts when sitting for a long time and travelling in a shaking car.** ▪ **After the caesarean, there were many problems in the abdominal incision area, including itching and sometimes pain. Mothers with diabetes, especially, take a long time for the wound to dry out and are subject to infections (TBA).**
Urinary Incontinence		▪ **During the caesarean, it was very painful to use the tube to urinate; even after coming home, there was a lot of pain and irritation, and the area was very swollen. The place was infected, which caused much suffering.** ▪ **After removing the urethral tube, there were many difficulties. There was a severe burning sensation during urination, and I had to take medicine for about two months.** ▪ **There was a burning sensation at the stitching site and a little pain sometimes.**

Experience following CS	**Fear of Death** **Distress of Infant Separation**	▪ **I was afraid about the caesarean delivery, what could happen to me, and whether I would survive at all. This fear led to a heart attack on the 16th, even though my delivery date was set for the 23rd.** ▪ **At the time, I was feeling a little stressed, and because of this, the happiness that came from seeing the baby was gone (Husband-3).**
	Other Experiences	▪ **After the caesarean section, there was itching and pain in my stitches.** ▪ **After the caesarean, my periods were much higher than usual.** ▪ **Due to the caesarean section, the blood flow during the post-caesarean period is** ▪ **often very high (TBA).** ▪ **After the caesarean, my wife had back pain as well as a lot of neck pain, which meant she could not sleep easily at night (Husband).**

Discussion

This study aimed to explore the direct experiences of mothers following CS regarding both the immediate and long-term physical effects. The findings have been interpreted through Oths's (1999) 'Biocultural theoretical approach' and Scheper-Hughes and Lock's (1987) 'Three Bodies Framework' to understand women's lived health experiences and the complex interplay between the individual, culture, and the body. After caesarean section deliveries, biocultural factors combine with postoperative complications. Immediate physical health experience a mother faces due to medicinal effects leads to experience of breastfeeding difficulties, back pain, and burning sensation at the site of the abdominal incision, while urinary complications were similar to those revealed in previous studies (Kealy et al., 2010; Mannion et al., 2015; Weckesser et al., 2019). Various drugs administered during caesarean delivery can impact mothers differently, influencing their physical and psychological health. To understand this, the body framework provides insights into individual health experiences, the decision to undergo a cesarean section, and cultural attitudes toward cesarean sections. During CS delivery, mothers' psychological health is also affected by immediate fears of death and concerns about not being able to see their infants. The use of antibiotics and anaesthesia during caesarean delivery can have an adverse effect on mothers' physical health, with symptoms such as weakness and headaches persisting for up to 14 days after delivery (Goldszmidt et al., 2005; Grant et al., 1991). All those consequences are experienced as a form of sickness of the body, mentioned as a holistic form of illness by Scheper-Hughes and Lock. Our data showed that inserting a catheter with medication into the urinary tract during a CS and keeping it in for four days caused the mother pain and irritation in the vaginal section, further distress, incontinence, and sleeplessness. Similarly, urinary incontinence was highest among women undergoing delivery by emergency CS (Leth et al., 2009; Mannion et al., 2015; Gundersen et al., 2018). Most caesarean mothers of our study experienced urinary infections following a CS since the presence of a catheter in the urinary tract for over three days increases the risk of urinary tract infections, with longer catheterisation increasing the risk of surgical site infection (Li & Cui, 2021).

According to the results of this study, women who delivered via emergency CS reported having had more breastfeeding difficulties following the birth than those undergoing a planned CS. These findings resonate with the previous findings (Hobbs et al., 2016; UNICEF, 2018; Prado et al., 2018). According to physicians, the effects of

antibiotics and the pain of anaesthesia on their bodies hampered baby nursing and breastfeeding, representing a new dimension of findings among caesarean mothers. Our findings reveal that caesarean mothers felt physically weak, experienced pain, and were unable to move comfortably. This hampered caregiving activities, leading to the inability to lift the baby onto their laps for breastfeeding (Weckesser et al., 2019). The data revealed that participants were required to use a breast pump to provide enough breast milk for newborns, placing a financial burden on the family in addition to the expenses involved with having the caesarean. Delayed breastfeeding initiation after a CS birth is linked with maternal and infant separation, poor suckling skills, lower newborn responsiveness, and insufficient milk supply. Our findings align with the fact that many mothers were "unprepared for the intensity and duration of postoperative pain" that accompanied their physical recovery (Weckesser et al., 2019, p.7).

After a CS, women in our study frequently experienced unforeseen and potentially life-threatening wound complications (Kealy et al., 2010). Our analysis showed that abdominal incisions significantly impacted women's mobility, infant care, self-care, and everyday activities. Other studies have shown that wound complications such as infection, hematoma, and disruption may be a source of anxiety and can negatively impact the quality of life and mother-child relationships during the postpartum period (Carbonnel et al., 2021). The fear of large stitches, itching around the stitches, pain, and physical discomfort with movement meant that caesarean mothers were unable to carry heavy objects. In addition, the relationship between the type of skin incision and skin closure was associated with wound complications (Conner et al., 2014). Contrary to the statements provided by the participants in this research, other studies found that obesity was not substantially associated with traditional risk factors involving wound complications in women (Carbonnel et al., 2021). Our study identified women who did not receive better medical treatment or care during CS and were not concerned about continuing medicine and postpartum treatment, with many facing wound complications and suffering in the long term. Furthermore, wound complications remain the major risk factor in unplanned CS (Temming et al., 2017).

There are numerous reasons for caesarean mothers being at risk, including commercial considerations on the part of the hospital administration and a lack of awareness, the accessibility of modern medical treatment, and inappropriate knowledge of caesarean among expectant mothers and their families. First-time caesarean mothers and their families are primarily unaware of the short and long-term complications involved, with most of them paying attention to the postpartum complications potentially arising from physical complications after caesarean delivery. Consequently, women take a long time to recover from the physical problems of having unexpected experiences after their CS. If mothers, their families, and service providers avoid unnecessary CS deliveries, maternal and child health will improve, contributing to goal number 3 of the Sustainable Development Goals (SDGs). The strengths of this study include the perception and in-depth comprehension of caesarean mothers, with qualitative research techniques and content analysis employed to ensure the inclusion of rich data. Despite its strengths, this study's findings are limited by being conducted in a semi-urban area with a greater diversity of migrant people. Future studies should focus on participants with more diverse socioeconomic characteristics to better understand the complications involved in caesarean delivery.

Conclusion

CS plays a crucial role in reducing maternal and infant mortality in cases of complex childbirth. Despite its positive aspects, there are also immediate and long-term negative consequences such as medicinal effects, breastfeeding difficulties, back pain, abdominal wound complexity, urinary incontinence, fear of death, and distress of infant separation. However, in developing countries like Bangladesh, the increasing rate of caesarean delivery is attributed to the commercialisation of

health services, lack of awareness, and the reluctance to negotiate with service providers regarding the complexities of childbirth. A health campaign is necessary to increase awareness associated with short and long-term health complications on mothers' and child health; it should also be considered in policies aimed at controlling and reducing unnecessary caesarean sections so that society can get better health outcomes for mothers and newborn babies and thereby contribute to SDGs3.

References

Boerma, T., Ronsmans, C., Melesse, D. Y., Barros, A. J. D., Barros, F. C., Juan, L., Moller, A. B., Say, L., Hosseinpoor, A. R., Yi, M., de Lyra Rabello Neto, D., & Temmerman, M. (2018). Global Epidemiology of Use of and Disparities in Caesarean Sections. *The Lancet*. 392(10155), 1341–1348. https://doi.org/10.1016/S0140-6736(18)31928-7

Boatin, A. A., Ngonzi, J., Ganyaglo, G., Mbaye, M., Wylie, B. J., & Diouf, K. (2021). Caesarean Delivery in Low- and Middle-income Countries: A Review of Quality-of-care Metrics and Targets for Improvement. *Seminars in Fetal & Neonatal Medicine*, 26(1), 101199. https://doi.org/10.1016/j.siny.2021.101199

Bangladesh Demographic and Health Survey. (2022). *Bangladesh DHS 2022 - Key Indicators Report. The DHS Program*. https://www.dhsprogram.com/pubs/pdf/PR148/PR148.pdf

Betran, A. P., Torloni, M. R., Zhang, J. J., Gülmezoglu, A. M., & WHO Working Group on Caesarean Section (2016). WHO Statement on Caesarean Section Rates. *BJOG: An International Journal of Obstetrics and Gynaecology*. 123(5), 667–670. https://doi.org/10.1111/1471-0528.13526

Braun, V., & Clarke, V. (2012). Thematic Analysis. APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological. *American Psychological Association*. 2(2), 57–71. https://doi.org/10.1037/13620-004"

Choudhary, D., Saxena, N., & Gupta, V. (2024). Trend Analysis of Caesarean Sections Using Modified Robson's Classification in a Teaching Institution in Uttarakhand. *Journal of family Medicine and Primary Care*. 13(6), 2278–2282. https://doi.org/10.4103/jfmpc.jfmpc_1288_23

Chien P. (2021). Global Rising Rates of Caesarean Sections. BJOG: *An International Journal of Obstetrics and Gynaecology*. 128(5), 781–782. https://doi.org/10.1111/1471-0528.16666

Carbonnel, M., Brot, D., Benedetti, C., Kennel, T., Murtada, R., Revaux, A., & Ayoubi, J. M. (2021). Risk Factors for Wound Complications After Caesarean Section. *Journal of Gynecology Obstetrics and Human Reproduction.* 50(7), 101987. https://doi.org/10.1016/j.jogoh.2020.101987

Conner, S. N., Verticchio, J. C., Tuuli, M. G., Odibo, A. O., Macones, G. A., & Cahill, A. G. (2014). Maternal Obesity and Risk of Postcaesarean Wound Complications. *American Journal of Perinatology*. 31(4), 299–304. https://doi.org/10.1055/s-0033-1348402

Carlos, T., & Jorgelina, A. (2022). Increase in the Caesarean Rate: An Issue of Global Priority. *International Journal of Family and Community Medicine*. 6(5), 193-194. https://medcraveonline.com/IJFCM/IJFCM-06-00288.pdf

Dhakal-Rai, S., van Teijlingen, E., Regmi, P. R., Wood, J., Dangal, G., & Dhakal, K. B. (2022). Factors Contributing to Rising Caesarean Section Rates in South Asian Countries: A Systematic Review. *Asian Journal of Medical Sciences.* 13(2), 143–174. https://doi.org/10.3126/ajms.v13i2.40904

De Vries, B. S., Morton, R., Burton, A. E., Kumar, P., Hyett, J. A., Phipps, H., & McGeechan, K. (2022). Attributable Factors for the Rising Caesarean Delivery Rate Over 3 Decades: An Observational Cohort Study. *American Journal of Obstetrics & Gynecology MFM*. *4*(2), 100555. https://doi.org/10.1016/j.ajogmf.2021.100555

Gundersen, T. D., Krebs, L., Loekkegaard, E. C. L., Rasmussen, S. C., Glavind, J., & Clausen, T. D.

(2018). Postpartum Urinary Tract Infection by Mode of Delivery: A Danish Nationwide Cohort Study. *BMJ Open*. 8(3), e018479. https://doi.org/10.1136/bmjopen-2017-018479

Goldszmidt, E., Kern, R., Chaput, A., & Macarthur, A. (2005). The Incidence and Etiology of Postpartum Headaches: A Prospective Cohort Study. *Canadian Journal of Anaesthesia*. 52(9), 971–977. https://doi.org/10.1007/BF03022061

Grant, R., Condon, B., Hart, I., & Teasdale, G. M. (1991). Changes in Intracranial CSF Volume After Lumbar Puncture and their Relationship to Post-LP Headache. *Journal of Neurology, Neurosurgery, and Psychiatry*. 54(5), 440–442. https://doi.org/10.1136/jnnp.54.5.440

Hossain, M. A., Jahan, I., Haque, M. M., Sarwar, N., Yeasmin, N., & Islam, D. (2022). Rising Trends of Caesarean Section in Bangladesh: Associated Factors and Long-Term Complications on Health of Mother and Children. *Journal of Maternal and Child Health*. 7(5), 532–542. https://doi.org/10.26911/thejmch.2022.07.05.04

Hobbs, A. J., Mannion, C. A., McDonald, S. W., Brockway, M., & Tough, S. C. (2016). The Impact of Caesarean Section on Breastfeeding Initiation, Duration and Difficulties in the First Four Months Postpartum. *BMC Pregnancy and Childbirth*. 16, 90. https://doi.org/10.1186/s12884-016-0876-1

Heale, R., & Twycross, A. (2015). Validity and Reliability in Quantitative Studies. *Evidence-Based Nursing*. 18(3), 66–67. https://doi.org/10.1136/eb-2015-102129

John, W., Moore., Séverine, Navarro., K., J., McCarthy., Ridwan, Bin, Rashid., Simon, Phipps., Akwasi, Amoako., L., Callaway., Victoria, Eley. (2024). State of the Art: Intrapartum Antibiotics in Caesarean Section—The Infant Microbiota and Allergic Diseases. *Obstetric Anesthesia Digest*. 7. https://doi.org/10.1111/aogs.14577

Kealy, M. A., Small, R. E., & Liamputtong, P. (2010). Recovery After Caesarean Birth: A Qualitative Study of Women's Accounts in Victoria, Australia. *BMC Pregnancy and Childbirth*. 10(47). https://doi.org/10.1186/1471-2393-10-47

Khan, M. N., Islam, M. M., Shariff, A. A., Alam, M. M., & Rahman, M. M. (2017). Socio-Demographic Predictors and Average Annual Rates of Caesarean Section in Bangladesh between 2004 and 2014. *Plos One*. 12(5). https://doi.org/10.1371/journal.pone.0177579

Leth, R. A., Møller, J. K., Thomsen, R. W., Uldbjerg, N., & Nørgaard, M. (2009). Risk Of Selected Postpartum Infections After Caesarean Section Compared With Vaginal Birth: A Five-Year Cohort Study Of 32,468 Women. *Acta Obstetricia et Gynecologica Scandinavica*. 88(9), 976–983. https://doi.org/10.1080/00016340903147405

Li, L., & Cui, H. (2021). The Risk Factors and Care Measures of Surgical Site Infection After Caesarean Section in China: A Retrospective Analysis. *BMC Surgery*. 21(1), 248. https://doi.org/10.1186/s12893-021-01154-x

Mannion, C. A., Vinturache, A. E., McDonald, S. W., & Tough, S. C. (2015). The Influence of Back Pain and Urinary Incontinence on Daily Tasks of Mothers at 12 Months Postpartum. *Plos One*. 10(6). https://doi.org/10.1371/journal.pone.0129615

Mueller, N. T., Whyatt, R., Hoepner, L., Oberfield, S., Dominguez-Bello, M. G., Widen, E. M., ... & Rundle, A. (2015). Prenatal Exposure to Antibiotics, Caesarean Section and Risk of Childhood Obesity. *International Journal of Obesity*. *39*(4), 665-670. https://doi.org/10.1038/ijo.2014.180

Nagy, S., & Papp, Z. (2020). Global Approach of the Caesarean Section Rates. *Journal of Perinatal Medicine*. 49(1), 1–4. https://doi.org/10.1515/jpm-2020-0463

Noble, H., & Smith, J. (2015). Issues of Validity and Reliability in Qualitative Research. *Evidence-Based Nursing*. 18(2), 34–35. https://doi.org/10.1136/eb-2015-102054

Oths, K.S. (1999). Debilidad: A Biocultural Assessment of an Embodied Andean Illness.

Medical Anthropology Quarterly. 13, 286-315. https://doi.org/10.1525/maq.1999.13.3.286

Prado, D. S., Mendes, R. B., Gurgel, R. Q., Barreto, I. D. C., Cipolotti, R., & Gurgel, R. Q. (2018). The Influence of Mode of Delivery on Neonatal and Maternal Short and Long-Term Outcomes. *Revista de Saude Publica*, 52, 95. https://doi.org/10.11606/S1518-8787.2018052000742

Sandall, J., Tribe, R. M., Avery, L., Mola, G., Visser, G. H., Homer, C. S., Gibbons, D., Kelly, N. M., Kennedy, H. P., Kidanto, H., Taylor, P., & Temmerman, M. (2018). Short-Term and Long-Term Effects of Caesarean Section on the Health of Women and Children. *The Lancet*, 392(10155), 1349–1357. https://doi.org/10.1016/S0140-6736(18)31930-5

Sichitiu, J., Baud, D., Vial, Y., & Desseauve, D. (2021). Ten Labor Ward Commandments: Reducing the Caesarean Section Rate by One-Third. *The Journal of Maternal-Fetal & Neonatal Medicine*. *34*(8), 1318-1319. https://doi.org/10.1080/14767058.2019.1633302

Scheper-Hughes, Nancy, & Margaret M. Lock (1987). The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology. *Medical Anthropology Quarterly*. 1, 6–41. https://doi.org/10.1525/maq.1987.1.1.02a00020

Temming, L. A., Raghuraman, N., Carter, E. B., Stout, M. J., Rampersad, R. M., Macones, G. A., Cahill, A. G., & Tuuli, M. G. (2017). Impact Of Evidence-Based Interventions on Wound Complications After Caesarean Delivery. *American Journal of Obstetrics and Gynecology*. 217(4), 449.e1–449.e9. https://doi.org/10.1016/j.ajog.2017.05.070

UNICEF (2018). *Capture the Moment: Early Initiation of Breastfeeding*. https://data.unicef.org/resources/capture-the-moment/

Weckesser, A., Farmer, N., Dam, R., Wilson, A., Morton, V. H., & Morris, R. K. (2019). Women's Perspectives on Caesarean Section Recovery, Infection and the PREPS Trial: A qualitative Pilot Study. *BMC Pregnancy and Childbirth*. 19(1), 245. https://doi.org/10.1186/s12884-019-2402-8

Weiser, T. G., Haynes, A. B., Molina, G., Lipsitz, S. R., Esquivel, M. M., Uribe-Leitz, T., Fu, R., Azad, T., Chao, T. E., Berry, W. R., & Gawande, A. A. (2015). Estimate of the Global Volume of Surgery in 2012: An Assessment Supporting Improved Health Outcomes. *The Lancet*. 385(2), S11. https://doi.org/10.1016/S0140-6736(15)60806-6

WHO (2021). *Caesarean Section Rates Continue to Rise, Amid Growing Inequalities in Access*. https://www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access

Yang, X. J., & Sun, S. S. (2017). Comparison of Maternal and Fetal Complications in Elective and Emergency Caesarean Section: A Systematic Review and Meta-Analysis. *Archives of Gynecology and Obstetrics*. 296(3), 503–512. https://doi.org/10.1007/s00404-017-4445-2

Zbiri, S., Rozenberg, P., Goffinet, F., & Milcent, C. (2018). Caesarean Delivery Rate and Staffing Levels of the Maternity Unit. *Plos One*. 13(11). https://doi.org/10.1371/journal.pone.0207379

Ethical Approval

The departmental ethical committee of Anthropology, Shahjalal University of Science and Technology, Sylhet, Bangladesh, approved this study. We ensured the voluntary status of participants and outlined the benefits before conducting each interview while confirming that their participation would not harm them.

Conflict of Interest/Competing Interest

The authors declare that no competing interest is associated with this publication.

Author Contribution Statement

Abir Hossin contributed towards writing the introduction, conceptualisation, methodology, formatting tables and charts, data analysis, and findings.

Chayan Chakma contributed to interview transcripts, data collection, finding, and editing.

Sabiha Noor contributed towards data collection, introduction, literature review, data analysis, transcript, and conclusion.

Dr. Md Shahgahan Miah contributed to conceptualisation, methodology, and writing, especially by reviewing and editing the manuscript and critically revising the study.

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Availability of Data and Materials

We declare that the collected data are original, that the authors collected all the data themselves, and that they are primarily available within this study.

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Abir Hossin's research focuses on maternal and child health, urban and community health, and reproductive health. Although he has not published any of his works, he is currently engaged in several promising projects, including community health issues, reproductive health, and climate impact on health.

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