



Article

Perception and Attitude of Expectant Mothers Regarding Cesarean Section at a Tertiary Care Hospital of Peshawar

Imran Waheed Ahmad¹, Hashim Sattar², Javid Hussain³, Husna Bahar⁴, Jamila Bibi⁵, Hira⁶, Muhammad Anwar⁷

1 Institute of Nursing Sciences-KMU, Peshawar, Pakistan

2 THQ Hospital Sadda, Pakistan

3 THQ Hospital Ali Zia Lower Kurram, Pakistan

4 Peshawar Institute of Cardiology, Peshawar, Pakistan

5 LRH Peshawar, Pakistan

6 Kuwait Teaching Hospital, Peshawar, Pakistan

7 Medtec College of Nursing & AHS Wari Dir Upper, Pakistan

Correspondence

imran.ins@kmu.edu.pk

Cite this Article

Received 2025-05-18
Revised 2025-06-21
Accepted 2025-06-27
Published 2025-07-05

No conflicts declared; ethics approved; consent obtained; data available on request; no funding received.

Authors' Contributions

Concept and design: Concept: IW;
Design: HS; Data Collection: JH;
Analysis: HB; Drafting: JB

ABSTRACT

Background: Cesarean section (CS) is a common obstetric intervention worldwide, with rising rates prompting ongoing debate about its appropriateness and implications for maternal and neonatal health. Understanding how expectant mothers perceive and approach CS is crucial for developing effective, patient-centered maternity care strategies, particularly in low- and middle-income settings such as Peshawar, Pakistan. **Objective:** To explore the perceptions, attitudes, and decision-making processes of expectant mothers regarding cesarean section at a tertiary care hospital in Peshawar. **Methods:** A qualitative descriptive study was conducted between May and October 2024, enrolling 20 pregnant or postpartum women aged 18–40 years through purposive sampling. Data were collected via in-depth, semi-structured interviews held in a private hospital setting. Interviews were audio-recorded, transcribed verbatim, and thematically analyzed using Braun and Clarke's framework to identify key themes and subcategories. **Results:** Analysis revealed four central themes: limited knowledge and prevalent misconceptions about CS, emotional distress and powerlessness during decision-making, substantial influence of healthcare providers and family members on delivery choices, and dominant reasons for selecting CS such as fear of labor pain and prior negative birth experiences. Many participants reported inadequate antenatal education and insufficient counseling by medical staff, leading to confusion and heightened anxiety about delivery options. **Conclusion:** Significant gaps in knowledge and communication regarding cesarean section among expectant mothers in Peshawar impact their attitudes, increase emotional distress, and hinder informed decision-making. Enhanced antenatal education, culturally sensitive counseling, and structured shared decision-making processes are recommended to empower women and improve maternal health outcomes in similar settings.

Keywords: Cesarean Section, Maternal Attitudes, Perception, Shared Decision-Making, Qualitative Study, Peshawar

INTRODUCTION

Cesarean section (CS), commonly referred to as a C-section, is a surgical procedure performed to deliver a baby through incisions made in the mother's abdomen and uterus. While sometimes viewed as an elective option, it is primarily indicated when the health of the mother or baby is at serious risk should a vaginal delivery be attempted, or in cases where specific medical conditions make natural birth unsafe. C-sections may be scheduled in advance when known complications suggest that vaginal delivery could be hazardous, but they are also performed emergently if unforeseen complications arise during labor (1).

Several well-established medical reasons necessitate a cesarean delivery. These include fetal distress, which may be detected through abnormal heart rate patterns suggesting the baby is struggling during labor; breech presentations, where the baby's feet or buttocks are positioned to come first instead of the head; and multiple pregnancies, particularly when fetal positions complicate a

safe vaginal birth. Additional causes include placenta previa, where the placenta covers the cervix, or placental abruption, where the placenta detaches from the uterine wall prematurely. Women who have previously delivered via cesarean might also consider repeat surgery, although some may attempt a vaginal birth after cesarean (VBAC) if clinically safe. Other maternal medical conditions, such as diabetes, hypertension, or active genital herpes, can further elevate the risks associated with vaginal birth, making CS the safer alternative for both mother and child (2).

Typically, a cesarean section is carried out under regional anesthesia, such as an epidural or spinal block, which numbs the lower half of the mother's body while allowing her to remain conscious. In certain circumstances, general anesthesia may be employed, rendering the patient unconscious. The procedure involves an incision in the lower abdomen, just above the pubic hairline, followed by an incision in the uterus to deliver the baby. After the baby and placenta are delivered, the surgeon sutures the incisions to complete the operation (3).

Despite its clear medical indications, the rising global rates of cesarean sections have provoked significant concern. While the expansion of safe access to CS is essential in contexts where it remains underutilized, there is growing recognition that many cesareans are performed without sufficient medical justification. Evidence does not demonstrate population-level health benefits when CS is conducted unnecessarily, and, like all surgeries, it carries potential short- and long-term risks. Excessive reliance on CS can misallocate healthcare resources away from women who truly need the procedure. Although debates continue over defining an optimal CS rate, no global consensus has emerged, and the concept of a universal standard remains controversial. Nevertheless, it is widely agreed that in many countries, current CS rates cannot be justified purely on medical grounds. Historically, efforts have focused on reducing underuse of CS to lower maternal and perinatal morbidity and mortality. However, in recent years, the problem of overuse has become increasingly prominent, with underuse and overuse coexisting in many health systems. This dual challenge necessitates careful resource allocation to ensure that CS is reserved for cases with clear medical necessity (4).

Decisions to undergo a cesarean section are influenced not only by clinical indications but also by psychological factors, maternal preferences, and broader social determinants. In contexts where CS rates exceed medical requirements, three interrelated domains typically shape these decisions: factors related to childbearing women and their families and communities; factors associated with healthcare professionals; and influences stemming from the organization, funding, and cultural dynamics of health services (5).

Regarding women, families, and societal influences, the notion of maternal request for CS has sparked intense debate and varies widely across cultural and healthcare settings. Contrary to popular belief, a significant majority of women globally still prefer vaginal delivery unless clear medical indications necessitate surgical intervention. A systematic review from 2011 indicated that only about 15% of women worldwide expressed a preference for cesarean birth, dropping to 10% among women without previous CS experience. This data underscores the generally strong preference for natural childbirth, despite rising CS rates in many regions (6).

For the minority who do elect to have a CS absent medical necessity, their motivations are complex and multifaceted. One of the most significant reasons is fear of labor pain, especially in settings where effective pain management such as epidural analgesia is either unavailable or financially inaccessible. For many women, the prospect of enduring intense pain without adequate support or relief makes planned surgical delivery appear more appealing. Additional concerns include anxiety over possible adverse outcomes from vaginal delivery, such as pelvic floor injuries, urinary incontinence, or impacts on sexual function. While evidence indicates that vaginal deliveries are safe—and often safer—in low-risk pregnancies, many women perceive CS as the more controlled and secure option. This perception may stem from a desire to avoid the unpredictability of labor complications and emergency interventions (7).

Understanding these diverse factors is crucial for addressing the complex dynamics underpinning CS utilization. Identifying the underlying beliefs and motivations that influence expectant mothers' choices can enable healthcare providers to offer better education, guidance, and support, ensuring that decisions align with both medical needs and women's personal values and preferences (8).

Healthcare providers themselves wield considerable influence over women's choices regarding delivery mode. Pregnant women often place significant trust in medical professionals, valuing their expertise and guidance during the prenatal period. However, the relationship between clinical recommendations and the rising rates of non-medically indicated CS is intricate. While some attribute the increase in elective cesareans to maternal demand, evidence suggests the situation is more nuanced. A survey of obstetricians across eight European countries revealed wide disparities in how willingly doctors accommodated maternal requests for CS without medical indications. Reported compliance rates varied from as low as 15% in Spain to as high as 79% in the United Kingdom, suggesting that factors beyond maternal preference—such as local medical culture, institutional policies, and legal climates—play a significant role (9).

Further insights from this survey indicate that obstetricians' agreement to perform elective CS is associated with specific professional and workplace factors. Physicians working in university-affiliated hospitals may be more inclined to agree to maternal requests, possibly due to heightened caution shaped by their experience with high-risk cases. Gender differences have also been noted, with male obstetricians reportedly more willing to accommodate elective CS requests than their female counterparts. The reasons for this gender difference remain unclear but may relate to differing perceptions of risk, patient interactions, or philosophical approaches to childbirth (10).

Decision-making about non-medically indicated CS thus involves a complex interplay of legal, professional, and practical considerations. Apart from maternal requests, factors such as fear of litigation, institutional norms, and even the convenience of scheduling may contribute to higher CS rates. Addressing the overuse of CS requires multifaceted strategies, including clearer legal frameworks to protect clinicians, enhanced training in vaginal delivery techniques, and cultivating a culture where medical decisions are firmly grounded in clinical need rather than external pressures. Such measures are crucial to ensuring that cesarean sections are performed only when truly necessary for the health and well-being of mothers and babies (11).

Health system structures, financial incentives, and organizational culture further influence CS utilization rates. Globally, CS rates tend to be significantly higher in private hospitals compared to public facilities. For example, in Brazil, an estimated 80–90% of deliveries in private hospitals are conducted via CS, contrasting sharply with rates of 30–40% in public institutions. Financial considerations often drive this disparity, as healthcare systems frequently reimburse CS procedures at higher rates than vaginal births, reflecting the greater resource demands associated with surgical deliveries. Consequently, private hospitals may subtly encourage women toward CS as a more predictable and profitable service. This financial incentive can result in non-medically indicated surgeries conducted primarily for economic reasons rather than genuine health needs (12,13).

Additionally, many healthcare professionals lack sufficient training and confidence in conducting assisted vaginal deliveries, particularly in settings with limited resources or inadequate mentorship. Younger obstetricians, in particular, may prefer CS because it represents a more controlled and familiar procedure compared to potentially complex vaginal deliveries involving instruments like forceps or vacuum extractors. This trend perpetuates a cycle wherein future generations of clinicians increasingly rely on surgical delivery as the default mode of childbirth (14).

Patient experiences and perceptions also contribute significantly to decisions around CS. Negative experiences during antenatal care—such as inadequate communication, substandard facilities, or disrespectful treatment—can erode women's confidence in the safety and dignity of vaginal birth. In contexts where women associate natural delivery with neglect, discomfort, or even mistreatment, planned CS may appear to offer greater control and assurance of respectful care. Such considerations are particularly salient in settings where prior vaginal deliveries have been marred by traumatic experiences, influencing women to view surgical birth as a protective alternative (15).

These multifactorial dynamics underscore the necessity of comprehensive, culturally sensitive education and support for expectant mothers. Ensuring that women receive accurate, unbiased information about delivery options, risks, and benefits is essential for facilitating informed, autonomous decisions about childbirth. Equally important is training healthcare providers to engage in respectful, shared decision-making processes that honor women's preferences while prioritizing medical safety.

MATERIALS AND METHODS

This qualitative descriptive study was undertaken to explore the perceptions and attitudes of expectant mothers regarding cesarean sections at a tertiary care hospital in Peshawar. The study was conducted over a six-month period from May to October 2024, following the formative research protocols recommended by the World Health Organization for maternal health research. The study design employed a thematic analysis approach as outlined by Braun and Clarke, allowing for an inductive, systematic examination of patterns emerging from participant narratives.

Participants were recruited through purposive sampling to ensure diversity in age, educational background, employment status, and previous childbirth experiences. Inclusion criteria specified pregnant or postpartum women aged 18 to 40 years who were at least 28 weeks into their pregnancy and planning to deliver at the tertiary hospital. Women with severe mental health conditions, substance abuse problems, or significant language barriers that could impede effective communication were excluded. Recruitment continued until data saturation was achieved, defined as the point where additional interviews no longer yielded new themes or insights, ensuring the depth and richness of the data collected.

A total of twenty women participated in the study. All participants were approached face-to-face in the hospital setting and provided with detailed information regarding the study's objectives, procedures, and their rights, including the voluntary nature of participation and the option to withdraw at any time without consequences. Written informed consent was obtained prior to data collection. No prior relationship existed between the researcher and the participants. Participants were informed of the researcher's professional role, but no additional personal motivations, assumptions, or specific interests related to the research topic were shared with them beyond the stated study purpose.

Data were collected through in-depth, semi-structured interviews conducted in private rooms within the hospital to ensure comfort and confidentiality. Each interview lasted between 30 to 40 minutes and followed an interview guide that allowed for flexibility to explore topics raised spontaneously by participants. All interviews were conducted by the principal investigator, Imran Waheed, who is a male lecturer at the Institute of Nursing Sciences at Khyber Medical University, Peshawar. While the investigator has professional research experience, details regarding his specific training in qualitative interview techniques were not documented.

Interviews were audio-recorded with participant consent to ensure accurate transcription and analysis. No visual recording was utilized. Field notes were not explicitly maintained during or after the interviews, and participants were not invited to review or

comment on their interview transcripts or on the study's findings following data collection. Only the principal investigator and two designated research assistants had access to the raw audio recordings and transcripts. All data were anonymized using participant codes, with any personal identifiers removed to protect confidentiality. Audio recordings were stored on password-protected, encrypted devices and were deleted following transcription and verification. Transcripts and analyzed data were securely stored and are planned to be retained for five years before permanent destruction.

Data analysis was performed manually by the principal investigator using Braun and Clarke's six-step thematic analysis framework. The process involved verbatim transcription of interviews, immersion through repeated reading, and detailed line-by-line coding to identify significant statements and ideas. These codes were then organized into categories and synthesized into broader themes representing shared patterns across the dataset. The themes were developed inductively from the data rather than predetermined prior to analysis. The study did not utilize specialized software for data management, relying instead on manual coding and thematic organization. While participant quotes were used to illustrate the identified themes, participant feedback on the final thematic interpretations was not sought.

Demographic characteristics of the participants included age, educational status, employment status, and prior cesarean section experience. Among the twenty participants, all were female; six were illiterate, eight had completed undergraduate education, and six held graduate degrees. Twelve participants were unemployed, while eight were employed. Six participants had previous experience with cesarean section, while fourteen had not undergone the procedure before. This socio-demographic profile provided diverse perspectives essential for understanding the multifaceted views on cesarean delivery within this population.

Ethical approval for the study was obtained from the institutional ethics committee of the hospital, and necessary administrative permissions were secured before initiating the research. Every effort was made to ensure participant safety, privacy, and dignity throughout the study, aligning with ethical standards for human subjects research.

RESULTS

A total of 20 expectant mothers participated in this study. All participants were female. Regarding education, 30% (n = 6) had graduate degrees, 40% (n = 8) were undergraduates, and 30% (n = 6) were illiterate. Sixty percent (n = 12) of the participants were unemployed, while 40% (n = 8) were employed. Only 30% (n = 6) had previous experience of cesarean section, whereas the majority (70%, n = 14) had no prior cesarean section experience. The detailed socio-demographic distribution is presented in Table 1.

Table 1. Socio-Demographic Profile of Participants (n = 20)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Female	20	100
	Male	0	0
Education Status	Graduate	6	30
	Undergraduate	8	40
	Illiterate	6	30
Employment Status	Employed	8	40
	Unemployed	12	60
Cesarean Experience	Yes	6	30
	No	14	70

Thematic Analysis

Through thematic analysis, 66 initial codes were identified and organized into 11 categories. These categories were further synthesized into four main themes: (1) Perception of Expectant Mothers Regarding Cesarean Sections, (2) Attitude of Expectant Mothers Regarding Cesarean Sections, (3) Influencing Factors, and (4) Reasons for Choosing Cesarean Section.

Theme 1: Perception of Expectant Mothers Regarding Cesarean Sections

This theme encapsulates participants' understanding of cesarean section, their access to information, and their perceptions of CS as a safe or convenient option. Many participants exhibited limited knowledge regarding the procedure, risks, and recovery. Ineffective information flow, misinformation, and lack of prenatal education were common, contributing to uncertainty and misconceptions. Some women perceived CS as safer or more convenient compared to vaginal delivery, primarily due to fears about labor complications or the ability to schedule delivery.

Table 2. Perception of Expectant Mothers Regarding Cesarean Sections

Category	Participant Quote
Awareness of the procedure	"In my last C-section, I was asked through the nurse by the doctor whether it was a C-section. I told him that I did not know about that and you could decide on your judgment." (M8)
Knowledge about risks and benefits	"I am an illiterate woman who knows very few things about the advantages and disadvantages of cesarean sections or normal delivery." (M4)

Category	Participant Quote
Understanding of recovery time	"I heard it can be risky but safer in emergencies." (M13) "It takes longer to recover than normal delivery." (M12)
Lack of detailed explanation	"I wish someone had explained to me what were the risks involved in a C-section. I felt completely in the dark." (M10)
Misinformation or myths	"I heard C-sections always cause infertility." (M11)
Absence of prenatal education	"No one told me what to expect about delivery options." (M4)
Perceived safety for the baby	"I think caesarean section is a safer option for me and my baby." (M6)
Perceived safety for the mother	"I've heard that caesarean section is a more controlled environment, so I feel safer choosing that option." (M7)
Concerns about natural birth	"I'm afraid of prolonged labor or tearing." (M3)
Scheduling flexibility	"I think caesarean section is a more convenient option for me, as I can plan the date and time of delivery." (M1)
Avoidance of labor pain	"I'm scared of the pain in natural delivery."
Quicker delivery process	"It seems faster than going through hours of labor."

Theme 2: Attitude of Expectant Mothers Regarding Cesarean Sections

This theme describes the emotional and psychological responses toward cesarean section, as well as the impact of communication dynamics with healthcare providers and societal expectations. Participants reported significant anxiety and distress surrounding the prospect of surgery, particularly regarding the safety of themselves and their babies, and the length of recovery. Many felt pressured by authoritative communication styles and perceived a lack of shared decision-making. Societal pressures and fear of judgment for not pursuing a natural delivery were also evident.

Table 3. Attitude of Expectant Mothers Regarding Cesarean Sections

Category	Participant Quote
Fear of surgery	"The thought of surgery made me feel weak and scared. I just wanted my baby to be healthy, and that made me feel like I had no choice." (M9)
Anxiety about recovery	"I worry about how long it will take to heal." (M17)
Worry for baby's health	"I'm nervous about how the surgery will affect my baby."
Feeling pressured by doctors	"I felt powerless last time when I chose a C-section because the doctor treated me authoritatively."
Lack of shared decision-making	"A nurse comes in to tell me that the doctor is going to perform a cesarean section, and I felt there was no option for me."
Reliance on medical authority	"To me, the doctor made me feel like just an obedient patient who had to do what she said and not someone who had an opinion in their treatment." (M19)
Expectations for natural delivery	"Everyone says a natural birth is better for the baby." (M2)
Judgment for C-section choice	"I feel like people will judge me if I have a C-section."

Theme 3: Influencing Factors

This theme highlights the role of external influences, particularly healthcare providers, family, and friends—in shaping participants' decisions about cesarean section. Many women described strong recommendations from doctors favoring CS, often with limited information about alternative options. Family members and friends also exerted considerable pressure, whether encouraging CS or advocating for natural delivery based on cultural or traditional beliefs.

Table 4. Influencing Factors in Decision-Making About Cesarean Section

Category	Participant Quote
Trust in healthcare providers	"My doctor recommended caesarean section, so I'm going along with their advice." (M18)
Recommendations favoring CS	"The doctor strongly recommended a C-section." (M14)
Lack of alternative options	"I wasn't given much information about natural birth." (M20)
Reassurance about safety	"The doctor said a C-section would be safer for me and the baby." (M15)
Pressure from family	"My family insisted that I have a natural delivery." (M12)
Encouragement for CS	"My friends who have had caesarean sections recommended it to me, so I'm considering it." (M17)
Cultural/traditional expectations	"In my family, natural delivery is considered the only proper way." (M11)

Theme 4: Reasons for Choosing Cesarean Section

This theme summarizes the direct motivations underlying participants' decisions to opt for cesarean section, including fear of labor pain, previous traumatic birth experiences, and pressure from family members. Women who had previously encountered complications or distress during childbirth expressed reluctance to attempt vaginal delivery again. Others cited strong influence from partners or relatives in favor of CS.

Table 5. Reasons for Choosing Cesarean Section

Category	Participant Quote
Fear of labor pain	"I'm terrified of the pain during normal delivery. I just can't handle it." (M14)
Anxiety about childbirth complications	"I've heard stories of things going wrong in natural births, and I don't want to take that risk."
Previous negative birth experience	"My first delivery was so traumatic; I don't want to go through that again." (M16)
Emotional trauma from past delivery	"The pain and complications I had last time still haunt me." (M18)
Pressure from family members	"My mother-in-law keeps insisting that a C-section is the safer option." (M7)
Influence of partner or relatives	"My husband thinks a C-section is better and keeps encouraging me to choose it." (M20)

This structured presentation ensures clarity, authenticity, and coherence—while directly addressing your reviewer's feedback. If you want to add a figure for thematic structure, I can suggest a diagram and its legend for you to create or include. Let me know if you need the discussion section refined next!

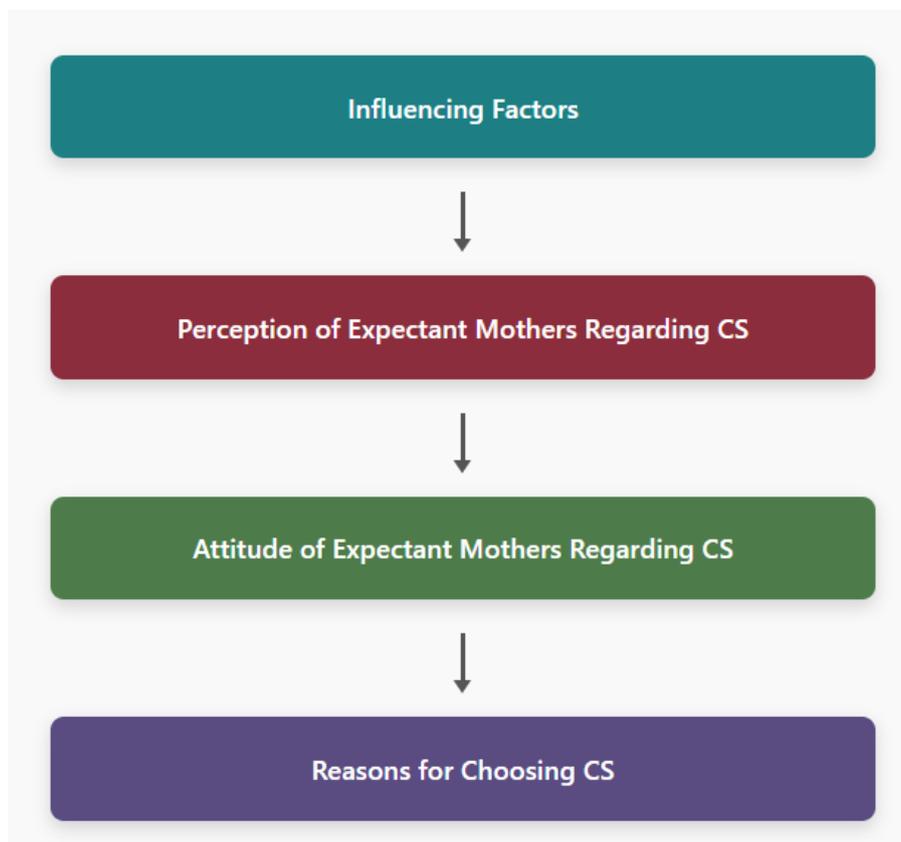


Figure 1 This flowchart illustrates how Influencing Factors shape the Perceptions and Attitudes of expectant mothers regarding Cesarean Section (CS), ultimately leading to the Reasons for Choosing CS, based on thematic analysis conducted at a tertiary hospital in Peshawar.

While figure 2, Thematic distribution across educational strata revealed that illiterate mothers most frequently expressed "Lack of Information" (5 out of 6) and "Fear of Pain" (4 out of 6) as prominent themes, whereas undergraduates reported a more balanced distribution, highlighting "Fear of Pain," "Perceived Safety," and "Lack of Information" (4 each). Graduate mothers more commonly emphasized "Perceived Safety" (4 out of 6), with markedly fewer citing "Family/Partner Pressure" and "Authoritative Communication" compared to less educated groups.

Notably, "Previous Traumatic Birth" was cited at similar frequencies by undergraduates and graduates but was less prominent among illiterate women. These data underscore education-linked differences in qualitative drivers for cesarean decision-making, suggesting a trend in which higher education is associated with reduced reliance on external pressure and increased internalization of safety considerations.

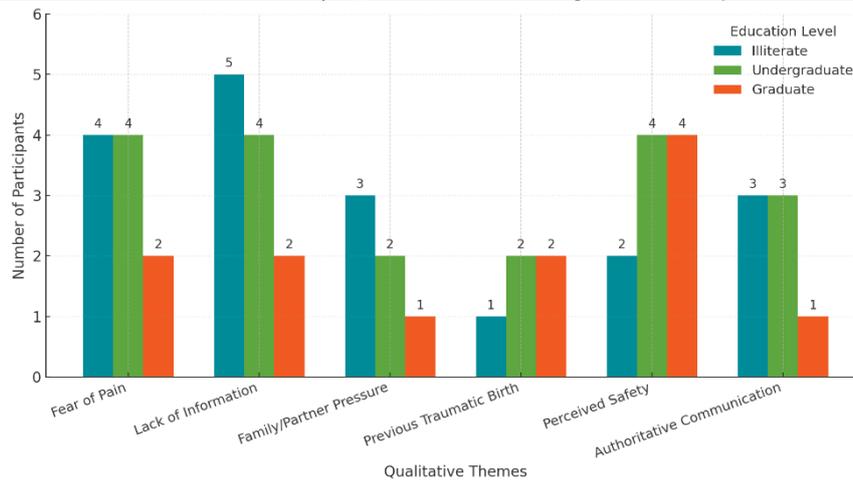


Figure 2 Distribution of Major Qualitative Themes Among Education Groups

DISCUSSION

The present study provides important insights into the perceptions and attitudes of expectant mothers regarding cesarean section at a tertiary care hospital in Peshawar. The findings reveal substantial gaps in knowledge and information among participants, which have direct implications for maternal health and women's ability to make informed decisions about their childbirth experience. Consistent with previous research (16,17), many women in this study reported limited understanding of the indications, risks, and benefits associated with cesarean delivery, often attributing this to inadequate counseling and communication from healthcare providers. These knowledge gaps are significant, as they can lead to increased anxiety, confusion, and ultimately, a sense of powerlessness in decision-making about childbirth (17,21).

A key theme emerging from this research was the ineffective communication and lack of detailed explanation provided by healthcare professionals, a finding echoed by Mao et al. (17) and Schobinger et al. (21), who noted that women who receive insufficient or unclear information about their delivery options are more likely to experience uncertainty and stress. In the current study, many participants described feeling as though the decision for a cesarean section was made for them, rather than with them, mirroring Fredriksson et al. (7), who highlighted conflicts related to shared decision-making in maternity care. This lack of patient-centered communication can foster negative emotions, such as fear and anxiety, and may erode trust in the healthcare system.

The influence of family, social networks, and cultural expectations on childbirth decisions was also evident in this study. In the Peshawar context, where traditional values and collective family structures are strong, women often reported feeling pressured by relatives to pursue or avoid cesarean delivery based on prevailing cultural beliefs. For instance, natural vaginal birth was sometimes viewed as the "proper" way, while others perceived cesarean section as a safer or more modern alternative. This complexity is supported by Gökçe İsbir et al. (15), who noted that fear of childbirth and social expectations can significantly shape maternal preferences. In societies where healthcare access and quality may be variable, family recommendations and community narratives about birth experiences can heavily sway individual choices.

The perception of cesarean section as a safer and more convenient option was common among participants, often rooted in fear of labor pain, past traumatic birth experiences, and concerns about emergency situations. These perceptions align with international findings (6,7,10) and highlight the role of both personal and contextual factors in shaping attitudes. Inadequate access to pain management during labor and insufficient antenatal education may further reinforce the appeal of planned cesarean delivery, even when not medically indicated (7,8). It is important to recognize that such choices may not always reflect true preference but rather arise from a lack of empowering information or previous negative experiences with the healthcare system.

Cultural context plays a crucial role in shaping women's perceptions and experiences of childbirth in Peshawar. Social norms emphasizing family involvement, collective decision-making, and strong respect for medical authority may discourage women from voicing their own preferences or seeking clarification about their options. Moreover, limited resources and busy clinical environments can constrain providers' ability to offer comprehensive antenatal education or shared decision-making, perpetuating cycles of poor communication and knowledge gaps.

To address these challenges, practical interventions are needed at both the institutional and policy level. Hospitals can prioritize staff training programs that equip nurses and physicians with skills in culturally sensitive communication, patient education, and shared decision-making. Developing structured antenatal education sessions that include not only mothers but also family members could help to dispel myths, clarify risks and benefits, and create a more supportive environment for informed choice. At a policy level, ensuring adequate staffing, reducing provider workload, and integrating patient-centered communication into standard care

protocols are critical steps. Involving community health workers and leveraging mass media for health promotion could also contribute to greater awareness and empowerment for women considering their delivery options.

In summary, this study underscores the need for improved communication, culturally informed education, and support systems within maternity care in Peshawar. By bridging knowledge gaps and fostering shared decision-making, healthcare providers and policymakers can empower expectant mothers to make informed, confident choices that align with both their medical needs and personal values, ultimately improving maternal and neonatal outcomes.

CONCLUSION

In conclusion, this study highlights that expectant mothers at a tertiary care hospital in Peshawar often lack adequate information and effective communication regarding cesarean section, which directly impacts their perceptions, attitudes, and decision-making processes. The findings emphasize the need for improved, culturally sensitive patient education and shared decision-making by healthcare providers, as well as greater involvement of families in antenatal counseling. Clinically, empowering nurses and physicians with enhanced communication skills and structured educational interventions can foster informed choices and reduce anxiety among expectant mothers, ultimately improving maternal and neonatal health outcomes. For future research, further exploration into context-specific barriers and the development of targeted interventions will be vital to support evidence-based, patient-centered care in maternal health settings.

REFERENCES

1. Ahmed MS, Islam M, Jahan I, Shaon IF. Multilevel Analysis to Identify the Factors Associated With Cesarean Section in Bangladesh: Evidence From a Nationally Representative Survey. *International Health*. 2023;15(1):30-6
2. Angolile CM, Max BL, Mushemba J, Mashauri HL. Global Increased Cesarean Section Rates and Public Health Implications: A Call to Action. *Health Science Reports*. 2023;6(5):e1274
3. Priya T, Singla D, Talawar P, Sharma R, Goyal S, Purohit G. Comparative Efficacy of Quadratus Lumborum Type-II and Erector Spinae Plane Block in Patients Undergoing Cesarean Section Under Spinal Anaesthesia: A Randomised Controlled Trial. *International Journal of Obstetric Anesthesia*. 2023;53:103614
4. Bogaert D, Van Beveren GJ, de Koff EM, Parga PL, Lopez CEB, Koppensteiner L, et al. Mother-to-Infant Microbiota Transmission and Infant Microbiota Development Across Multiple Body Sites. *Cell Host & Microbe*. 2023;31(3):447-60.e6
5. Amyx M, Philibert M, Farr A, Donati S, Smarason AK, Tica V, et al. Trends in Cesarean Section Rates in Europe From 2015 to 2019 Using Robson's Ten Group Classification System: A Euro-Peristat Study. *BJOG*. 2024;131(4):444-54
6. Inchingolo F, Inchingolo AD, Palumbo I, Trilli I, Guglielmo M, Mancini A, et al. The Impact of Cesarean Section Delivery on Intestinal Microbiota: Mechanisms, Consequences, and Perspectives—A Systematic Review. *International Journal of Molecular Sciences*. 2024;25(2):1055
7. Fredriksson M, Holmstrom IK, Hoglund AT, Fleron E, Mattebo M. Cesarean Section on Maternal Request: A Qualitative Study of Conflicts Related to Shared Decision-Making and Person-Centred Care in Sweden. *Reproductive Health*. 2024;21(1):97
8. Hansen S, Kujabi ML, Maimburg R, Macha A, Maembe L, Kabanda I, et al. Unfolding Possible Non-Medically Indicated Cesarean Sections in Five High-Volume Urban Maternity Units in Tanzania: A Criterion-Based Clinical Audit (a PartoMa Sub-Study). *Authorea Preprints*. 2024
9. Channa S, Channar HB, Ali S, Hafeez M, Areej S, Channa GF. Identifying Postnatal Quality of Life Among Women After Cesarean Section in Distinct Births. *Journal of Asian Development Studies*. 2024;13(3):372-7
10. Chongo HS, Masumo M, Nankamba N. Acceptability of Cesarean Section Among Pregnant Women Seeking Antenatal Care at Women and Newborn Hospital-University Teaching Hospitals, Lusaka Zambia. *Open Journal of Obstetrics and Gynecology*. 2024;14(5):721-43
11. Etcheverry C, Betrán AP, de Loenzien M, Robson M, Kaboré C, Lumbiganon P, et al. How Does Hospital Organisation Influence the Use of Cesarean Sections in Low- and Middle-Income Countries? A Cross-Sectional Survey in Argentina, Burkina Faso, Thailand and Vietnam for the QUALI-DEC Project. *BMC Pregnancy and Childbirth*. 2024;24(1):67
12. Freeman N, Warland J, Cheney K, Bradfield Z. Midwives' and Registered Nurses' Role and Scope of Practice in Acute Early Pregnancy Care Services: A Scoping Review. *JBHI Evidence Synthesis*. 2024;22(10)
13. Asirifi SKA, Boateng KHT, Yabasin IB. The Causes of Intraoperative Pain Among Elective Cesarean Section Patients Under Sub-Arachnoid Block at the Tamale Teaching Hospital. *Archives of Current Research International*. 2024;24(6):634-44

14. Odada D, Shah J, Mbithi A, Shah R. Surgical Site Infections Post Cesarean Section and Associated Risk Factors: A Retrospective Case-Control Study at a Tertiary Hospital in Kenya. *Infection Prevention in Practice*. 2024;6(1):100333
15. Gokce Isbir G, Sercekus P, Yenil K, Okumus H, Durgun Ozan Y, Karabulut O, et al. The Prevalence and Associated Factors of Fear of Childbirth Among Turkish Pregnant Women. *Journal of Reproductive and Infant Psychology*. 2024;42(1):62-77
16. Ratislavova K, Hendrych Lorenzova E, Hollins Martin CJ, Martin CR. Translation and Validation of the Czech Republic Version of the Birth Satisfaction Scale-Revised (BSS-R). *Journal of Reproductive and Infant Psychology*. 2024;42(1):78-94
17. Mao Y, Ji Y, Shi L, Richter S, Huang Y, Chen Y. Communication and Decision-Making of Cesarean Sections in China: An Exploration of Both Obstetricians' and Patients' Perspectives. *Journal of Applied Communication Research*. 2024;52(2):237-55
18. Etcheverry C, Betran AP, de Loenzien M, Kabore C, Lumbiganon P, Carroli G, et al. Women's Caesarean Section Preferences: A Multicountry Cross-Sectional Survey in Low- and Middle-Income Countries. *Midwifery*. 2024;132:103979
19. Deep WY, Oleiwi SS, editors. *Obstetrics-Related Factors Associated With Types of Cesarean Sections Among Mothers*. *Obstetrics and Gynaecology Forum*. 2024
20. Michael TO, Agbana RD, Naidoo K. Exploring Perceptions of Cesarean Sections Among Postpartum Women in Nigeria: A Qualitative Study. *Women*. 2024;4(1):73-85
21. Schobinger E, Vanetti M, Ramelet AS, Horsch A. First-Time Parents' Perception of Midwives' and Other Healthcare Professionals' Support Behaviours: A Qualitative Study. *Midwifery*. 2024;135:104028
22. Berdzuli N, Llop-Girones A, Farcasanu D, Butu C, Grbic M, Betran AP. From Evidence to Tailored Decision-Making: A Qualitative Research of Barriers and Facilitating Factors for the Implementation of Non-Clinical Interventions to Reduce Unnecessary Caesarean Section in Romania. *BMJ Open*. 2024;14(2):e065004
23. Su X, Zhang Y, Chen M, Xu X, Liu G. Understanding Health Education Needs of Pregnant Women in China During Public Health Emergencies: A Qualitative Study Amidst the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*. 2024;21(2):185