Biological and Clinical Sciences Research Journal
eISSN: 2708-2261; pISSN: 2958-4728
www.bcsrj.com
DOI: https://doi.org/10.54112/bcsrj.v2024i1.714
*Biol. Clin. Sci. Res. J., Volume, **2024**: 714*
Original Research Article

FACTORS CONTRIBUTING TO HIGH RATES OF CEASERIAN SECTION

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(Received, 09th November 2023, Revised 06th January 2024, Published 25th February 2024)

Abstract: *The increasing rate of caesarean deliveries is a major concern for public health experts worldwide. A study was conducted from January to September 2022 at the civil hospital Khairpur Mir to determine the rates of C-sections compared to normal vaginal deliveries and to evaluate the factors contributing to their increased rate in women. The study included 354 pregnant women aged 20 to 40 years who were surveyed using a pre-tested, structured questionnaire. The data was then analysed using SPSS version 16. Out of the 354 participants, 129 (36.4%) were aged between 31 to 35 years, 211 (59.6%) were uneducated, and 174 (49.2%) belonged to the middle socio-economic status. Furthermore, 103 (42.9%) women delivered by C-section, while 71 (62.3%) had a normal delivery. 54 (15.3%) participants had a parity of three, of which 19 (7.9%) women delivered by C-section, and 35 (30.7%) delivered by normal vaginal delivery. The study found that factors such as maternal age, mother's education, pregnancy complications, utilization of antenatal care, place of birth, area of residence, wealth profiles of mothers, and the number of exercises performed in the last semester were all linked to C-section. The study shows that these factors were the major contributors and strongly associated with higher C-section rates than normal deliveries. Additionally, educational status, occupation, economic status parity, place of C-section, place of ANC visit, and number of ANC visits were also found to be linked to C-section. The p-value was found to be 0.05. In conclusion, this study highlights the need for increased awareness and education on the factors contributing to the high rate of C-section deliveries, and the importance of normal vaginal deliveries for the health and well-being of both mother and child.*

Keywords: Cesarean Section, risk factors, Normal Vaginal Delivery, Pakistan

Introduction

Rates of the Caesarian section (CS) have risen worldwide in recent years (Mylonas and Friese, 2015). CS is the most basic and straightforward obstetric operative procedure characterized by an abdominal and uterine incision after the age of viability of the fetus (Waqarunissa et al., 2016).It is performed to reduce maternal morbidity and mortality rate and infant mortality rate even though it has many short-term and long-term adverse effects on maternal and child health as well (Abebe et al., 2015).The CS rate is recorded as higher in developing countries than in developed countries. In developed countries, the CS rate ranges from 10 to 25%, while it varies from 25 to 39% in developing countries. Its rate in the USA is recorded at 29.1%, in England at 21.5 % and in Latin American countries at 40% (Abebe et al., 2015).According to the American College of Obstetricians and Gynecologists report, Caesarean delivery significantly increases a woman's risk of vulnerability of pregnancy-related morbidity and mortality, which accounts (for 35.9 deaths per 100,000 live deliveries) as compared to women who possess vaginal delivery (9.2 deaths per100,000 live births) (Rayburn and Strunk, 2013).However, in the most recent survey, the rate of CS in Pakistan was 25.6% in urban areas as compared to 11.5 in rural areas. For many years, the increased rate of CSs among women has been a major health concern in Pakistan. CS is a major surgery performed for safe motherhood and newborn (Waqarunissa et al., 2016). According to world Health Organization (WHO), the underuse of CS, i.e. below 5% and overuse of CSs more than 15%, is a harmful health indicator (Boatin et al., 2018).Recent studies have shown that the rate of infant births by CS has increased considerably, especially in urban areas in low-income countries (Rayburn and Strunk, 2013).CS is necessary for its indication, but nowadays, it is performed due to unnecessary indications. Medical, legal, social, psychological, and economic factors are contributing factors in the increased rate of CS (Waqarunissa et al., 2016).In Pakistan, CS rates have increased over the last fifteen to twenty years. The major clinical determinants of the CS rate are medical and non-medical conditions. The medical condition includes fetal compromise, failure to progress in labor, repeat CS ,breech presentation, presumed fetal distress, failure to progress, breach, and maternal hypertensive disorders (Anderson and Lomas, 1985). The non-medical contributing factors include maternal request and obstetrician interest in performing CSs (Waqarunissa et al., 2016). With the help of this study, Standardized care and guidelines should have been applied and practiced in

maternal care before, during, and after labor. Normal vaginal birth is a safe and less economic burden on the family and health care system. By determining the most common factors responsible for the increased rate of CSs, the proposed study will help in the planning and implementation of strategies to control unnecessarily increased rates of CSs by adopting appropriate implementation of standard guidelines. The significance of the study is that many women in Pakistan endure needless CSs, which pose a risk to their health and hampers the health care system. It also decreases the funds to spend in making health care more affordable and essential CSs for vulnerable and difficult-to-reach women. What is causing Pakistan's CS rate to rise recently is undetermined. Furthermore, whether Governmental, individual or familial decisions affect the high CS rates. In order to determine whether such expensive operations are undertaken to save lives or to help health facilities benefit economically, it is essential to examine the indications for CSs. The current analysis will, therefore, describe the factors associated with increased birth rates per CS in Pakistan (socioeconomic, cultural, health and institutional) and examine the factors that affect the decision to perform surgery.

Methodology

The ethics approval was obtained from the Research Ethics Committee Liaquat University of Medical and Health Sciences, Jamshoro, to conduct a descriptive cross-sectional study; and also obtained approval for data collection from Civil Hospital Khairpur Mirs then the research was carried out at the obstetric ward of Lady Willington Hospital, Civil Hospital Khairpur Mir's from January to September 2022. In this study, married women between 20 and 40 years who were willing to be part of the study, had previous exposure to at least one CS, had at least one living child, were married for years and above, Had a history of previously five years back CS delivery, and woman with history of alive/ Intra Uterine Death were included. All those women who were not willing to be part of the study, without previous CSs and with all normal vaginal births, were excluded. Moreover, all healthcare providers who were serving in Govt hospitals had working experience of more than one year in the obstetric ward, registered/licensed by the Pakistan Medical & Dental Council and or Pakistan Nursing Council were included, whereas those who had less than one year experience in the obstetric ward, not willing to be part of this study and Non-Govt servant were excluded.

Data were collected through a pre-tested structured questionnaire. Before getting informed consent from the subjects, they were briefed on the purpose of the research. The research data were compiled and analyzed through Statistical Package for Social Sciences (SPSS) version 16.0 to find the most leading factors contributing to the increased CS rate. Frequency and percentage were calculated, and a chi-square test was applied to compare the proportions between CS and NVD groups. For continuous variable mean ±, standard deviation was computed, and a t-test was applied to compare the means between the groups. A (P=0.05) was considered as a statistically significant level.

In section one, the explanatory variables included maternal age (≥19, and ≤ 40 years), educational attainment (un-educated, educated, primary school education, matriculation and intermediate), working status of participants /occupation (employed, unemployed), socio-economic status (poor, middle and upper).In Section two included the data regarding maternal past obstetric information, such as Parity (1, 1–3 and ≥4), type and place of CS (public services/ private services), the place of antenatal care (public services/ private services), Number of antenatal visits (none, 1–3 and ≥4), availability of referral facility (Yes/No), Place of delivery (home, hospital, clinic). Exercise performed in the last trimester was categorized (Yes/No) as the Birth weight of the baby at the time of delivery (<2.5kg,>2.5kg).Section three comprised the data regarding reasons for CS (life-saving, previous section, insufficient provision of medicine, lack of skilled birth attendant, and long distance from the basic health unit. The decision of C- Section is taken by (the doctor, patient, husband, and relatives). Satisfaction from medical indication of CS (Yes/No). Is CS necessary (Yes/No), Selection of CS due to fear of labor pain (Yes/No). Is CS safe than NVD (Yes/No)? Duration of true labor pain before C- Section (6 hours,12 hours, 24 hours, > 24 hours. Were standardized labor care provided (Yes/No)? The fetal heart sounds were checked frequently (every one hour, after one hour, after 2 hours, after 3 hours, not checked). Rate of fetal heart sound before CS (120-140, <100,>160 b/m).

Results

Table 1. Shows the results for a total of 354 pregnant women. The mean age and standard deviation of the participants was 33.31 ± 9.10 years. Moreover, out of 354 samples, most of the women 129 (36.4%), were found in the age group 31 to 35 years, followed by 129 (36.4%) women in the age group 26 to 30 years, where 85 (24.0%) were found in the young age group 20 to 25 years. There was no significant difference in age between CS and normal delivery (P= 0.22). With regards to educational background, most of the women 211(59.6%), were un-educated 89(25.1%) were educated 18 (5.1%) women had an education level of Primary 31(8.8%) were Matric pass and only 5 (1.4%) women had an education level of intermediate. Most of the women, 60 (16.9%), were working. Of these, 33(13.8%) women were delivered by CS. Out of 354 women, 294(83.1%) were not working. Of these, 207(86.2%) women were delivered by CS. There was a significant difference between working status and type of delivery (P= 0.02). In the present study, out of 354 women, most of these women 174 (49.2%) belonged to the Socio-economic Status of the middle class. Of these, 103(42.9%) women delivered by CS, and 71(62.3%) had a normal delivery. 164 (46.3%) women belonged to poor class of socio-economic Status. Of these, 132(55.0%) were delivered by CS, and 32(28.1%) women had a normal delivery. There was a highly significant difference between socio-status and CS (P= 0.001).

Table 2. Shows distribution and association of maternal post-obstetric information. In this study, out of 354 women, most of these women 54 (15.3%) had a parity of three. Of these, 19 (7.9%) women delivered by CS, and 35 (30.7%) delivered by normal vaginal delivery (NVD). There was a highly significant difference between parity and CS (P= 0.001). Regarding the place of CS, out of 354 women, most of these women 306 (86.4%) were delivered at a Govt hospital. Of these, 217(90.4%) women delivered by CS, and 89 (86.4%) women delivered by NVD. 48 (13.6%) women

delivered at private hospitals. Of these, 23 (9.6%) delivered by CS, and 25 (21.9%) women delivered by NVD. There was a significant difference between the place of the CS and the type of delivery (P= < 0.003).

Table 1: distribution and association of socio-demographic characteristics of participants

Variable	C-Section (n=240)	Normal delivery (n=114)	Total (n=254)	P value
Age				
20-25 years	51(21.2%)	34(29.8%)	85(24.0%)	
26-30 years	89(37.1%)	34(29.8%)	123(34.7%)	
31-35 years	90(37.5%)	39(34.2%)	129(36.4%)	(P=0.2)
>35 years	10(4.2%)	7(6.1%)	17(4.8%)	
Educational status				(P=0.005)
Un-educated	158(65.8%)	53(46.5%)	211(59.6%)	
Educated	41(17.1%)	48(42.1%)	89(25.1%)	
Primary	18(7.5%)	0(0%)	18(5.1%)	
Matriculation	18(7.5%)	13(11.4%)	31(8.8%)	
Intermediate	5(2.1%)	0(0%)	5(14%)	
Occupation				P=0.23
Employed	33(13.8%)	20(86.2%)	60(16.6%)	
Un-employed	27(23.7%)	87(76.3%)	29(83.1%)	
Socio-economic Status				P= 0.001
Poor	132(55.0%)	32(28.1%)	164(46.3%)	
Middle	103(42.9%)	71(62.3%)	174(49.2%)	
Upper	5(2.1%)	11(9.6%)	16(4.5%)	

Table 2: Distribution and association of maternal post obstetric information

Variable	C-Section (n=240)	Normal delivery (n=114)	Total (n=254)	P value
Parity				P= 0.001
1	40(16.7%)	7(6.1%)	47(13.3%)	
2	121(50.4%)	65(57.0%)	18(52.5%)	
3	18(7.9%)	35(30.7%)	54(15.3%)	
4	18(7.5%)	0(0%)	12(5.1%)	
>4	42(17.5%)	7(6.1%)	49(13.8%)	
Place of Caesarian Section				P= 0.003
Govt. Hospital	217(90.4%)	89(78.1%)	306(86.4%)	
Private Hospital	23(9.6%)	25(21.9%)	48(13.6%)	
Place of antenatal care				P= 0.001
Govt hospital	161(67.1%)	43(37.7%)	204(57.6%)	
Private hospital	79(32.9%)	71(62.3%)	150(42.4%	
Number of antenatal visits				P= 0.001
None	11(4.6%)	2(1.8%)	13(3.7%)	
1	22(9.2%)	5(4.4%)	27(7.6%)	
2	14(60.8%)	49(43.0%)	19(55.1%)	
3	2(8%)	4(3.5%)	6(1.7%)	
4	15(6.2%)	5(4.4%)	20(5.6%)	
>4	44(18.3%)	49(43.0%)	93(26.3%)	
Availability of referral facility				
Yes	92(38.3%)	62(54.4%)	154(43.5%)	P= 0.06
No	148(61.7%)	52(45.6%)	200(56.5%)	
Place of delivery				P= 0.07
Home	20(8.3%)	7(6.1%)	27(7.6%)	
Hospital	20(86.7%)	94(82.5%)	302(85.3%)	
Clinic	12(5.0%)	13(11.4%)	25(7.1%)	
Exercise performed in last trimester				P= 0.04
Yes	91(37.9%)	49(43.0%)	140(39.5%)	
No	149(62.1%)	65(57.0%)	214(60.5%)	
Birth weight of the baby				P= 0.07
>2.5kg	131(54.6%)	35(30.7%)	166(46.9%)	
<2.5kg	109(45.4%)	79(69.3%)	188(53.1%)	

[Citation: Khoso, Z., Memon, K.N., Channar, H.B., Bhutto, Z., Parveen, R., Salam, M.U., Baqar, M. (2024). Factors contributing to high rates of ceaserian section. *Biol. Clin. Sci. Res. J.,* **2024***: 714*. doi: https://doi.org/10.54112/bcsrj.v2024i1.714]

In the current study, out of 354 women, most of these women, 306 (86.4%), went to a Govt hospital for antenatal care. Of these, 161(67.1%) women were delivered by CS, and 43 (37.7%) women were delivered by NVD, while 150 (42.4%) women went to the private hospital for antenatal care out of 354. Of these, 79(32.9%) delivered by CS, and 71(62.3%) women delivered by NVD. There was a significant difference between the place of antenatal care and CS (P= 0.001). However, 195 (55.1%) women had three antenatal visits. out of them, 146 (60.8%) women delivered by CS while 49 (43.0%) women delivered by NVD. It was observed that CS delivery significantly depends upon the number of antennal visits. There was a significant difference between antenatal visits and CS (P= 0.001). Availability of reference facilities showed that 154 (43.5%) had availability of referral facilities. Of these, 92 (38.3%) women delivered by CS, and 62 (54.4%) were delivered by NVD. However, 200 (56.5%) women did not avail the facility of referral. There was a significant difference in availability of referral facility with CS (P= 0.06). The place of delivery of women showed that most of these women, 302 (85.3%) women, delivered at the hospital. Of these, 208 (86.7%) women delivered by CS, and 94 (82.5%) women delivered by NVD, 25 (7.1%) women delivered at the clinic. Of these 12 (5.0%) delivered by CSs and 13 (11.4%) women delivered by NVD. Moreover, 27 (7.6%) women delivered at home. Of these, 20(8.3%) delivered by CS, and 7(6.1%) women delivered by NVD. There was no significant difference between Place of delivery and CS (P= 0.07). While the exercise information showed that 214 (60.5%) did not perform the exercise in the last trimester. Of these, 149 (62.1%) women delivered by CS, and 65 (57.0%) had a normal delivery. However, 140 (39.5%) women performed exercise in the last trimester out of the total samples. Of these 91(37.9%) delivered by CS and 49 (43.0%) women delivered by NVD. There was not a significant reason for CS due to exercise performed in the last trimester (P= 0.4). Majority of women 188 (53.1%) delivered babies whose birth weight was < 2.5 kg. Of these, 109 (45.4%) babies were delivered by CS, and 79 (69.3%) babies were delivered by NVD, while 166 (46.9%) women delivered healthy babies whose birth weight was > 2.5 kg. Out of them, 131(54.6%) delivered by CS, and 35(30.7%) women delivered babies by NVD. There was a highly significant association between the birth weight of the baby at the time of delivery and CS (P= 0.001).

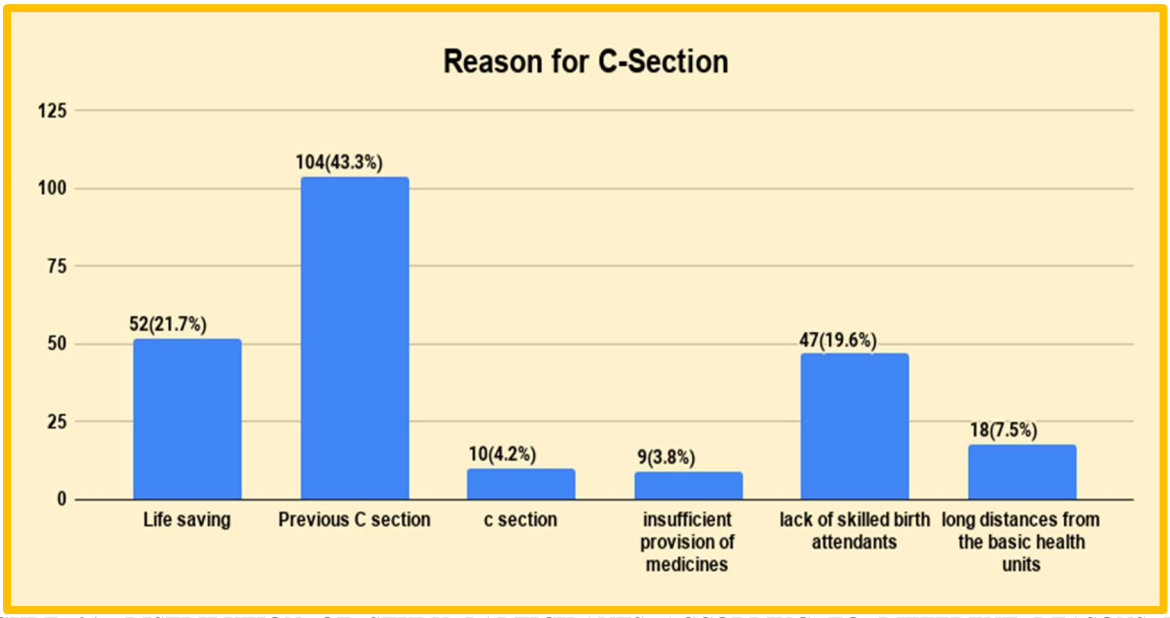

FIGURE 01: DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO DIFFERENT REASONS FOR CESAREAN SECTION

Figure 1 illustrates the reasons for CSs. The results of the current study indicate that, of 354 women, the majority had a CS for a variety of reasons, including prior CSs 104 (43.3%), lifesaving procedures 52 (21.7%), CSs 10 (4.2%), inadequate medication provision 9 (3.8%), a shortage of trained birth attendants 47 (19.6%), and distances from basic health facilities 18 (7.5%).

Table 3. depicts the details regarding CSs; most of the women, 198 (82.5%), decided on CSs by doctor's advice, 34 (14.2%) women decided by husband/relative suggestions, and 8 (3.3%) women decided by themselves. Further, out of 240 women with CSs, most of these women, 188 (78.3%) agreed and were satisfied with the medical indication for CSs, whereas 52 (21.7%) women were not satisfied with the medical indication for CSs. Participants 202 (84.2%) women responded that it was necessary to conduct a CS, while the rest of the respondents, 38 (15.8%), thought that it was not necessary to conduct a CS. In labor pain, information showed that 121(50.4%) women selected the CS due to fear of labor pain, while 119 (49.6%) did not select the CS .Participants retorted that CS is safer than a NVD. 165 (68.8%) women thought that CS was safer than a CS, and 75 (31.2%) women responded that CS was not safer than a NVD. Out of 240 women with CS s, 93 (37.91%) whose duration of true labor pain before a CS was 06 hours, 12 (5.0%) had a duration of true labor pain before a CS was 12 hours, 134(55.8%) had a duration of true labor pain before CS was 24hours, 3(1.25%) had a duration of true labor pain before a CS was more than 24 years. Standardized labor care provision showed that out of 240 women with CS, 180 (75.0%) women were provided standardized labor care and 60 (25.0%) women were not provided labor care.

Table 3: Information regarding cesarean section

Variable	CS (n=240)
Decision of CS taken by	
Doctor	198(82.5%)
Patient	8(3.3%)
Husband /relative	34(14.2%)
Satisfaction from medical indication of CS	
Yes	188(78.3%)
No	52(21.7%)
Was it necessary to conduct CS	
Yes	202(84.2%)
No	38(15.8%)
Selection of cesarean section due to fear of labor pain	
Yes	121(50.4%)
No	119(49.6%)
Cesarean section is safe than normal vaginal delivery	
Yes	165(68.8%)
Yes	75(31.3%)
Duration of true labor pain before C- Section	
6 hours	93(37.91%)
12 hours	12(5.0%)
24 hours	134(55.8%)
>24 hours	3(1.25%
Were you provided standardized labor care	
Yes	180(75.0%)
No	60(25%)
How much frequently the fetal heart sounds were checked	
Every hour	66(18.6%)
After 1 hour	18(5.1%)
After 2 hour	38(10.7%)
After 3 hour	49(13.8%)
Not checked	183(51.7%)
Rate of fetal heart sound before cesarean section	
120-40 b/m	211(59.6%)
<100 b/m	25(7.1%)
>160	118(33.3%)

In fetal heart sounds assessment reported that 66 (18.6%) babies whose fetal heart sounds were checked every hour, 18 (5.1%) babies whose fetal heart sounds were checked after one an hour, 38(10.7%) babies whose fetal heart sounds were checked after 2 hours, 49 (13.8%) babies whose fetal heart sounds were checked after 3 hours and 183 (51.7%) babies whose fetal heart sounds were not checked.

The rate of fetal heart sound before a CS was observed in 211(59.6%) babies whose rate of fetal heart sound before CS was 120 to 140 beat per minute, 25 (7.1%) babies whose rate of fetal heart sound before CS was Less than 100 b/m, and 118(33.3%) babies whose rate of fetal heart sound before CS was More than 160 b/m.

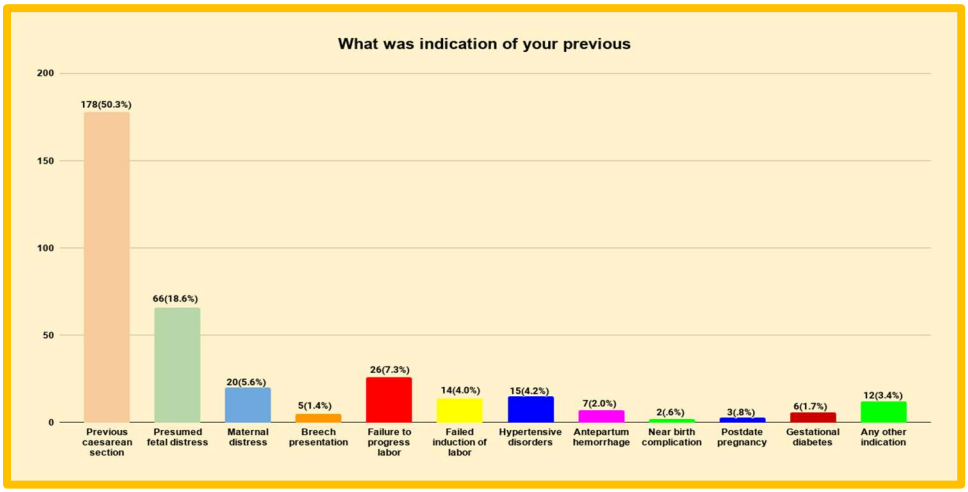

FIGURE 2. DISTRIBUTION OF AN INDICATION OF PREVIOUS CEASERIAN SECTION

Figure 2. Shows the distribution of an indication of the previous CS. It was observed that the most common indication for a previous CS was 178 (50.3%), followed by suspected fetal distress (66.6%), maternal distress (20.6%), Breech presentation 5 (1.4%), failure to progress labor 26 (7.3%), failed induction of labor 14 (4.0%), hypertensive disorders 15 (4.2%), antepartum hemorrhage 7 (2.0%), near-birth complications 2 (.6%), postdate pregnancy 3 (.8%), gestational diabetes 6 (1.7%), and other indications 12 (3.4%).

Discussion

A CS is a life-saving obstetric procedure that promotes reproductive health and decreases maternal mortality. Although vaginal birth continues to be the most common, safest, and cost-effective method of delivery, unnecessary CSs are performed, which puts the health of expecting mothers and their newborns at risk.The socio-demographic characteristics like age, education status, occupation, and socio-economic status were associated with a higher likelihood of CS. The CS rate in Pakistan has steadily increased in a few years (Mylonas and Friese, 2015).In Pakistan, the current rate is rising by 25% (Waqarunissa et al., 2016). The risk of undergoing a CS increased with age. The findings from this study showed that most of the women with CS, 129 (36.4%) were found in the age group 31 to 35 years. The age shows the association with CS, among study participants. Similarly, the risk of CS associated with maternal age at birth is well documented (Abebe et al., 2015; Amjad et al., 2018; Janoudi et al., 2015). The risk of CSs decreased with an increase in maternal education. Our findings showed that nearly 65.8% of the uneducated women compared to 2.1. % of those with higher education had a CS. Previous reports suggested that more educated mothers are more informed about hygiene and health standards (Tsai et al., 2016). Moreover, the frequency of CSs was observed to be higher in unemployed women than the employed. In this study, out of 354 women, most of these women 174 (49.2%) belonged to the socio-economic status of the middle class. Of these, 103 (42.9%) women delivered by CS. However, studies suggest that women with a middle socio-economic background are more likely to undergo CS, which is consistent with this study (Amjad et al., 2018; Leone et al., 2008).

In this study, out of 354 women, most of these women 306 (86.4%) were delivered at the Govt hospital. Of these, 217 (90.4%) women delivered by CS, and 48 (13.6%) women delivered at private hospitals. Of these, 23(9.6%) were delivered by CSs. Despite the fact that caesarean deliveries have been shown to reduce maternal and infant mortality, the risks associated with caesarean surgery must not be overlooked (Amjad et al., 2018). According to a study conducted in India, private hospitals have three times the number of caesarean deliveries as public hospitals (Padmadas et al., 2000).Likewise, the current study finds that the rate of caesarean deliveries is rising in Pakistan's private healthcare centers and hospitals.

In this study, out of 354 women, most of these women 195 (55.1%) women had three antenatal visits. It was observed that by CSs delivery significantly depends upon the number of antennal visits. There was a significant difference between antenatal visits and by CSs (P=0.001). Pregnancy complications, repeated visits to antenatal care facilities, and the mode of delivery of a baby are all closely linked, conferring to previous clinical studies.

The guideline emphasize that every pregnant woman should have at least eight ANC visits during each pregnancy(Solomon, 2019).Previous studies have demonstrated the importance of prenatal care for women's health throughout pregnancy and its potential to reduce the likelihood of caesarean births(Solomon, 2019; Taye and Yuya, 2015). However, our data consistently indicates that mothers who have had more than four prenatal care visits also have a higher rate of cesarean births. Although a precise rationale is unknown, it is most probable that gynecologists encouraged women with pregnancy-related conditions like diabetes, hypertension, or obesity to schedule routine prenatal care appointments in order to reduce the risk of obstetric complications.

Previous studies have shown that mothers who had three ANC follow-up visits were 5.17 times more likely to have a CSs than mothers who only had one ANC visit (AOR=5.17, CI1.4 8-18.00). These results confirmed the current study's findings (Aman et al., 2014; Hafeez et al., 2014).The results of the research showed that 178 patients, or 50.3%, had previously needed CSs and that 66 (18.6%), exhibited probable fetal distress. Maternal distress 20 (5.6%), breach presentation 5 (1.4%), failure to progress labor 26 (7.3%), failed induction of labor 14 (4.0%), hypertensive disorders 15 (4.2%), antepartum hemorrhage 7 (2.0%), near-birth complications 2 (.6%), postdate pregnancy 3 (.8%), gestational diabetes 6 (1.7%), and other indications 12 (3.4%) These results are consistent with Solomon AA who suggested that An increase in caesarean deliveries among Pakistani women from 3.2% in 1990 to 19.6% in the 2018 year (Solomon, 2019). Additional research carried out in Pakistan reveals that the most frequent medical reasons for CS births in Pakistani hospitals are placenta rupture, extended labor discomfort, wound infection, and prior cesarean history (Taye and Yuya, 2015). Few studies have revealed that 15.9% of cases represent a substantial indication for cesarean delivery. The present investigation and this one were comparable (Hafeez et al., 2014). This study found that placenta previa, macrosomia, preeclampsia and prior caesarean deliveries were not significant risk factors for further cesarean sections. The findings did not align with research that demonstrated cephalo pelvic disproportion (CPD) as a major indicator for CS. This research concurs (Aman et al., 2014).

Conclusion

This study shows that Caesarean section rates are high in Lady Willington Hospital, Civil Hospital Khairpur Mir's. This study shows that factors like maternal age, mother's education, pregnancy complications, utilization of antenatal care, and place of birth of a child, area of residence, the wealth profiles of mothers, and the probability of caesarean section deliveries were the major contributors and strongly associated with higher C-section rates than normal deliveries. The current study suggests that physicians should offer thorough medical reasoning for doing cesarean sections in order to decrease the rising rate of these procedures. Adequate awareness regarding the reduction of pregnancy

complications anal so help to reduce the chance of malpractice involving caesareans.

Declarations

Data Availability statement
All data generated or analyzed during the study are included in the manuscript.
Ethics approval and consent to participate.
Approved by the department Concerned.
Consent for publication.
Approved
Funding
Not applicable

Conflict of interest

The authors declared absence of conflict of interest.

Author Contribution

ZAKIRA KHOSO (Principal)
Conception of Study, Final approval of manuscript.
Manuscript revisions, critical input.
KHALIDA NAZ MEMON (Professor)
Coordination of collaborative efforts.
Data acquisition, analysis.
HUSAN BANO CHANNAR (Assistant Professor)
Manuscript write-up, Review of manuscript,
Conception of Study, Development of Research Methodology Design, Study Design, final approval of manuscript.
ZUBEDA BHUTTO (Senior lecturer)
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RUBINA PARVEEN (Assistant Professor)
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MUNAWAR-US-SALAM (Lecturer)
Data acquisition, analysis.
Coordination of collaborative efforts.
MUHAMMED BAQAR (Clinical Instructor)
Conception of Study, Development of Research Methodology Design, Study Design, Review of manuscript, final approval of manuscript.

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