

# Frequency of Caesarean Delivery on maternal request in a private teaching hospital

Fozia Umer Qurashi<sup>1</sup>, Saima Jabeen<sup>2</sup>, Wajiha Alvi<sup>3</sup>

<sup>1</sup> Professor, Department of Obs. & Gyn.,  
Shalamar Medical & Dental Hospital, Lahore.

<sup>3</sup> Postgraduate Trainee, Department of Obs. & Gyn.,  
Shalamar Medical & Dental Hospital, Lahore.

<sup>2</sup> Assistant Professor, Department of Obs. & Gyn.,  
Shalamar Medical & Dental Hospital, Lahore.

## Author's Contribution

<sup>1</sup> Conception of study

<sup>1,2,3</sup> Experimentation/Study conduction

<sup>2</sup> Analysis/Interpretation/Discussion

<sup>2</sup> Manuscript Writing

<sup>1,2</sup> Critical Review

<sup>1,3</sup> Facilitation and Material analysis

## Corresponding Author

Dr. Saima Jabeen

Department of Obs. & Gyn.,  
Shalamar Medical & Dental Hospital,  
Lahore.

Email: drsaima35@yahoo.com

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## Abstract

**Introduction:** Caesarean section rates are increasing worldwide. There are many reasons for this increasing caesarean section rate one of them is increasing requests by women for caesarean section in the absence of medical indications. Most women think that elective caesarean section is safe both for women and babies. Some clinician also considered caesarean section safe. An increasing rate of caesarean section is alarming in developed as well as underdeveloped countries.

**Objective:** To investigate the frequency of caesarean section on maternal request and factors leading to it in a private teaching hospital.

**Materials and Methods:** This was a cross-sectional descriptive study carried out at Shalamar hospital from 1<sup>st</sup> May 2018 to 30<sup>th</sup> April 2019. Women of all ages who were pregnant and were going to have caesarean delivery during the study period at Shalamar hospital.

**Results:** There were 3438 total births during the study period. There were 2380(69%) caesarean section and 1058(31%) were normal vaginal deliveries. Caesarean section rate was 69%. Caesarean sections performed on maternal request were 167(7%) out of 2380 caesarean. Out of these 167 Seventy-two, 43.1% of women were those who already have a previous caesarean section for different non-recurrent indications and now they don't want the trial of labour and requested for caesarean section. Forty, 24% of women requested for a caesarean section because of fear of labour pains and eighteen, 10.8% were those who had a bad experience of the previous child-birth. Twelve, 7.2% of women had fear of failed vaginal delivery and eight women had fear of trauma to baby and three, 1.8% had fear of perineal trauma during the trial of normal vaginal delivery. Six, 3.6% of women had some social reasons for caesarean section and six, 3.6% had some bad experience of normal delivery of their relatives or friends and two, 1.2% were those who were requesting caesarean section because of their family members preferences.

**Conclusion:** Most of the women requesting for caesarean section were those who had previously trial of labour. We can control the caesarean section rate by proper counselling of pregnant women.

**Keywords:** Caesarean section rate, maternal request.

## Introduction

Caesarean section rates are increasing worldwide. There are many reasons for this increasing caesarean section rate one of them is increasing requests by women for caesarean section in the absence of medical indications.<sup>1</sup>

Caesarean section is associated with short term and long term complications for the mother and baby. In recent years, caesareans become safer in particular improvement in anaesthetic technique have led to more caesarean sections being performed under regional anaesthesia. Routine use of antibiotics and improved surgical techniques contributed to the perceived safety of caesarean section. There are many benefits of elective lower segment caesarean section which include avoidance of labour pain, greater safety for the baby, less pelvic floor trauma for the mother, convenience for mother and also for the health professional. However, a caesarean section like any other major operation is accompanied by postoperative adhesions and scarring formation. Some clinicians consider that the risks of caesarean section in healthy women are now so low that it is reasonable to accept the request of pregnant women of the caesarean section, without any medical indication. To minimize the risks associated with the caesarean section it is important to limit the number of caesarean section to only those that are medically indicated. United Kingdom national audit showed that 7% of all elective caesarean sections were performed on maternal request while the American College of Obstetrics and Gynecology (ACOG) has estimated that 2.5% of all births in the United States are caesarean delivery on maternal request.<sup>2,3,4</sup>

Caesarean sections without any medical indications are associated with many medical and ethical issues. National Institute of Health and Clinical Excellence (NICE) in the UK in June 2013 issued a guideline, women who requested caesarean section should be referred to a health care professional.<sup>5,6</sup>

An increase in the rate of caesarean section (CS) deliveries has been observed in both industrialized and non-industrialized countries like Pakistan.

In Pakistan demographic and health surveys 2017-2018, "the proportion of births delivered by Caesarean section has rapidly increased in the past 5 years from 14% in 2012 to 22% in 2017-2018. The caesarean section delivery rate is higher for births in private facilities (38%) than in public facilities (25%). Caesarean section deliveries are almost twice as prevalent in urban areas (32%) compared with rural areas (18%)".<sup>7,8</sup>

Increased section rate is associated with increased morbidity and mortality. Caesarean section doubled the risk of maternal complications compared to vaginal delivery. These complications include haemorrhage, urinary tract and bowel injuries. Risk of wound infection, endometritis and urinary tract infection are more in patients undergoing caesarean section. Risk of placenta previa and morbidly adherent placenta increases with the increasing number of caesarean sections.<sup>9,10,11</sup>

One of the causes of increased section rate is a caesarean section on maternal request without medical indications and it is needed to investigate what are the factors that lead to this request so that these factors should be considered in counselling of pregnant women to control caesarean section rate.

## Material & Methods

### Study Objective

To investigate the frequency of caesarean section on maternal request and factors leading to it in a private teaching hospital.

### Study Period

This was a cross-sectional descriptive study carried out at Shalamar hospital from 1st May 2018 to 30th April 2019.

### Sample Size

The calculated sample size was 1000 cases undergoing caesarean section with a 2% margin of error, 98% confidence interval taking an expected percentage of caesarean section on maternal request i.e 8%.

### Inclusion criteria

Women of all ages who were pregnant and were going to have caesarean delivery during the study period at Shalamar hospital.

### Exclusion criteria

Women undergoing caesarean section in emergency conditions.

### Method

All these women were given a questionnaire to be filled after taking informed consent. All those women who will be recruited according to inclusion criteria will undergo detailed history and examination. Data will be collected on a preformed questionnaire filled by the doctor on duty. Informed consent will be taken before filling in the questionnaire.

### Data Analysis

Data entered and analyzed using SPSS (statistical package for social sciences) version 16. Mean and standard deviation used for normally distributed

quantitative variables. Frequencies and percentages used for qualitative variables. Results tabulated and presented in the form of a pie chart and bar graphs.

## Results

There were 3438 total births during the study period. There were 2380 caesarean sections and 1058 were normal vaginal deliveries. Caesarean section rate was 69%.

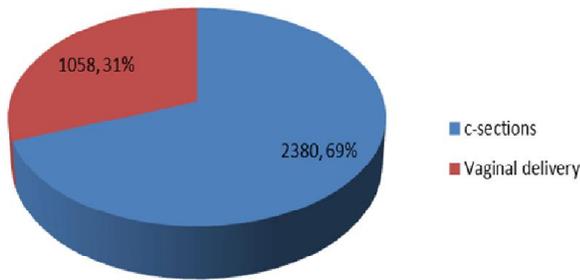


Figure 1: Total no of births during the study period

Figure 2 and 3, show indications of emergency and elective lower segment caesarean section performed during the study period.

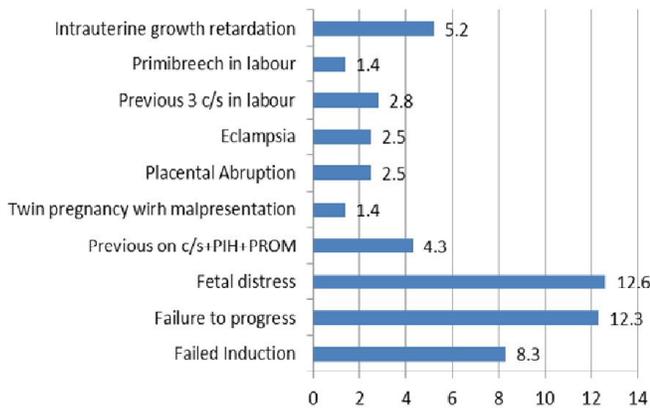


Figure 2: Indications for emergency lower segment caesarian sections

A most common reason for emergency lower segment caesarian section found out to be fetal distress as can be seen in the bar graph. Other indications for emergency caesarean sections were poor progress of labour, failed induction and intrauterine growth restriction.

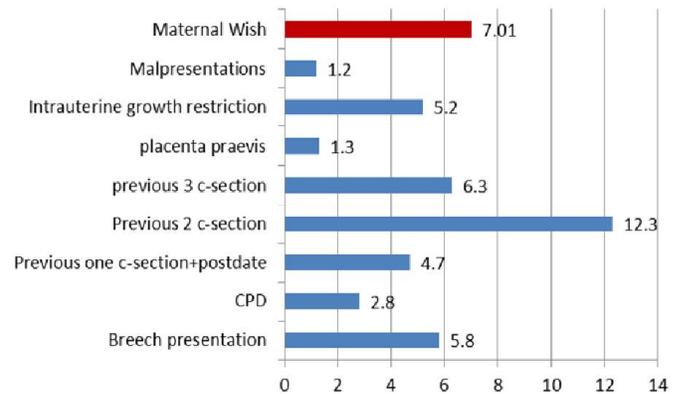


Figure 3: Indications of elective lower segment caesarian sections

Caesarean sections performed on maternal request were 167 out of 2380 caesarian. In elective cases, previous two and three caesarean deliveries and the caesarean section on maternal request were the highest indications.

Table 1: Grading of intubation conditions

Reasons for maternal request	Frequency	Percentage
Previous one c-section	72	43.1
Fear of labour pain	40	24
Bad experience of the previous child-birth	18	10.8
Fear of failed normal vaginal delivery	12	7.2
Fear of trauma to baby	8	4.8
Fear of perineal trauma	3	1.8
Social issues	6	3.6
Bad experience of relatives or friends	6	3.6
Midwife, relatives friends or doctor preference	2	1.2
<b>Total</b>	<b>167</b>	<b>100</b>

Seventy-two women were those who already have a previous caesarean section for different non-recurrent indications and now they don't want a trial of labour and requested for caesarean section (Table 1). Forty women requested for a caesarean section because of fear of labour pains and eighteen were those who had a bad experience of the previous child-birth. Twelve women had fear of failed vaginal delivery and eight women had fear of trauma to baby and three had fear of perineal trauma during the trial of normal vaginal delivery. Six women had some social reasons for caesarean section and six had some bad experience of normal delivery of their relatives or friends and two

were those who were requesting caesarean section because of their family members preferences.

Table 2 shows an association of parity with the maternal wish for caesarean section. P-value is 0.000 which is very significant.

**Table 2: Association of parity with the maternal wish for c-section**

Maternal age	Maternal wish for c-section		
	Yes n(%)	No n(%)	Total
Primi	45(28.5%)	113(71.5%)	158
P1	92(29.7%)	218(70.3%)	310
P2	30(4.0%)	727(96.0%)	757
<b>Total</b>	<b>167</b>	<b>1058</b>	<b>1225</b>

P=0.000\*

Table 3 shows an association of age with the maternal wish, significant P-value shows that both different age groups and parity affect maternal wish for caesarean section.

**Table 3: Association of age with the maternal wish for c-section**

Age	Maternal wish for c-section		
	Yes n(%)	No n(%)	Total
<25 years	38(27.9%)	98(72.1%)	136
25-35 years	101(33.2%)	203(66.8%)	304
>35 years	28(3.6%)	757(96.4%)	785
<b>Total</b>	<b>167</b>	<b>1058</b>	<b>1225</b>

P=0.000\*

## Discussion

Caesarean section rate is progressively increasing in many parts of the world both developed and underdeveloped countries as shown in many previous studies.<sup>13,15,16</sup> In our study, there is also a very high caesarean section rate at our hospital. High caesarean rate is expected at Shalamar hospital. It is a tertiary care hospital, receive referred cases and most of the patients are private. The most common reason for caesarean section in emergency turned out to be fetal distress (12.6%). In a study conducted at Agha Khan hospital, the most common reason for emergency caesarean section was also turned out to be fetal distress.<sup>14</sup>

In our study, 7% of total caesarean sections done during the study period were on maternal demand without any medical indications. Unnecessary caesarean sections do more harm than good.

Caesarean section has higher mortality and morbidity than vaginal delivery. Increase in rate of caesarean section increases fetal morbidity and increased number of neonatal admission to ICU.<sup>17,18</sup>

A similar type of study conducted in Sweden by Ingela Wick land in 2013, 8% of caesarean section turned out to be on maternal request.<sup>19</sup> There were different reasons for these requests and the predominant reason was fear of child-birth. Most common reason of these request in our study is a previous caesarean section which is due to fetal distress or failure to progress in past but in present pregnancy, pregnant women don't have any indication for a caesarean section but she requested caesarean section and don't want the trial of labour mainly because of fear of labour pains.<sup>20,21</sup> This very high rate of caesarean section on maternal request is alarming for health professionals. Most of the request is due to the reasons which we can avoid by proper counselling of the patient.<sup>23,24,25</sup> Health professionals should also encourage the patient, discuss with them fears and give a trial of vaginal birth after caesarean section (VBAC). Forty women had fear of failed vaginal delivery. Few women had fear of trauma to the baby and some had fear of perineal trauma. Women who request caesarean section during their antenatal visits should be told about the benefits of vaginal delivery complications of caesarean section and risks in a subsequent pregnancy.

Limitation of this study is that it only investigates the patient perspective. Further studies are needed to investigate healthcare professional perspectives to control the increasing rate of cesarean section by refusing and counselling women who demand a caesarean section without any medical indications.

## Conclusion

Caesarean section rate is increasing in many developed and underdeveloped countries. Most of the women requesting for caesarean section were those who had previously trial of labour and now they have fear of labour pains. Health professionals can control the caesarean section rate by proper counselling of pregnant women.

## References

1. Anderson, T. (2006). Caesarean section for non-medical reasons at term. The Practising Midwife. DOI: 10.1002/14651858.CD004660.pub2.
2. Nzewi, C., &Penna, L. K. (2011). Caesarean section for maternal request. Obstetrics, Gynaecology and Reproductive Medicine. <https://doi.org/10.1016/j.ogrm.2011.09.004>

3. Kwee, A., Cohlen, B. J., Kanhai, H. H. H., Bruinse, H. W., & Visser, G. H. A. (2004). Caesarean section on request: A survey in the Netherlands. *European Journal of Obstetrics and Gynecology and Reproductive Biology*.  
<https://doi.org/10.1016/j.ejogrb.2003.09.017>
4. Keag OE, Norman JE, Stock SJ. Long-term risks and benefits associated with cesarean delivery for mother, baby, and subsequent pregnancies: Systematic review and meta-analysis. *PLoS Med*. 2018;15(1). <https://doi.org/10.1371/journal.pmed.1002494>
5. D'Souza, R. (2013). Caesarean section on maternal request for non-medical reasons: Putting the UK National Institute of Health and Clinical Excellence guidelines in perspective. *Best Practice and Research: Clinical Obstetrics and Gynecology*. <https://doi.org/10.1016/j.bpobgyn.2012.09.006>
6. Alsayegh, E., Bos, H., Campbell, K., & Barrett, J. (2018). No. 361-Caesarean Delivery on Maternal Request. *Journal of Obstetrics and Gynaecology Canada*. <https://doi.org/10.1016/j.jogc.2017.12.009>
7. H., R. (2015). Why mothers' demand cesarean section in an uncomplicated pregnancy? *International Journal of Gynecology and Obstetrics*.
8. Pakistan Demographic and Health Survey 2017-2018, maternal health care161, delivery by caesarean section, Page No 210.
9. Dweik D, Sluijs AM. What is underneath the cesarean request? Vol. 94, *Acta Obstetrica et Gynecologica Scandinavica*. Taylor and Francis Ltd; 2015. p. 1153-5. <https://doi.org/10.1111/aogs.12692>.
10. CÂMARA R, BURLÁ M, FERRARI J, LIMA L, AMIM JUNIOR J, BRAGA A, et al. Cesarean section by maternal request. *Rev Col Bras Cir*. 2016;43(4). <https://doi.org/10.1590/0100-69912016004002>.
11. Few women wish to be delivered by caesarean section - Hildingsson - 2002 - *BJOG: An International Journal*. <https://doi.org/10.1111/j.1471-0528.2002.01393.x>.
12. Schantz C, Sim KL, Petit V, Rany H, Goyet S. Factors associated with caesarean sections in Phnom Penh, Cambodia. *Reprod Health Matters*. 2016;24(48). DOI: 10.1016/j.rhm.2016.11.009.
13. Rahman H, Pradhan D. Rising trends and changed indications of caesarean sections in Sikkim, India: cause for concern? *Int J Reprod Contraception, Obstet Gynecol*. 2016 Jun 1;1851-6. DOI:10.18203/2320-1770.ijrcog20161676
14. wanyonyi\_2006\_review of caesareans at Aga Khan hospital in Nairobi. *East African Medical Journal*
15. Ji H, Jiang H, Yang L, Qian X, Tang S. Factors contributing to the rapid rise of caesarean section: A prospective study of primiparous Chinese women in Shanghai. *BMJ Open*. 2015; <http://dx.doi.org/10.1136/bmjopen-2015-008994>
16. Ryding EL, Lukasse M, Parys AS Van, Wangel AM, Karro H, Kristjansdottir H, et al. Fear of childbirth and risk of cesarean delivery: A cohort study in six European countries. *Birth*. 2015;42(1). <https://doi.org/10.1111/birt.12147>.
17. Wiklund I, Andolf E, Lilja H, Hildingsson I. Indications for cesarean section on maternal request—guidelines for counseling and treatment. *Sexual & Reproductive Healthcare*. 2012 Oct 1;3(3):99-106. DOI: 10.1016/j.srhc.2012.06.003.
18. Villar J, Valladares E, Wojdyla D, Zavaleta N, Carroli G, Velazco A, et al. Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America. *Lancet [Internet]*. 2006 Jun 3 [cited 2019 Nov 26];367(9525):1819-29. [https://doi.org/10.1016/S0140-6736\(06\)68704-7](https://doi.org/10.1016/S0140-6736(06)68704-7)
19. Sahlin M, Carlander-Klint AK, Hildingsson I, Wiklund I. First-time mothers' wish for a planned caesarean section: Deeply rooted emotions. *Midwifery*. 2013; <https://doi.org/10.1016/j.midw.2012.02.009>.
20. Chu S, Chen Q, Chen Y, Bao Y, Wu M, Zhang J. Cesarean section without medical indication and risk of childhood asthma, and attenuation by breastfeeding. *PLoS One*. 2017;12(9). <https://doi.org/10.1371/journal.pone.0184920>
21. Liu X, Landon MB, Cheng W, Chen Y. Cesarean delivery on maternal request in China: What are the risks and benefits? *Am J Obstet Gynecol*. 2015;212(6). <https://doi.org/10.1016/j.ajog.2015.01.043>.
22. Keag OE, Norman JE, Stock SJ. Long-term risks and benefits associated with cesarean delivery for mother, baby, and subsequent pregnancies: Systematic review and meta-analysis. *PLoS Med*. 2018;15(1). <https://doi.org/10.1371/journal.pmed.1002494>.
23. Tuschy B, Berlit S, Stützer P, Lis S, Schmahl C, Baumgärtner U, et al. Evaluation of psychosocial and biological parameters in women seeking for a caesarean section and women who are aiming for vaginal delivery: a cross-sectional study. *Arch Gynecol Obstet*. 2018;297(4). DOI: 10.1007/s00404-018-4654-3.
24. Kingdon C, Downe S, Betran AP. Women's and communities' views of targeted educational interventions to reduce unnecessary caesarean section: A qualitative evidence synthesis. Vol. 15, *Reproductive Health*. 2018.<https://doi.org/10.1186/s12978-018-0570-z>.
25. Sydsjö G, Möller L, Lilliecreutz C, Bladh M, Andolf E, Josefsson A. Psychiatric illness in women requesting caesarean section. *BJOG An Int J Obstet Gynaecol*. 2015;122(3). DOI: 10.1111/1471-0528.12714.