



CAESAREAN SECTION; INDICATIONS AND RATE OF CAESAREAN SECTION IN PRIMIGRAVIDA

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ABSTRACT ... Background: All over the world the rate of caesarean section is increasing day by day due to multiple factors and Pakistan is no exception to it. According to World Health Organization (WHO) the rate of caesarean section varies from 5% to 15%. This rate of C-section is acceptable to WHO and is considered as justifiable which differs from country to country due to diverse socio economic conditions, literacy rate, medico legal issues as well as availabilities of health care facilities to patients and especially antenatal facilities. **Objectives:** To analyze the rate and indications of caesarean section in primigravida. **Study Design:** Descriptive study. **Setting:** Government Sardar Begum Hospital Sialkot. **Period:** 1st January 2017 to 31st December 2017. **Materials and Methods:** Inclusion and exclusion criteria were made and all patients which underwent caesarean section were included in the study and all patients delivered vaginally were excluded from the study. A proforma was designed specially to record the different parameters/information of patients and indications of c-section. Data was analyzed using SPSS version 22. **Results:** Total caesarean section rate was 40 %, out of which 30.87% were Primigravida and 69.13% were multigravida. Failure to progress was the most common indication and only in 0.47% patients, obstructed labour was an indication of C-section. **Conclusion:** In primigravida women the prevalence of Caesarean Section is increased which also lead to enhance repeat caesarean section chances and it is not free of risk. It is risk factor for placenta previa, further, repeat caesarean section adherent morbidly placenta which increased the chances of huge PPH and acute maternal morbidity and mortality.

Key words: Caesarean Section, Indication, Multigravida, Primigravida.

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INTRODUCTION

In case of fetal and maternal distress in obstetrical practice the caesarean section demonstrated as a life saving procedure that is why it is the general and oldest obstetrical operation all over the world.¹ In different countries according to different signs/indications this surgical operation done for handling complications. The signs of caesarean section influenced by request of delivery without pain with continuous electrical fetal heart rate monitoring, epidural analgesia, in cases of fetal hypoxia fetal scalp blood sampling, busy schedule of surgeons and children long term follow-up in developed countries where excellent facilities for heal care are available to pregnant female like regular checkups, antibiotics, ambulances for timely referrals, tonics and well instrumented hospitals.²

The ideal range of caesarean section rate 5% to 15% has given by the World Health Organization (WHO). Under use of helpful surgical operation caesarean section done in less than 5% and not permissible more than 15% rate of caesarean section, this study shows moderate of this opportunity.³

In Pakistan facilities for health care are limited like antibiotics, sterilization, and service of ambulance, hospitals and safe anesthesia. Especially in rural areas of Pakistan all pregnant women are not getting equal antenatal care as well as proper timely checkups. In rural areas majority of pregnant female preferred to give birth at home by traditional birth attendant (TBA) and in some cases by untrained persons. There are few numbers of female who going to basic health units (BHU) and RHU for antenatal care. While

in urban areas the situation is different. The rate of caesarean section increased in Pakistan day by day but has different causes from developed countries.

The aim of our study was to evaluate the signs and prevalence of caesarean section in Primigravida, enable us to find out some avertable causes to decrease the rate of caesarean section.

MATERIALS AND METHODS

This is a descriptive study which was conducted at Government Sardar Begum Hospital Sialkot from 1st January 2017 to 31st December 2017. During twelve months, 3342 patients were delivered. Out of these patients 2708 were delivered by caesarean section. All patients were included in this study who undergo for caesarean section. A special designed proforma used to record the information and rate and signs were calculated. The data was collected from the record of hospital. Caesarean section prevalence and signs in primigravida were calculated / evaluated.

RESULTS

During twelve (12) months, 3342 patients were delivered. Out of these patients 2708 were delivered by caesarean section i.e. 81%. 634 patients were vaginally delivered 19%. 576 (68%) patients were delivered by emergency caesarean section and 260 (32%) patients were delivered by elective caesarean section. The percentage of referred cases was 75% and our booked cases were 25%. 90% delivered by emergency caesarean section out of referred cases. The primigravida patients were 836, the rate of primigravida patients was calculated as 30.87% and 1920 patients were multigravida rated as 69.13%, so that the prevalence of 1st caesarean section was 30.87 percent and repeat caesarean section was 69.13 percent. The most general sign was failure to progress 262(31%) and 2nd general sign was fetal distress 22%. These two signs comprises on 53% of all cases of caesarean section. Fail induction in 120 (14%) patients was the next general sign and malpresentation in 98 (11.7%) patients. In 70 (8.3%) patients, caesarean section was done for hypertensive disorders. Fewer general indications were patients request

24 (2.87%), chorioamnionitis 18 (2.1%), precious pregnancy 14 (1.67%) and 4 (0.47%) obstructed labour.

	Cases	Percentage
Primigravida	836	30.87%
Multigravida	1872	69.13%
Total	2708	100%

Table-I. Caesarean section (C.S) rate

Procedure	Cases	Percentage
Emergency caesarean section	576	68.89
Elective caesarean section	260	31.10
Total	836	100.0

Table-II. Rate of caesarean section in primigravida

Failure Progress	262	31 %
Fetal Distress	186	22 %
Failed Induction	120	14 %
Malpresentation	98	11 %
Hypertensive Disorder	70	8.3 %
Request of Patients	24	2.87 %
Chorioamnionitis	18	2.1 %
Precious Pregnancy	14	1.67 %
Obstructed Labour	4	0.47 %

Table-III. Caesarean section indication

DISCUSSION

In our study the caesarean section rate is very high as 81%, the optimal caesarean section rate is 5% to 15% according to World Health Organization recommendations. In India, the caesarean section rate is 23.97% according to another study.⁴ A Study conducted at China also show the high caesarean section rate as 54.90%.⁵ The study conducted by Haider et al demonstrate caesarean section rate of 67.67%.¹⁰ In our study most probably the caesarean section rate is high due to increased referral rate from peripheral areas and dispensaries which cannot handle emergency due to lack of well equipped and repeat caesarean section and elective caesarean section, because of fewer facilities of feto maternal monitoring for vaginal birth after CS (VBAC) and increase the frequency of primary caesarean section.

In this study, primigravida patients were 836 (30.87%) and multigravida patients were 1872 (69.13%). As compared to another study

conducted at India which primary section rate is 41.99%⁴, the prevalence of caesarean section is less in our study. Another study in Nigeria shows the prevalence of caesarean section as 44.6%³, this is because of reason we have departmental protocol to give excellent trial of labour in primigravida after clinical pelvic evaluation and estimation of fetal weight through ultrasound and clinically. We persuade patients with cord around neck instead of doing elective caesarean section, to detect meconium, we use intermittent fetal heart rate monitoring, partogram, early artificial rupture of membranes (ARM) in active phase of labour, emergency LSCS and elective selection on careful basis. But caesarean section rate in primigravida as 30% shows in a local study at Lahore Sharif Medical Complex¹, another similar study in Saudi Arabia which shows 32%.⁶ There were emergency caesarean section rate 68.89% and 31.10% of elective caesarean section.

The emergency caesarean section rate is higher in our study due to we received patients of high risk referred from all over the Punjab. Majority patients with low risk delivered at primary as well as secondary health care hospitals. The patients who need immediate care, intensive care unit, specialist and nursery care were referred to us due to which majority patients ended in emergency caesarean section and landed in acute emergency. Our emergency caesarean section rate outcomes are comparable with a study conducted at India in which emergency caesarean section rate is 74.2%⁴ and also with a local study conducted at CMH in which emergency caesarean section rate is 65.84%.⁷ The local study conducted by Gul Rana and Saima shows 37.3% and 20.4% emergency caesarean section rate and it shows low rate than our study.⁸

Failure to progress 262 (31%) is the most general sign of caesarean section, in our study, it is very high due to a number of patients were un-booked and referred and not accurately evaluated and selected. There were also some dai handled cases. 15% to 20% indication in a study at Ganga Ram Hospital⁸, in Saudi Arabia 18.8%⁶ and 18.29% in Sharif Medical College.¹

Fetal distress 22% is next most general sign. It is

due to use of PGE-1 series, a cheap drug available in Pakistan and late referred from remote areas. It is also because of malpractice by untaught person as traditional birth attendant (TBA) S/L and orally. Due to lack of services of ambulance there is delay in transportation. This sign rate is compared with study in Ganga Ram Hospital⁸ 23.8% to 33.3%. 30% rate of fetal distress in Saudi Arabia.⁶ 7.7% rate of fetal distress shows in a study conducted at Mumbai India. Failure of induction is another significant sign which is 14% as in our setup PGE-2 is not readily available due to its cost and cold chain maintenance. We only use PGE-1 which is easily available in our setup. In routine repeat induction was not done in our department because less availability of surveillance tools like fetal scalp sampling, continuous fetal heart rate monitoring. Gynecologists are on call and not available all the time and labour class patients deals in this hospital and in case of complications we face blaming and harsh attitude of patient's attendants. Anyhow, in a study at Mumbai this rate is only 2.9%⁹ and Government Medical College Latur India.⁴ Due to failed induction, the rate of caesarean section is 11.7% in a study of Saudi Arabia and it is comparable to this study.

Obstructed labour was very less as 0.47% in our study because we use partogram to monitor the patients and in emergency operation theaters & anesthesia coverage we have excellent facilities twenty four hours residential medical officers and on call gynecologist consulted as well as senior registrar. The frequency is high in India study at Latur as 3.1%⁴ and in Ganga Ram Hospital local study 1.69%.⁸

Pakistan is a developing country and there are insufficient health care facilities for common peoples especially in rural areas. Mortality and morbidity associated with pregnancy is one of the highest in Pakistan in comparison to other developing countries. Due to fear of repeat caesarean section patients lost from hospital and delivered by untaught as well as inexperienced people at home. In this study, we recommend to launch proper anti-natal campaign at all BHUs and other primary health care facilities which are the places of first contact of these pregnant patients with

health service providers for guidance and early booking of pregnant patients. Proper training be arranged at basic health units (BHU) for traditional birth attendant (TBA) regarding antenatal care, categorization of high and low risk pregnancies and early referrals for appropriate management. Medicine used for induction of labour and miscarriage like prostaglandins be placed in list of control medicines and their availability to quacks and unethical practitioners be made unmanageable.

CONCLUSION

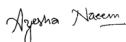

This high level of mortality and morbidity linked with pregnancy adversely affect the existing fragile economic condition of the country. In primigravida caesarean section rate is increasing in Pakistan which results in enhanced rate of caesarean section in multigravida. Multiple C-sections are linked with very serious complications including placenta previa which has bad obstetric outcome. Due to anxiety and fear of repeated C-sections, many patients become an easy trap for untrained and unethical practitioners and quacks and finally land in fatal complications.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Ayesha Naeem	Data collection.	
2	Ashba Anwer	Writing of manuscript and compiling results.	
3	Saadia Sajjad	Guidance in writing the manuscript.	