FREQUENCY OF CAESAREAN SECTION AT A TERTIARY CARE HOSPITAL

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ABSTRACT

Background: Caesarean section is one of the commonly performed surgical procedure in obstetric care. High caesarean section rate may have implications due to cost, complications for mothers and child. **Objective:** To determine the frequency of caesarean section at tertiary care hospital. **Methodology:** In this cross sectional study sample size was 600 patients out of 363 underwent caesarean section. The data was collected from two institutions, Shahida Islam Teaching Hospital and District Headquarter Lodhran. All cases of institutional deliveries (booked and un-booked) via caesarean section during the defined study period were recorded as an inclusion criteria while there was no exclusion criteria. Data was collected based on non-probability convenient sampling method. A statistical analysis of collected data was done through SPSS software version 21. **Results:** In this study, it was found that the rate of caesarean section was 60.5% and 62% were elective Caesarean Section cases. **Conclusion:** The frequency of caesarean section is very high in our tertiary care hospital.

Keywords: Caesarean section, Frequency, Delivery

INTRODUCTION

Caesarean section is a major abdominal surgery which may be life saving for mothers and fetus and offers great benefit in situation where there is obstructed & failed progress of labor.[1] However, is associated with immediate maternal and prenatal risk and may have implications for future pregnancies.[2-5] In order to keep the rate of caesarean section at a low that is according to WHO recommendations, guidelines must be established and implemented for caesarean section. There is increasing trend in the rate of caesarean section in both developed and developing countries.[6] WHO states no additional health benefits associated with caesarean section if its rate goes above 10–15%.[8,9]

Although the caesarean section rates have increased over the last decade, the major clinical indications have remained the same, namely fetal distress, failure to progress in labor/failed induction, previous caesarean section and breech presentation.[1]

Pakistan has its own unique trend about caesarean section. The rate of caesarean sections are increasing in Pakistan as they are increasing in the other regions of the world but the reasons might be different as compared with the developed region. This study was aimed to determine the rate of caesarean section in this rural area of south Punjab of Pakistan.

METHODOLOGY

Study Design: Cross sectional study. This was carried out from from 1st August 2016 to 31st March 2017. This study was carried out on 600 study subjects, in the department of Obstetrics and Gynecology at Shahida Islam Teaching Hospital (SITH) and District Headquarter Lodhran.

Data Collecting Tools: Data from the record register of Obstetrics and Gynecology department was collected. Inclusion Criteria: All the cases undergone the delivery at obstetrics and Gynecology department. Exclusion Criteria: Delivery with incomplete records. Statistical analysis of the data was done through SPSS version 21.0 for obtaining descriptive statistics like frequency of caesarean section as percentage.

RESULTS

This study showed that total numbers of women delivered through caesarean section were 363 out of 600, with caesarean rate of 60.5% of this study. (Figure I)

Table I : Elective versus Emergency caesarean section

Type of caesarean	Number of CS	Percentage
Elective	226	62.25
Emergency	137	37.75
	363	100

Table I shows that 226 (62.25%) cases underwent elective caesarean section, while 137(37.75%) cases as emergency CS.

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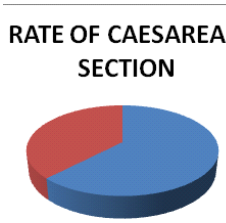
Figure I: Frequency of Caesarean section



DISCUSSION

The study was aimed to analyze the rate of Caesarean Section (CS) in women of a rural area of South Punjab presenting, at Shahida Islam Teaching Hospital and District Headquarter Lodhran for delivery. It was found that 60.5% women in this region underwent CS. The indications that contribute to this high rate may be previous caesarean section after fetal distress with oligohydramnios, failed progress of labor, antepartum hemorrhage, breech presentation of fetus, preterm rupture of membrane, post date, cephalopelvic disproportion, pregnancy induce hypertension and gestational diabetes.[14-20]

Although there is an upward trend of cesarean deliveries all over the world, cesarean section rate in our study was 60.5%, which is a little higher than 41.96% by Jehanara Rafiq et al,[14] much higher than 35% by Yousaf et al,[15] in the region of Hyderabad, it was also much higher than another study from Peshawar by Raees et al[16] which is 22%, and 25.3% by Okezio et al,[17] from Nigeria. This was probably because majority of the pregnant women of our dependent families were delivered at home by TBA/LHV's, or being followed in nearby private nursing homes without any obstetrician and specialized care, and then lately referred to us near term having one or the other risk factor, or already had a trial of labour, or mishandled by dai and developed complication. So the cesarean section was obviously high in these high risk and un-booked case. A significant rise in the rate of CS has been noted in the last few decades worldwide and this rise is not only constrained within the developed countries but the underdeveloped countries are also showing same rate.[11,18,19] This study also show the significant variation from WHO standard. Based on a survey by the World Health Organization (WHO) on methods of delivery during the period 2007–8, the rates of CS in China and other Asian countries were 46% and 27%, respectively,[20] despite the fact that in 1985, WHO recommended that no region should have a CS rate over 10–15%.[11,21,22] This situation exists not only in China and Asia, but also in many other countries in Latin America and the Caribbean.[11,23] A widespread debate on the reasons for the progressively increasing rate of CS is on in both the medical and lay press. In recent years, an increasing number of women requested delivery by elective CS without a valid medical indication termed as caesarean delivery on maternal request (CDMR) several studies have shown that this phenomenon may be one of the drivers of the rising CS rate.[24-28]

According to one study by Saman et al,[29] a high rate of cesarean section at CMH Rawalpindi in 2011-12 showed (56%), Holy Family Hospital Rawalpindi in 2008-45%, Ayoub Medical College in 2006-07-35%, Ganga Ram hospital in 2000-01-21%,[29] which are in accordance with this study. The result of above discussion showed there has been a steady increase in the rates of CS in both developed and developing countries although there exist a wide variation in CS rates between two owing to limited resources in the developing nations. In Pakistan, the caesarean section rates are difficult to calculate as most of the births take place at homes. Only complicated cases or those having good access to health centers avail this facility.[30] This is also a major reason for increased rate of caesarean in rural areas. The limitation of this study is that it is a hospital based study, however it sheds light on an important issue.

CONCLUSION

The frequency of caesarean section was high which is four times of WHO standard. There is a possibility of keeping the rate to minimum by reducing number of primary cesarean sections, by proper prenatal and perinatal counseling of the patients, proper monitoring of maternal and fetal parameters, careful selection of the patient who have previous caesarean in future pregnancies and promoting institutional deliveries.

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Article Citation: Gondal A, Bukhari S, Muhammad TK, Karim S. Frequency of Caesarean Section at a Tertiary Care Hospital, JSZMC 2017;8(3): 1248-1250.