

Prevalence of caesarian section among primigravida women in Shahr-Ara teaching hospital Kabul, Afghanistan

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Abstract. Caesarian section is defined as a surgical procedure carried out on the abdomen and uterus of the mother to deliver one or more than one fetus and most of the time it is carried out when the survival of mother or fetus is in danger and sometime it is carried on mothers own choice.

Aim: The aim of this study is to know the prevalence of caesarian section among the primigravida women visiting shahrara teaching hospital.

Method. This research was done as descriptive cross sectional study such that the prevalence of caesarian section among primigravid women who visited shahrara teaching hospital at the first six months of the year 1396.

Result: In this research caesarian section was done on 29 women making 38.15 % with gestational age of 28 weeks out of total 76 primigravid women. Median age was 23.34±4 (±SD), age range was 17-35 years, and majority of the case was at ages 21-25 years.

Average age of the newborn was 3.88±0.436(0.436(±SD) kilogram, and weight range was 2-4.5 kilgram. Among 75.86% of primigravid women caesarian section was done on emergency bases and about 3.44 percent of women experienced hemorrhage during surgery. The percentage of babies with low APGAR score 13.79 percent. 27.58 percent of women had oligohdromnios and 17.24 percent had premature rupture of amniotic membrane (PROM). Incidence of breech presentation was about 6.89% and 24.13 percent had cranio pelvic disproportion (CPD). 3.44percent had twin pregnancy.

Conclusion: It was concluded in this research that the prevalence of caesarian section among primigravid women was 38.15 percent and the incidence increases at age range of 21-25 years. Although caesarian section is considered a lifesaving procedure for mother and newborn it must be carried out on logical and appropriate bases among the primigravid women.

Keywords: caesarian section, pregnant women, prevalence, primigravid, Kabul, Afghanistan.

Background: Pregnancy and birth is considered a normal process among women but 10% of deliveries can be risky processes. The main goal of delivery team is safe delivery, birth of a healthy newborn with maintaining good health of mother and obstetricians have achieved these goals thanks to the developments in recent years. Maternal and newborn mortality and morbidity have decreased due to pre and on delivery care and caesarian section is no exception to this rule. It is carried out at a time when vaginal delivery is not possible and there is a risk to the life of mother, newborn or both.

Caesarian section is defined as the delivery of the fetus and placenta through an incision on abdominal wall and uterus and is one of the most sensitive and most important health services in all societies. As each service should be appropriate, cost effective and accompanied by least physical and mental complications, caesarian section as a mean of delivery is not exception to this rule.

Although the indications of caesarian section are related to mother, newborn or both, more than 80 percent of experience degrees of fear of delivery in which 6-10 percent of this fear give rise to serious complications among women and leads to increased incidence of emergency caesarian section and also leads to increased demand of caesarian section by mothers. Fetal distress, abnormal fetal presentations, and dystocia also can be reason for caesarian section. Another indication wish has prevailed in recent years is the demand of this procedure by the patient herself and the prevalence increase day by day among people.

As a whole the rate of caesarian section is on the rise in different regions of the world and this rise is specially seen in primigravida women. Primigravida is important because of its adverse effects but unfortunately these adverse effects are not considered important and factors effecting this include lack of lower level of education, unawareness about the importance of antenatal care, lack of health services and lack of access to referral system.

The rate of caesarian section varies among the primigravid women in different parts of the world. The main reason for this are fear of vaginal deliveries and fetal distress and also obesity is also an important factor in the rise of caesarian section among primigravida women. In a study carried out in the department of gynecology and obstetrics, Liaquat National Hospital and college, Karachi, Pakistan the incidence of caesarian section was 57.4 percent.

In a study done in department of gynecology and obstetrics, institute of medical sciences, Punjab, India, the prevalence of caesarian section among primigravid women was 67.30 percent.

Also in another study performed in the department of gynecology and obstetrics, Gujarat Medical College and Hospital, India at 2016 the prevalence of caesarian section among primigravid women was shown to be 49.7 percent.

Also the study done in department of gynecology and obstetrics, Sharif Medical College, Lahore, Pakistan the prevalence of caesarian section was about 30 percent.

In a study carried out in Qassim University, Saudi Arabia the prevalence of caesarian section among primigravid women was about 32 percent.

Study method: this study was done as descriptive cross sectional method in a period of six months of the year 1396 carried out at Shahrara Hospital and the files of primigravid women were collected and analyzed by SPSS v 23'.

Whole of the primigravid women with above 28 weeks of pregnancy who visited the hospital in the six months research period were included in the study.

Aim: To find out the prevalence of caesarian section among primigravida women visited Shahrara Teaching Hospital.

Results: In the first six months period a total of 76 primigravid women visited the Shahrara Teaching Hospital and among 29 of them making 38.15 percent the caesarian section was performed, the average age was

23.34±4(±SD), age range was 17-35 years, average weight was 3.088±0.436(±SD) kilogram and weight range was 2-4.5 kilogram.

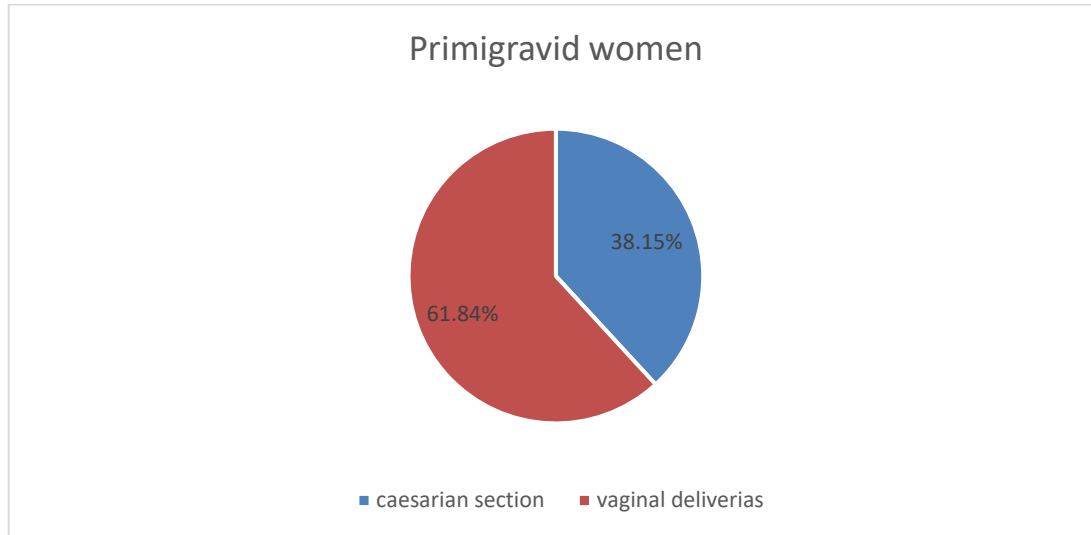


Figure 1: Percentage of caesarian section among primgravida women.

Out of total 76 primigravid women 26 (38.15%) of them undergone caesarian section.

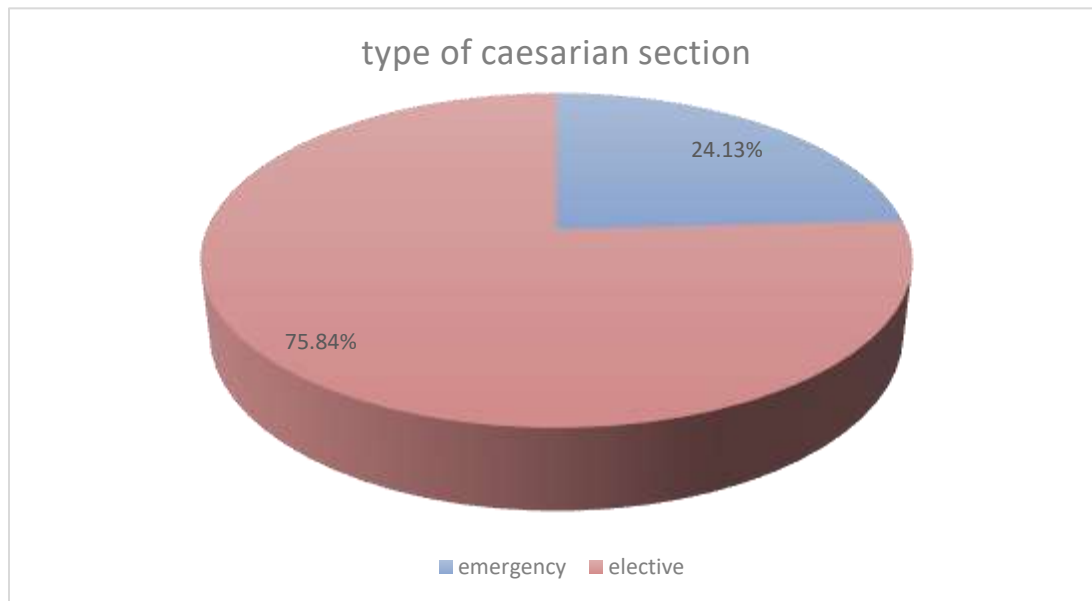


Figure 2: Percentage of types of caesarian section among primigravida women.

Among primigravida women 75.86% of them undergone emergency caesarian section.

Table 1: percentage of maternal complications during caesarian section.

Bleeding during surgery	No	Percentage
Bleeding	1	3.44
Non bleeding	28	96.56
Total	29	100

3.44 percent of primigravida women experienced bleeding during surgery.

Table 2: percentage of fetal complications during surgery.

Low APGAR score	No.	Percentage
Present	4	13.79
Absent	25	86.20
Total	29	100

Out of total 29 primigravida women who undergone caesarian section 13.70 percent of them gave birth to babies with low APGAR score, 31.03 percent had fetal distress, 8 of them had oligohydromnios, 17.24 percent had premature rupture of amniotic membrane (PROM), incidence of breech presentation was 6.89 percent and 7 cases making 24.13 percent had cephalopelvic disproportion (CPD).

Table 8: percentage of twin pregnancies among primigravida women.

Twin pregnancy	No.	Percentage
Present	1	3.44
Absent	28	96.55
Total	29	100

As shown in the table out of total 29 cases of caesarian section on primigravida women who were under study only one of them which makes 3.44 percent of total gave birth to twin pregnancy.

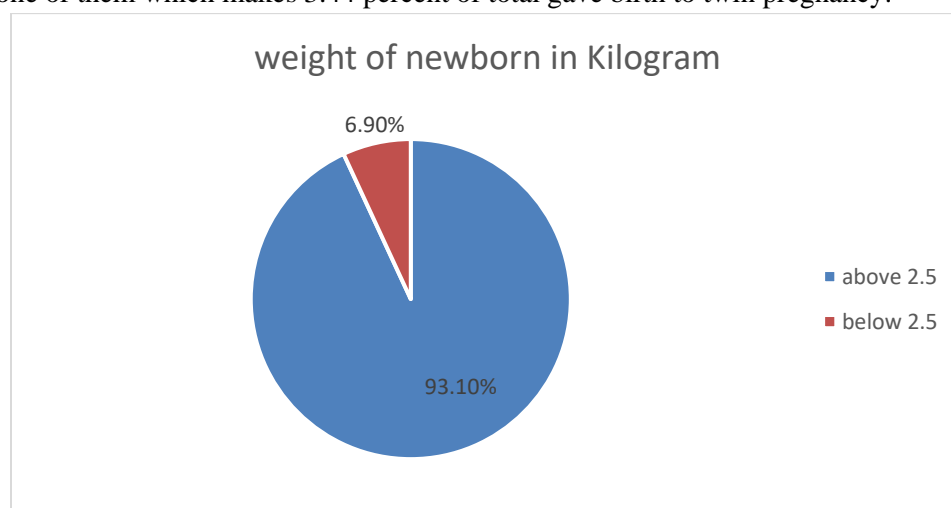


Figure 3. Percentage of weight of newborn in Kilogram

Discussion: The present research which took place for a period six month of the year 1396 in shahrara teaching hospital, shows that out of total 76 primigravida women having pregnancy above 28 weeks, 29 of them making 38.15 percent undergone caesarian section.

Meanwhile in a study carried out in the gynecology and obstetrics liaquat national hospital and medical college, Karachi, Pakistan the prevalence of caesarian section among primigravida women was shown to be 57.4 percent.

In a study carried out in institute of medical sciences, Punjab, India, the prevalence of caesarian section was shown to be 67.30 percent which is a different data.

Also in another study done in Gujarat medical college, India, the prevalence of caesarian section among primigravida women was shown to be about 49.7 percent.

A study carried out in GBoko General Hospital in the year 2017, the prevalence of caesarian section among primigravida women was about 29.090 percent.

In a study done in the year 2007 at Ayub Medical College Abbottabad the prevalence of caesarian section among primigravida women was shown to be about 37.1 percent.

Also in a research carried out in the department of gynecology and obstetrics, Sharif medical college Lahore, Pakistan, the prevalence of caesarian section among primigravida women was about 30 percent.

It is found from the above studies that the prevalence of caesarian section among the primigravida women varies greatly in different regions of the world and even in different regions of the same country. The reason for the above differeces is exactly not known but some of the probable factors are age of marriage, economic conditions, place of birth, level of education, infertility history, number of pregnancies, as a tool to escape labor pain, women volunteering for caesarian section, and the minimal use of delivery instruments like forceps and vacuum.

according to age 72.41 percent of these women were 21-25 years, 17.24 percent were 26-30 years, 6.89 percent less than 20 years, and 3.44 percent were above 30 years. Majority of the cases were at the ages of 21-25 years and least cases were above 30 years. In world literatures study carried out by Jaspinder Kauk and his colleagues in institute of medical sciences, Punjab, India, section, also shows the majority of cases of caesarian among primigravida women was shown to be 51.92 percent which correlates with the study done.

Incidence of caesarian section among primigravida women according to age shown in research indicates that 93.10 percent of newborns were above 2.5 kilograms and 6.89 percent were below 2.5 kilograms.

The study done in institute of medical sciences, Punjab, India correlates with the above study as in this study 55.76 percent of newborns were above 2.5 kilograms.

According to the mode of caesarian section this study correlates with the study done at 2016 in the department of gynecology and obstetrics, Gujarat medical college and hospital, India as this study also shows the majority of cases were done as emergency caesarian section (85%). According to fetal complications during caesarian section 13.79 percent fetal complication were seen among primigravida women which correlates with the study done in Misrata central hospital, Libya in 2015, the fetal complications during surgery was 13.1 percent.

According to the incidence of fetal distress among primigravida women 9 cases making 31.03 percent had fetal distress which correlates with the study carried out in 2012 in Prince Zaid ben Al Hussain hospital in which the incidence of fetal distress recorded was about 30 percent.

According to the incidence of PROM, 17.24 percent had premature rupture of amniotic membrane which is in contrast with the 2016 study in the department of gynecology and obstetrics, Gujarat Medical College and hospital, India (8.23%). The reason behind this maybe poor nutrition, intrauterine infections, multiple

pregnancies, uterine cervical incompetence, polyhydromnios, and maternal infections like urinary tract infections, lower genital infections, sexually transmitted diseases in our country.

Limitations: as the number of samples or sample size in this study was small and was related to a single place, there may be a difference with the other hospitals of the country. Also if the study is carried out in a large population, there may be changes in percentages of the study.

Conclusion: out of total 76 primigravida women who visited the shahrara teaching hospital during study, 29 of them undergone caesarian section.

The prevalence of caesarian section among primigravida women was 38.15 percent and majority of cases were in the age range 19-25 years, 75.86 percent had emergency caesarian section, and most common cause of caesarian section among primigravida women was fetal distress.

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