Original Article

Frequency and Awareness of Ante-Natal Care to Avoid Primary Cesarian-Section Among Multi-Parous Women of Karachi

Tafazzul H. Zaidi and Kiran Mehtab

ABSTRACT

Objective: To assess lack of antenatal visits as a reason of Primary Cesarean-Section in multi-parous women with previous S.V.D.

Study Design: Cross sectional study

Place and Duration of Study: This study was conducted at the Department of Community Medicine, Jinnah Postgraduate Medical Centre, Civil hospital and Sobraj Hospital, Karachi from May to August 2017.

Materials and Methods: A study was conducted on a sample of 130 women (undergone Primary cesarean section with previous S.V.D) taken through non probability purposive sampling from 3 hospitals of Karachi namely, Jinnah Postgraduate Medical Centre, Civil hospital and Sobraj hospital. A structured self-administered questionnaire was developed. An informed verbal consent was taken and a pilot study was conducted to assess the validity of the questionnaire. The questionnaire was then distributed, got filled, data was analyzed using SSPS version 16.0, with 95% confidence interval and 0.05 p-value as statistically significant.

Results: Out of the 130 primary caesarean deliveries during the study period 35.4% were indicated for mal-presentation, 25.4% for antepartum hemorrhage 20.0% for fetal distress, and 16.2% for pre-eclampsia. 73.8% (p-value= 0.035) patients had hypertension during pregnancy. When asked if these patients experienced any swelling in the hands or feet's during that time, a total number of 49.2% (p-value= 0.04) complained they had. 70.8% (p-value= 0.023) patients gave the history of fits during pregnancy. Antenatal clinics were frequented by only a mere 40.8% (p-value=0.005) of the patients. Among these 130 patients, reduced fetal movements were felt by 54.6% (p-value= 0.006) of the total consensus. A total of 52.3% (p-value= 0.00) were informed by their health worker about the abnormal position of their baby. It was also noted that 53.1 % (p-value= 0.00) of the patients were told by their doctor that they have a low lying placenta, and 56.9% (p-value= 0.00) of the total had an episode of severe vaginal bleeding at any time of pregnancy.

Conclusion: Previous vaginal delivery gives the family and the doctors a false sense of security that overshadows the need for vigilant antenatal and intra-partum care. The method of previous deliveries shouldn't be the primary criteria upon which the current delivery is decided. Rather, every pregnancy should be treated with as much concern and care as the first. (The physicians should display obligation in such circumstances and assess the pregnancy thoroughly before heading towards a massive scheme. Rather than promoting the doctors' own interests and convenience, Mothers' health and wellbeing should be considered the first priority and every possible measures should be taken to ensure that. The antenatal care should be the utmost preference and necessary investigations should be practiced. WHO recommends a minimum of four antenatal visits, comprising interventions such as tetanus toxoid vaccination, screening and treatment for infections, and identification of warning signs during pregnancy? With all the adequate steps taken, the rate and reasons of cesarean sections could be monitored and restricted hence progressing to initiate a huge stride for maternal and fetal health.

Key Words: Ante- Natal Care, Cesarean section, SVD, Antenatal care, Multipara, Mal-Presentation, Antepartum Hemorrhage

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INTRODUCTION

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Cesarean Section describes a procedure in which the fetus is delivered through incisions in the maternal abdominal and uterine walls. With the increasing risk of fetal mortality, C-section seems an appropriate choice to deal with maternal and fetal complications in a high-risk pregnancy. A study in India showed that the total cesarean rate in 2013 was 29.46%[1]. The rate of cesarean section in US in 2010 and 2011 was 32.8%[2]. According to a study in Pakistan, the rate of cesarean section was 27.94%, out of which 14.14% were elective and 85.86% were emergency C-sections[3]. These rates are significantly higher than the appropriate maximum

rate of 15%, above which more harm is done than good[4]. A previous concept that primary C-Section is of no much concern in parous women was disproved in a recent study[5] which showed the rate to be 13.3% against 18% in nulliparous women, which is not much different. In fact, increase in cesarean section rates is consistent with increase among parous women[1]. Dystocia with cephalopelvic disproportion (CPD) is the most important indication for nulliparous women, whereas placenta previa, hypertensive vascular disorder, mal-presentations and ruptured uterus are more common causes for C-section in multiparous women[6].

Multipara refers to those women who have delivered once or more after the age of viability. Dr. Solomon stated in his paper 'The dangerous multipara': "My object in writing this paper and giving it a sensational title is to remove if possible once and for all, from the mind of the reader, the idea that a primigravida means difficult labour, but a multipara means an easy one.[7] Primary caesarean section in the multipara means first caesarean section done in patients who had delivered vaginally once or more. Mainly the baby and the placenta are responsible for caesarean section in multipara[1]. It is a common belief amongst public that once a mother delivers her child or children normally, all her subsequent deliveries will be normal. As a result such multiparous mothers often neglect routine antenatal checkup[8].

Some indications for Primary Cesarean Section are:

- Fetal Mal-presentation: This refers most commonly to breech presentation, but also means any fetal orientation other than cephalic.
- Antepartum Hemorrhage: APH is bleeding from the genital tract during pregnancy from the 20th week till the onset of labour. It is caused by placental abruption or placenta previa.
- Non Reassuring EFM (electro fetal monitoring) STRIP: The fetal heart rate monitor pattern suggests the fetus may not be tolerating labour, but commonly this is a false-positive finding.

There is a false notion that multiparous women are less inclined to have a complicated pregnancy and delivery in comparison with a primipara, and this has primarily led to lack of care and antenatal follow up among them which ultimately directs them on the path of developing more severe complications at the time of delivery.

Cesarean delivery is one of the most commonly performed operations today[9]. Primary caesarean section in a multipara means first caesarean section done in the patients who had delivered vaginally once or more. Mainly the baby and the placenta are responsible for caesarean section in multipara[10].

MATERIALS AND METHODS

A cross sectional study was conducted on a sample of 130 women (multi-parous) (undergone Primary caesarean section) taken through non probability purposive sampling from 3 hospitals of Karachi namely, Jinnah Postgraduate Medical Centre, Civil hospital and Sobraj hospital, within a period of 4 months from May to August 2017.An informed verbal consent was taken and a pilot study was conducted to assess the validity of the questionnaire. A self-administered structured questionnaire was then distributed, got filled, and the data was analyzed using SSPS version 16.0, with 95% confidence interval and 0.05 p-value as statistically significant.

RESULTS

Out of the 130 primary caesarean deliveries during the study period 35.4% were indicated for mal-presentation, 25.4% for antepartum hemorrhage 20.0% for fetal distress, and 16.2% for pre-eclampsia. It was noted that 73.8% (p-value= 0.035) patients had hypertension during pregnancy. When asked if these patients experienced any swelling in the hands or feet's during that time, a total number of 49.2% (p-value= 0.04) complained of this. 70.8% (p-value= 0.023) patients gave the history of fits during pregnancy. Antenatal clinics were frequented by only a mere 40.8% (p-value=0.005) of the patients. Among these 130 patients, reduced fetal movements were felt by 54.6% (p-value= 0.006) of the total consensus. A total of 52.3% (p-value= 0.00) were informed by their health worker about the abnormal position of their baby. It was also noted that 53.1 % (p-value= 0.00) of the patients were told by their doctor that they have a low lying placenta, and 56.9% (p-value= 0.00) of the total had an episode of severe vaginal bleeding at any time of pregnancy.

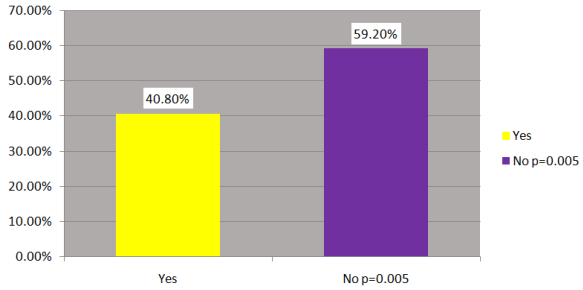

Figure No.1: Did you go for antenatal visits?

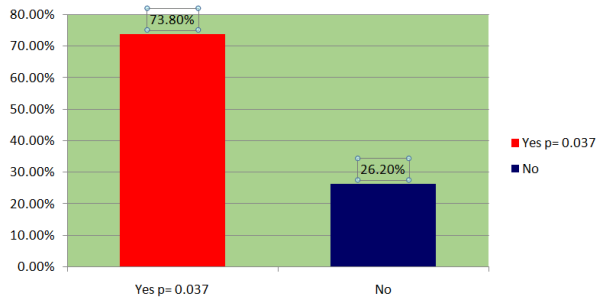

Figure No.2: Do you have hypertension during pregnancy?

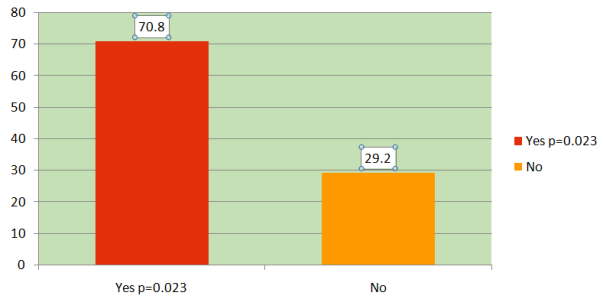

Figure No.3: Did you ever have fits during pregnancy?

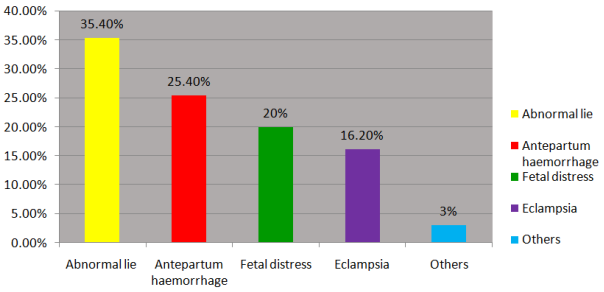

Figure No.4: What was the reason told by the doctor for C-section?

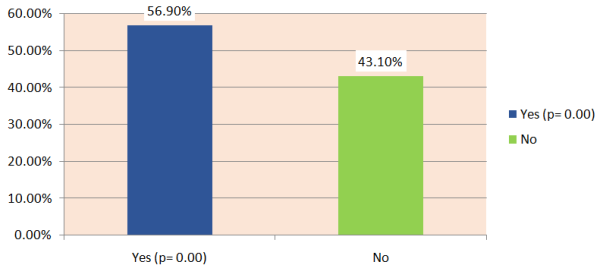

Figure No.5: Was there severe vaginal bleeding at any time of pregnancy?

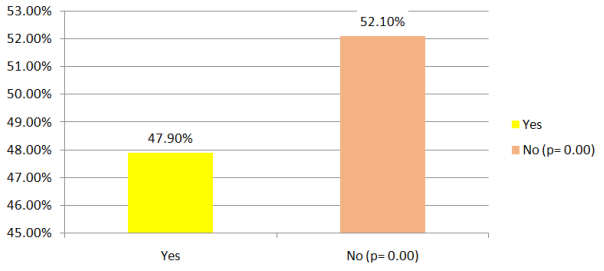

Figure No.6: Did your health worker inform you that position of your baby is abnormal?

DISCUSSION

Mal-presentation has been observed to be the leading cause of primary cesarean section in a multiparous woman. Here mal-presentation includes both an abnormal presentation- anything other than the back of the fetal head, and an abnormal lie- transverse or oblique lie.

The identification of mal-presentation as the most common cause of primary caesarean in a multipara is similar to studies done by Rao & Rampure[1] and Jacob & Bhargava[11]. Whereas, in another study, mal-presentation was ranked as the fourth most common cause[10]. Mal-presentation in a multiparous woman can be explained by the lordosis of the lumbar spine and the presence of a pendulous abdomen due to relaxed abdominal and uterine musculature. Additionally, in a multipara, engagement of the head usually doesn't take place before the onset of labour. Besides this, placental location is an important factor to the fetal presentation- it is known that placenta previa poses a significant risk to development of breech presentation and transverse lie, which could have been an underlying etiology in our study as 52.1% women were recorded to have a low-lying placenta. 47.7% women were informed about the abnormal positioning of the baby during the pregnancy. Consequently, 35.4% women were operated because of this reason whereas amongst the rest, either the head engaged at the time of labour or external cephalic version (ECV) was successful.

Antepartum hemorrhage (APH) ranked second as the most common cause of primary caesarean in multiparous woman. APH occurs secondary to placenta previa or placental abruption. One of the risk factors for placenta previa is multiparity, but age seems to play a greater role than parity[12]. Abruptio placentae is again more common in the multipara, being seen three times more often in those with parities greater than five, as opposed to primigravida[13].

Fetal distress was ranked as third most common cause of primary caesarean in multipara. The electronic fetal monitoring which is commonly used to detect fetal distress is known to have poor specificity resulting in increase in number of cesarean sections carried out for fetal distress[14,15]. It is considered prudent to perform a caesarean section rather than waiting and possibly endangering both mother and baby. In a study[12], it was found that 58% infants delivered via cesarean due to fetal distress were actually unaffected.

Pre-eclampsia was ranked as the fourth leading indication for primary caesarean in a multipara. Out of 130 women 96 were noted to be hypertensive during pregnancy, out of which 64 women had swelling on hands and face. Studies show that up to 22% of women with chronic hypertension and 50% of those with gestational hypertension eventually progress to preeclampsia[16, 17]. Preeclampsia if unchecked can lead to fits which is a potentially fatal situation for both mother and baby, hence, to avoid this, it is a common practice to deliver the baby as soon as it reaches term (37-42 weeks). However, active protection by thorough follow-ups is a very important element in prevention of preeclampsia[18].

According to WHO19 the minimum number of antenatal visits recommended are four, irrespective to the absence of any complications. A recent study in India showed that 68% women had not received any antenatal care[3]. Our study shows that 40.8% women

had only 1 antenatal visit, and 31.5% had 2 antenatal visits. In reality, only 19 out of 130 women actually visited 4 or more times. Thus lack of proper antenatal care could be the reason for the high number of hypertensive patients progressing to preeclampsia and moreover to a primary caesarean section.

Another point of interest noted was that 60.8% women had had previous instrumental vaginal deliveries. These women should be counseled that a previous instrumental delivery does not pose any risk of injury to the mother during subsequent delivery, but rather a vaginal delivery should be preferred as it prevents the complications of a caesarean section. In fact approximately 80% of women achieve a spontaneous vaginal delivery after an instrumental delivery[20,21,22] having heavier babies with very low overall rates of birth trauma or asphyxia[23].

According to a comparative study[2], multiparas are more prone to require caesarean section for mal-presentation and APH, whilst nulliparous more commonly required it for prolonged labour and cephalopelvic disproportion (CPD). Hence a cesarean section should not be disregarded just because a woman has had a previous vaginal delivery. Rather a multipara requires good antenatal care as it helps to detect threatening abnormalities that may have an adverse outcome.

CONCLUSION

Previous vaginal delivery gives the family and the doctors a false sense of security that overshadows the need for vigilant antenatal and intra-partum care. The method of previous deliveries shouldn't be the primary criteria upon which the current delivery is decided. Rather, every pregnancy should be treated with as much concern and care as the first. (The physicians should display obligation in such circumstances and assess the pregnancy thoroughly before heading towards a massive scheme. Rather than promoting the doctors' own interests and convenience, Mothers' health and wellbeing should be considered the first priority and every possible measures should be taken to ensure that. The antenatal care should be the utmost preference and necessary investigations should be practiced. WHO recommends a minimum of four antenatal visits, comprising interventions such as tetanus toxoid vaccination, screening and treatment for infections, and identification of warning signs during pregnancy? With all the adequate steps taken, the rate and reasons of cesarean sections could be monitored and restricted hence progressing to initiate a huge stride for maternal and fetal health.

Author's Contribution:

Concept & Design of Study:	Tafazzul H. Zaidi,
Drafting:	Tafazzul H. Zaidi
Data Analysis:	Kiran Mehtab, Tafazzul H. Zaidi,
Revisiting Critically:	Kiran Mehtab, Tafazzul H. Zaidi,
Final Approval of version:	Tafazzul H. Zaidi, Kiran Mehtab

Conflict of Interest: The study has no conflict of interest to declare by any author.

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