



A STUDY OF NEW ANTENATAL CARE STRATEGY METHOD AND RISK FACTORS FOR PLACENTA PRAEVIA AT A TERTIARY CARE HOSPITAL OF DELHI

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Abstract

Previa placenta occurs when a baby's placenta partially or completely covers the mother's cervix, which is the uterus' exit. Previa placenta can cause significant bleeding during pregnancy and delivery. The placenta is implanted in the lower uterine section, partly or completely covering the internal organs (os/opening in the center of the cervix), is known as placenta praevia. According to latest report, previa placenta affects one in every 200 pregnancies. The diagnosis is generally obtained by transabdominal sonography or vaginal in pregnancy's second trimester. Total 200 patients were surveyed for 12 months to have a prospective cohort research that took place at a tertiary care centre in Delhi from February 2016 to February 2016. The goal of this research is to discover a new antenatal care strategy for placenta praevia. Patients diagnosed with previa placenta should have numerous discussions with their OB/GYN about care and expectations prior to vaginal haemorrhage. To check for foetal health, placental localization, and any retroplacental haemorrhage, a full history, by clinical assessment including specific attention to an examination of the abdomen, laboratory testing, or ultrasound were performed in all instances. The novel placenta praevia antenatal care practice method, which urges medical practitioners to execute the "critical care strategy," describes the "critical care strategy" of patient outcomes in this study where 72 people agreed, 66 people strongly agreed, 35 people disagreed, and 27 people severely disagreed. Early enrollment is encouraged, Early diagnosis of high-risk patients and referral to a higher centre, as well as regular prenatal care can all help to prevent previa placenta, which is the most significant causes of newborn and maternal morbidity as well as death



Introduction

At fixed term, the placenta is discoid in shape, with a diameter of 15-25 cm, a thickness of 3 cm, and a weight of 500-600 kg. It is torn from the uterine wall after birth and ejected from the uterine cavity about 30 minutes after the kid is born. Placenta praevia is described as the implantation of the placenta in the lower uterine segment, partially or completely overlaying the internal os [1]. It has a 0.3–0.5 percent incidence. The diagnosis is usually made by transabdominal sonography or vaginal in the second part of pregnancy [2, 3]. However, terminology is still in flux, and the necessity for suitable sonographic criteria was raised multiple times [3, 4]. Placental villi invasion further than the endometrium basalis, resulting in placenta increta or accreta, is a common complication [5]. Severe maternal haemorrhage is likely to develop as a result of the aberrant position and invasion of placental tissue, notably during pregnancy's third trimester and with the commencement of labour [1, 5]. This type of aberrant placentation has been linked to past caesarean deliveries [5].

Placenta praevia

Placenta previa occurs whenever a child's placenta partially and fully blocks the mom's cervix, which is the uterus' exit. Preval placenta may cause significant bleeding during delivery and pregnancy. Whether you have previa placenta, you may bleed throughout pregnancy and delivery. Avoiding activities that may produce contractions, such as sex, douching, or using tampons, as well as activities that can raise your chance of bleeding, such as jogging, crouching, or jumping, will be recommended by your health care practitioner.

Cause of Placenta previa

The cause of placenta praevia is unknown. Low blastocyst implantation at a low position in the uterine cavity causes it. Low implantation has no established cause, but certain circumstances have been linked to the development of placenta praevia. All patients who arrived with a history of painless vaginal bleeding after 28 weeks of pregnancy were admitted to the hospital. The patient provided a detailed history of vaginal bleeding (warning haemorrhage). According to



Kurian, S., & Mallikarjuna, M (2016), the study comprised Cases having a definitive diagnosis of praevia placenta by ultrasonography. Placental abnormalities have been found in four (4.76 percent) of the cases, including two (2.38 percent) having attached placentas. PPH was managed by bimanual compression and injections of prostodin and methergin, and the placenta was removed piecemeal. (6)

During the ten-year study period (2007–2016), the stillbirth rate decreased at a 1% yearly rate. The cause of stillbirths has remained largely unchanged. However, the number of cases of obstructed labour has decreased significantly. Despite advancements in healthcare, hypertensive disorders of pregnancy and accompanying complications remain the leading cause of stillbirth, and a considerable minority of women does not receive proper antenatal care.(8)

Early enrollment is encouraged, Early diagnosis of high-risk patients and referral to a higher centre, as well as regular prenatal care can all help to prevent previaplacenta, which is the most significant causes of newborn and maternal morbidity as well as death. According to study of Kumari, S., & Singh, B. (2016, which is the most significant causes of newborn and maternal morbidity as well as death, ranking first among a deadly trio of maternal mortality that includes eclampsia and sepsis in India. To find out how common previalplacentais, as well as the maternal and perinatal outcomes. From February to February 2016, an six-month prospective cohort research was conducted in Obstetrics as well as Gynecology department at the Northern Indian tertiary care centre. Perinatal morbidity is measured as the proportion of newborns that needed regeneration or were admitted to the NICU, which was 25.71 percent. Perinatal mortality was at 19.99 percent. However, this study's goal is to determine a new antenatal care strategy method for placenta praevia among 200 patients at a tertiary care hospital in Delhi.

Material and Methods

With prior consent, data was obtained from patient case records at the Medical Records Department. The standard reference for assessing the case records was the WHO paper "The WHO near-miss strategy for maternal health." The participants in the trial were prenatal patients who had been diagnosed with at or after 26 weeks of pregnancy, a sonogram may reveal a



placenta previa. All of the patients were delivered at their facility. This study included antenatal women who had been experiencing vaginal bleeding for more than 24 weeks of gestation. In all cases, a full history, by clinical assessment including specific attention to an examination of the abdomen, laboratory testing, or ultrasound were performed to check for foetal health, placental localization, and any retroplacental haemorrhage. Ultrasonography was used to confirm the diagnosis of placenta previa, which was verified upon caesarean birth. The latest menstrual cycles and a first-trimester ultrasound were used to calculate gestational age. Age, multiple pregnancy, parity, malpresentation, previous caesarean, anaemia, as well as smoking in the current pregnancy were all documented as risk factors. Previous uterine scarring (caesarean section, curettage, medical termination, myomectomy of pregnancy), placenta previa, and any other risk factors were also considered.

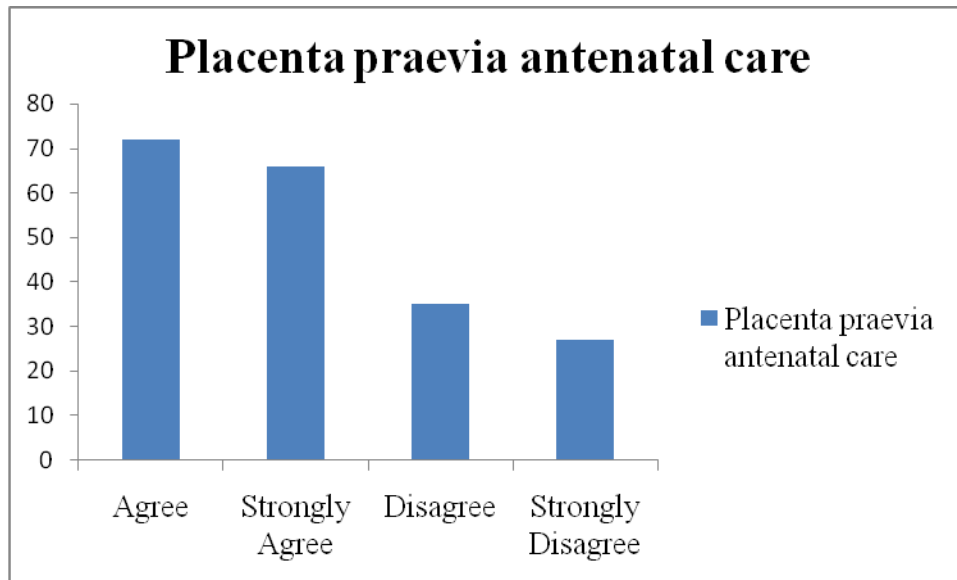
Results

In all research projects, data gathering is followed by analysis. SPSS 15.0, an all-around recognised factual programming tool, was used to conduct the quantitative testing. Microsoft Word and Microsoft Excel were used to construct the diagrams and tables.

Opinion	No. of respondent
Agree	72
Strongly Agree	66
Disagree	35
Strongly Disagree	27

Table 1: A new placenta praevia antenatal care practice approach that suggests medical professionals follow the "critical care strategy" of patient outcomes

Above table 1 describes the new placenta praevia antenatal care practice approach that suggests medical professionals follow the "critical care strategy" of patient outcomes. 72 respondents agreed, 66 respondents strongly agreed, 35 respondents disagreed and 27 respondents strongly



disagreed.**Figure 1:** A new placenta praevia antenatal care practice approach that suggests medical professionals follow the "critical care strategy" of patient outcomes

Opinion	No. of respondent
Agree	72
Strongly Agree	64
Disagree	38
Strongly Disagree	26

Table 2: Communication is an integral part of the doctor-patient interaction and is necessary for providing strong, high - quality patient care

Above table2,describes that Communication is an integral part of the doctor-patient interaction and is necessary for providing strong, high - quality patient care. The study revealed that 72 respondents agreed, 64 respondents strongly agreed, 38 respondents disagreed and 26 respondents agreed.

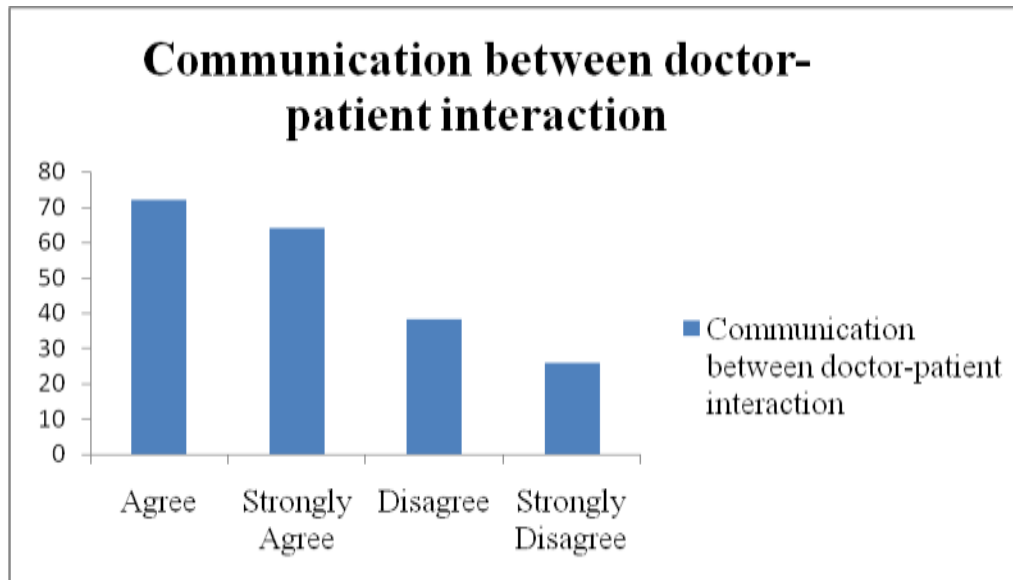


Figure 2: Communication is an integral part of the doctor-patient interaction and is necessary for providing strong, high - quality patient care

Opinion	No. of respondent
Agree	75
Strongly Agree	64
Disagree	36
Strongly Disagree	25

Table 3: Diagnosing, identifying, and treating acutely injured pregnant women is complex since both mother and fetus must be considered

Above table 3 describes the Diagnosing, identifying, and treating acutely injured pregnant women is complex since both mother and fetus must be considered. This suggests that 75 people agreed, 64 said they strongly agreed, 36 said they disagreed, and 25 said they severely disagreed.

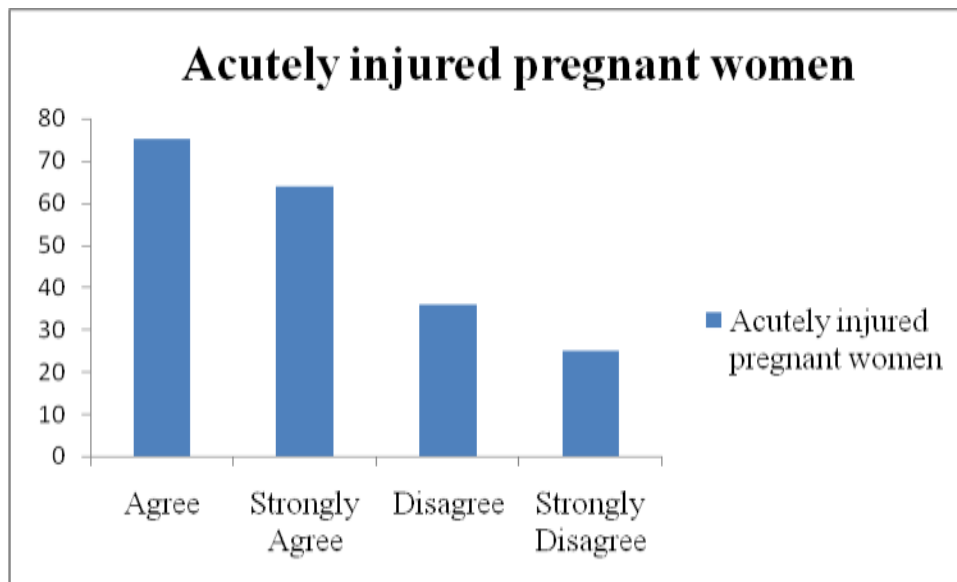


Figure 3: Diagnosing, identifying, and treating acutely injured pregnant women is complex since both mother and foetus must be considered.

Discussion

The current study indicates a 0.51 percent incidence rate of Placenta previa, which is similar to the result obtained by Kumari, S., & Singh, B. (2016). The treatment of a woman with placenta praevia haemorrhage will be determined by two key variables. The extent of the bleeding, as well as the foetal maturity at the time of the haemorrhage. The "critical care strategy" of patient outcomes is described in this study in the new placenta praevia antenatal care practise approach, which encourages medical providers implement the "critical care strategy." 72 people say they agree, 66 people say they strongly agree, 35 people say they disagree, and 27 people say they definitely disagree. Bleeding of any kind at foetal maturity, foetal distress at viable gestations and persistent haemorrhage producing maternal haemodynamic instability at any point of pregnancy are all absolute reasons for delivery. A retrospective study of all instances of Maternal mortality (death and near-death) owing to obstetric haemorrhage of enormous proportions (MOH) was undertaken over a 12-month period at Medical College of Lady Hardinge and Hospital Smt. Sucheta Kriplani, according to Agrawal, S. 2016. (April 2016-March 2017). (MOH). The most prevalent cause of major obstetric haemorrhage in the near miss cases (n=30) was a morbidly



attached placenta, which has been responsible for 26.6 percent of cases (n=8). Other reasons included postpartum haemorrhage in 23% (n=7) of cases, uterine rupture in 13% (n=4) of cases, antepartum haemorrhage owing to severe abruption in 13% (n=4) of cases, and placenta praevia in 3% (n=1) of cases. MNM occurred in 16 percent (n=5) of cases and 3.3 percent (n=1) of cases, approximately, owing to incomplete abortion and because of a burst pregnancy complications, there was a premature obstetric haemorrhage. MNM occurred in 16 percent (n=5) of cases and 3.3 percent (n=1) of cases, respectively, owing to incomplete abortion and Because of a burst pregnancy complications, there was a premature obstetric haemorrhage. In 40% (n=12) of MNM patients, previous caesarean section was determined to be the single most significant cause of the patient's morbidity (8 cases of morbidly adherent placenta plus 4 cases of rupture uterine). Caesarean section rates must be decreased to minimise the morbidity and mortality associated with MOH.

Conclusion

It may be suggested from the present study that Previa placenta can have catastrophic repercussions; therefore it's important to pay attention to any signs of vaginal bleeding very once. To offer the best possible care for the patient, an interdisciplinary team approach is required. Prior to vaginal bleeding, patients diagnosed with previa placenta should have many discussions with their OB/GYN about care and expectations. Early enrollment is encouraged, Early diagnosis of high-risk patients and referral to a higher centre, as well as regular prenatal care can all help to prevent previa placenta, which is the most significant causes of newborn and maternal morbidity as well as death. Previa placenta patients who have had previous caesarean sections are more likely to have their placenta accrete, necessitating hysterectomy. In such circumstances, the obstetrician must be particularly watchful during the antenatal period to avoid difficulties. Infant treatment must be enhanced to reduce infant morbidity as well as death, which is mostly caused by preterm in pregnant ladies that have a previa placenta



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