

Case Report: The Role of Midwives in the Management of Pregnant Women with Placenta Accreta and Total Placenta Previa at Tertiary Referral Hospitals

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ABSTRACT

Background: Hemorrhaging during pregnancy and childbirth constitutes an obstetric emergency that markedly elevates maternal and newborn morbidity and mortality rates. Placenta previa is frequently identified during the first trimester of gestation and is the predominant source of hemorrhage in pregnancy. The prevalence of placenta previa is rising due to the growing frequency of cesarean deliveries, resulting in an increased incidence of placenta accreta in Indonesia over the past few decades. **Methods:** This case report is compiled using a descriptive and case study approach. The researcher supported Continuity of Care (CoC) for one patient in the Surabaya Community Health Center working area from pregnancy to the postpartum and newborn phases. **Case Presentation:** A midwifery assessment and care were provided to a 38-year-old pregnant lady, GIIP2002, at 34/35 weeks of gestation, who presented multiple risk factors for placenta accreta and placenta previa. The mother had cautious management and monitoring for 12 days before being delivered as planned at 37 weeks gestation. **Discussion:** Risk factors include age over 35, multiparity, a history of two or more cesarean sections, placenta previa, antepartum bleeding, anemia, and total placenta previa. Consequently, midwives must conduct early detection during antenatal care in collaboration with obstetrics and gynecology specialists. **Conclusion:** In conjunction with an obstetrician-gynecologist, the obstetric ultrasonography (USG) examination is crucial for assessing implantation location, placental attachment, placental maturation degree, and fetal biometry. The test results will influence the clinical decision on the type and timing of labor. Midwives are responsible for early detection during antenatal care (ANC) in primary and secondary health facilities, collaborating with obstetricians to provide referrals for comprehensive ANC assessments in tertiary health facilities. Midwives contribute to tertiary health centers by offering psychological support, as mothers typically have prolonged hospital stays.

Keywords: placenta accrete; total placenta previa; risk factors; early detection; role of midwives.

INTRODUCTION

In a typical pregnancy, the placenta adheres to the decidualized endometrium, while aberrant infiltration of placental trophoblasts into the uterine myometrium is called placenta accreta. Placenta accreta is a form of aberrant placentation characterized by the adherence of chorionic villi directly to the myometrium, resulting in a portion of the placenta remaining attached post-delivery, which may lead to significant hemorrhage. Specific instances of placenta accreta necessitate emergent cesarean hysterectomy for management due to its abnormal placentation, which poses a substantial risk of severe obstetric hemorrhage during labor. According to the degree of myometrial invasion, there are three classifications: placenta accreta, placenta increta, and placenta percreta. Placenta accreta results in heightened maternal and fetal morbidity and mortality. Placenta accreta is predominantly attributed to a prior cesarean section, as the loss of decidua at the cesarean scar

leads to subsequent aberrant placentation [1]. Placenta previa totalis is a disorder in which the placenta is positioned in the lower segment of the uterus, completely obstructing the birth canal, potentially resulting in significant hemorrhage both antepartum and intrapartum. Placenta previa is a risk factor for placenta accreta [2].

The prevalence of placenta accreta rose from 1 in 30,000 pregnancies in the 1960s to 1 in 533 in the 2000s and subsequently to 1 in 272. The prevalence of placenta accreta in developed nations has risen tenfold over the past 50 years, reaching approximately 3.5-7%. The rise in cesarean deliveries has led to an increased incidence of placenta accreta over recent decades: approximately 6.7% of patients with five prior cesarean sections are affected, in contrast to 0.3% of those with one previous cesarean section. The prevalence of aberrant placental invasion is 81.6% for placenta accreta, 11.8% for placenta increta, and

6.6% for percreta. In Indonesia, a total of 4,726 occurrences of placenta previa were recorded, resulting in 36 maternal fatalities during 2018-2019, attributed to the mothers' irregular attendance at antenatal care sessions. Placenta previa manifests in approximately 80% of instances, with its frequency rising annually due to the growing prevalence of cesarean births. Consequently, placenta accreta has also escalated over recent decades, estimated at 6.7% in Indonesia [3]. Morbidity rates were reported at 60%, with a death rate of 7%. In the last twenty years, epidemiological studies have recognized the rapid rise in cesarean delivery rates and placenta previa as risk factors for placenta accrete [1]. Risk factors for placenta accreta include a history of cesarean section, with the incidence increasing in correlation to the number of prior cesarean deliveries. Additional risk factors encompass maternal age exceeding 35 years, multiparity, prior uterine surgery, history of curettage, Asherman's syndrome, and previous instances of placenta previa. Placenta accreta is observed in 3% of women diagnosed with placenta previa who have not undergone a prior cesarean section. In cases where the mother has a history of placenta previa and one or more previous cesarean sections, the risk of placenta accreta significantly increases [4]. Risk factors for placenta previa include maternal age over 35 years, multiparity, twin pregnancy, abnormal fetal position (such as breech or transverse), abnormal uterine shape, history of miscarriage, previous placenta previa, and history of uterine surgery. Placenta previa totalis presents a clinical challenge during pregnancy as the placenta entirely obstructs the Ostium Uteri Internum (OUI), necessitating delivery via cesarean section due to a significant risk of hemorrhage associated with vaginal labor, which also renders natural delivery improbable. Symptoms of bleeding during pregnancy with placenta previa include painless bleeding, bright red fresh blood, and the potential for recurrent bleeding. Placenta previa results in the shortening of the uterus, frequently leading to entire placenta previa. Hemorrhaging during gestation can induce maternal anemia, jeopardizing the health of both the mother and fetus; additionally, it heightens the risk of problems such as placenta previa and placenta accreta in future pregnancies [5].

Placenta accreta presents a clinical issue during labor when the placenta fails to completely detach from the uterus, resulting in significant obstetric hemorrhage, with the typical blood loss in affected women ranging from 3,000 to 5,000 ml. Placenta accreta is the predominant peripartum cause of emergency hysterectomy, accounting for 51.1%, and it also results in injuries to the ureters, bladder, intestine, or neurovascular structures, as well as adult respiratory distress syndrome, acute transfusion reactions, electrolyte imbalance, and renal failure. Up to 90% of patients with placenta accreta necessitate blood transfusions, and 40% require over 10 units of packed red cells. Maternal mortality may transpire even with good planning, transfusion management, and surgical intervention.

This condition will influence maternal health outcomes, affecting maternal morbidity and death. Mortality rates in the country continue to provide a challenge for healthcare professionals today. Maternal and newborn outcomes are typically improved when diagnoses are made before birth, allowing for management by a multidisciplinary team with competence in these diseases [1].

This case study aims to examine the role of midwives in instances of placenta accreta and complete placenta previa. Midwives are responsible for early detection in basic and secondary healthcare settings, collaborating with obstetrician-gynecologists to facilitate referrals to tertiary healthcare facilities for further evaluation and treatment by subspecialist physicians. The midwife aids the mother and family in formulating the birth plan, which encompasses selecting the birth attendant and location, determining essential items for delivery, and strategizing for labor-related expenses. The birth plan is formed through a dialogue with the expectant mother, her family, and the midwife during the prenatal examination. Midwives in tertiary health facilities deliver physical midwifery care with other health professionals and offer psychological midwifery support to mothers, given that the average stay in tertiary hospitals exceeds seven days.

METHODS

This case report is compiled using a descriptive and case study approach. The researcher supported Continuity of Care (CoC) for one patient in the working area of the Surabaya Community Health Center from pregnancy through the postpartum period and the newborn phase.

CASE PRESENTATION

A midwifery assessment and care were provided to a 38-year-old pregnant woman, GIIP2002, at 34/35 weeks gestation. The patient had a history of placenta previa, antepartum bleeding, anemia, and preterm labor and was treated in a tertiary referral hospital. This case report discusses a pregnant woman expecting her third child, who has a history of receiving three-month birth control injections from 2012 to 2013 and utilizing an Intrauterine Device (IUD) from 2013 to 2023. After removing the IUD, the mother used calendar-based family planning exclusively. The patient has a history of first pregnancy characterized by umbilical cord entanglement, lasting 9 months. A scheduled cesarean delivery was performed by an obstetrician-gynecologist at the hospital, resulting in a birth weight of 3300 grams. The first child is currently 12 years old. The patient has a history of a second pregnancy complicated by placenta previa. She is currently 9 months pregnant and is scheduled for a scheduled cesarean delivery, assisted by an obstetrician-gynecologist at the hospital. The infant's birth weight is 3700 grams, and the patient's first child is 10 years. The mother expressed concern following indications of placenta accreta, given her history of anemia during pregnancy and the associated risk of hemorrhage from the condition.

This pregnancy was unforeseen, as the woman relied only on calendar birth control following the removal of the IUD; yet, she was delighted and embraced her present pregnancy. The mother longed for her children at home, as they were prohibited from visiting her throughout her treatment at the Hospital. The midwife's involvement in alleviating the mother's fears is engaging with her, offering emotional support, and delivering positive affirmations to ensure a joyful and passionate pregnancy experience. Furthermore, the midwife reiterated the mother's anemic condition, assuring that there was no cause for concern regarding the current pregnancy, as the condition had improved due to blood transfusion. During this third pregnancy, the antenatal care history for the first trimester included visits to the midwife and health center, where the patient reported complaints of nausea and vomiting and received vitamin B6, iron, and calcium therapy. The results of the triple elimination examination indicate non-reactivity, with a hemoglobin level of 8.9 g/dL. The mother reported consistently low hemoglobin levels in previous pregnancies; however, she did not pursue further examination. The patient underwent antenatal care (ANC) at the health center, once during the second trimester, and twice at the obstetrics and gynecology (Obgyn) clinic. During the final visit to the Obgyn clinic at 26/27 weeks of gestation, a suspected case of placenta accreta was identified, prompting a referral to a tertiary hospital for comprehensive ANC management. The patient has a history of ANC in the third trimester at the OB-GYN clinic once and twice at the tertiary referral hospital. The Hb examination results indicated a level of 9.2 g/dL. A follow-up appointment is scheduled for 17/10/2024, with a planned cesarean section on 24/10/2024.

On 12 October 2024 at 11:15 hours, the patient experienced spotting vaginal bleeding. The obstetrician-gynecologist recommended bed rest at home. On 13 October 2024 at 01:00 hours, the patient presented with significant fresh red vaginal bleeding and subsequently visited the health center. After receiving initial treatment, including infusion and nasal oxygen, a referral was made to a type C hospital, where various therapies were administered to manage the bleeding. The patient was referred to a tertiary care hospital for further evaluation and treatment. Laboratory results from 12/10/2024 at Type C Hospital indicated the following: Hemoglobin (HB) 7.1 g/dL, Hematocrit (HCT) 24.6%, Leukocyte count 10,500 cells/ μ L, Platelet count 224,000 cells/ μ L, Albumin 3.3 g/dL, Blood type B positive, and Mentzer Index 21. These findings suggest a diagnosis of microcytic hypochromic anemia due to iron deficiency and hypoalbuminemia associated with hypercatabolism. Examination results from the tertiary referral hospital indicated blood pressure of 133/92 mmHg, pulse rate of 98 beats per minute, respiratory rate of 20 breaths per minute, and oxygen saturation levels of 98-99% with supplemental oxygen via nasal cannula at 3 liters per minute. A cardiac examination revealed normal

heart sounds, S1 and S2, with no additional findings. No audible murmur or gallop was detected. Pulmo: Vesicular breath sounds, no wheezing observed—the absence of wheezing. Results of obstetric examination Fundus Uteri Height: 30 cm; Right head dorsal presentation; Fetal Heart Rate (DJJ): 144 beats per minute. Contractions: None; His: None. Vaginal Toucher (VT): Procedure not performed. Laboratory results from a tertiary referral hospital on December 10, 2024, indicated the following values: APTT 17.7 seconds, PPT 10 seconds, BUN 5.0 mg/dL, Creatinine 0.5 mg/dL, Potassium 3.50 mmol/L, Sodium 143 mmol/L, and Chloride 100.0 mmol/L. Diagnosis of Erythrocyte Hypochromic microcytic anisopoikilocytosis: DPJP recommends administering blood transfusion in the form of packed red cells (PRC) to elevate hemoglobin levels to at least 10 g/dL. The ultrasound examination conducted on 12/10/2024 revealed a single live intrauterine fetus in dorsal presentation, with DJJ positive. The gestational age was determined to be 34/35 weeks, with a fetal body weight of 2650 grams and an amniotic fluid index of 15.2. Placenta mapping indicated an anterior placenta covering the OUI, classified as grade II-III, with a high suspicion of placenta accreta, grade 1 type 2. Laboratory examination dated October 17, 2024 Hemoglobin 10.2 g/dL; Erythrocytes 4.28 million/ μ L; Hematocrit 33.1%; Leukocytes 5.23 thousand/ μ L; Platelets 168 thousand/ μ L; Basophils 0.4%; Eosinophils 2.3%; Neutrophils 80.8%; Lymphocytes 9.8%; Monocytes 6.7%; Mean Corpuscular Volume 77.3 fL; Mean Corpuscular Hemoglobin 23.8 pg; Mean Corpuscular Hemoglobin Concentration 30.8 g/dL Diagnosis of microcytic hypochromic anemia and beta thalassemia trait. During her treatment at the tertiary referral hospital, the mother was administered Tranexamic Acid Injection 3x500mg/IV and Microgest 2x200 mg/rectal tablets to mitigate and cease bleeding. Following the physician's recommendation, the mother had a progressive transfusion of five bags of PRC blood. An MRI examination conducted on October 20, 2024, revealed complete placenta previa. The scheduled termination of the SC procedure occurred on 24/10/2024. The male infant was born at 15:28 WIB, weighing 3075 grams and 48 cm long. The Apgar score was 7/8, indicating a good condition with no congenital anomalies. The operation report indicates the presence of placenta accreta and total placenta previa, and a Female Sterilization Operation Method (MOW) was conducted with the consent of both the mother and her husband due to the elevated health risks to both the mother and fetus in the event of another pregnancy. The mother got post-surgical treatment for three days and was discharged on October 27, 2024, with a postpartum follow-up scheduled for one week later on November 4, 2024. The mother received a planned referral from the primary health facility for further treatment concerning the diagnosis of placenta accreta and total placenta previa, enabling delivery at a tertiary health facility equipped with specialists and subspecialists. This may decrease the morbidity and mortality rates among mothers and infants in Indonesia.

DISCUSSION

The midwife and health center assessed the mother's antenatal care history during the first trimester. The history of ANC during the second trimester includes a check at the health center and Obgyn clinic. At the last control in the Obgyn clinic, conducted at 26/27 weeks of gestation, a suspected case of placenta accreta was identified, leading to a referral to a tertiary hospital for further integrated ANC. The third-trimester antenatal care history at the obstetrics and gynecology clinic was recorded once, while at the tertiary referral hospital, it was recorded twice. The ANC history indicated that the mother consistently monitored her pregnancy at three health facilities, facilitating the detection of placenta accreta via obstetric ultrasound examination. This approach allowed for assessing implantation location, attachment, degree of placental maturation, and fetal biometry. The examination results influence the clinical decision regarding the timing of labor (6). Midwives facilitate the early detection of placenta accreta and total placenta previa in partnership with physicians to mitigate the mother's risk of complications. This involves prompt referral to a tertiary care hospital equipped with the necessary infrastructure and healthcare professionals, including specialists and subspecialists, for patients requiring care beyond primary and secondary health services. Early detection is crucial for minimizing maternal and infant morbidity and mortality, particularly in instances of placenta accreta and placenta previa. Pregnant women aged 38 years, specifically those over 35, are at increased risk for placenta accreta and total placenta previa due to uterine degeneration and alterations in endometrial conditions, such as vascular sclerosis, which lead to reduced vascularization and subsequent tissue hypoxia (7). At over 35 years of age, vascular sclerosis manifests as the hardening, thickening, and diminished elasticity of arterial walls due to the accumulation of lipids, cholesterol, and other substances. This condition can lead to abnormal placentation, specifically total placenta previa and placenta accreta, as the placenta adheres improperly and invades deeper tissues to obtain necessary nutrients for the fetus.

Multiparous pregnant women in their third pregnancy represent a risk factor for placenta accreta and placenta previa, as increased parity correlates with a heightened risk of pregnancy complications. Each pregnancy diminishes cellular performance in the uterus, leading to excessive placental adherence to the uterine wall and endometrial tissue in the lower segment of the uterus (7). Multiparous mothers exhibit an increased risk of placenta accreta and placenta previa, attributable to fibrosis at the site of prior placenta implantation in previous pregnancies. Fibrosis is the accumulation of fibrous connective tissue surrounding tissue that has been chronically damaged. Fibrosis may develop in multiple organs, including muscle, due to gene mutations that impact the stability of muscle fibers (8). Increased parity elevates the risk of placenta accreta and placenta

previa, as the placenta aims to find an optimal implantation site during pregnancy. The fundus uteri is the optimal site for placental implantation in the first pregnancy, as most pregnancies typically exhibit this implantation pattern. With an increase in pregnancy frequency, the condition of the tissue in the fundus uteri deteriorates due to repeated placental attachment. This leads to the placenta seeking an alternative implantation site, typically in the lower region of the uterus, resulting in deeper implantation. Consequently, it is anticipated that a woman may regulate the frequency of pregnancies and childbirths or, at minimum, space her pregnancies through adherence to a family planning program.

The mother had a history of complications during her pregnancies, including umbilical cord entanglement with her first child and placenta previa with her second child, leading to a delivery via cesarean section. Consequently, her history of cesarean deliveries totals two instances. A history of two or more cesarean sections is a risk factor for placenta accreta and placenta previa, as previous surgeries may result in scar tissue that causes the placenta to adhere excessively to the scar tissue. Scarring from the last surgical procedure is situated in the lower abdomen, precisely above the pubic bone and 3 cm superior to the pubic symphysis. The incision from the surgery is horizontal and measures approximately 10-20 cm in length. The scar tissue in the former SC leads to tissue hypoxia, prompting the trophoblast to invade and adhere more deeply to secure a sufficient supply of blood vessels (7). A prior occurrence of placenta previa constitutes a risk factor for its recurrence in later pregnancies, as the initial placental development induces atrophic alterations or tissue reduction in the decidua, resulting in a depressed area. Furthermore, it decreases vascularization, impeding the blood flow necessary for transporting oxygen and nutrients via the blood vessels. This results in the placenta implanting in the lower uterine segment, perhaps covering part or all of the OUI, as it connects more deeply to obtain oxygen and nutrition. Placenta previa totalis occurs when the placenta entirely covers the orifice of the uterus (8). A cesarean section involves a surgical incision in the uterine wall, resulting in damage to the endometrial tissue, which leads to inadequate blood flow to the embryo. Consequently, the placenta attempts to locate a more suitable region within the endometrium that possesses viable tissue for implantation. The placenta implants lower, nearing the interior uterine ostium, resulting in placenta previa. The placenta implants more deeply to secure adequate oxygen and nutrition for embryonic development.

The mother has a history of a second pregnancy complicated by placenta previa, necessitating a cesarean section due to the risk of severe hemorrhage leading to hypovolemic shock, a medical emergency characterized by significant blood or fluid loss that impairs the heart's ability to circulate blood effectively. This condition may result in potentially life-threatening organ damage; hence, a

cesarean section is the optimal choice to mitigate these issues during labor. Placenta previa and placenta accreta are distinct disorders that may coexist in the placenta. Placenta accreta may often be asymptomatic during gestation; however, when it coexists with placenta previa, it can result in hemorrhaging during the third trimester. A history of placenta previa may lead to placenta accreta due to the majority of the placenta covering the incision from the cesarean section. The inferior section of the uterus possesses a diminished nitabuch and decidua basalis layer, allowing the chorionic villi to implant directly into the myometrium for a sufficient blood vascular supply (7). The elevated prevalence of diseases in women with prior cesarean sections and placenta previa raises significant concerns about aberrant placental invasion, particularly placenta accreta. Healthcare professionals must adequately prepare for the delivery of moms with a prior history of placenta previa.

This third pregnancy features an aberrant fetal position, specifically transverse, which is a risk factor for placenta previa. The MRI scan and cesarean section report confirmed total placenta previa. However, during the abdominal ultrasound mapping of the placenta, a diagnosis of total placenta previa was not established, although there was suspicion of placenta previa due to the occurrence of APB in the third trimester of pregnancy. This MRI test was conducted at 36/37 weeks of gestation before the termination of pregnancy. Position abnormalities are more prevalent in placenta previa due to the reduction in uterine size, preventing the descent of the baby's head. The fetal position is elevated due to the placenta's placement in the lower segment of the uterus, preventing the lowest section from approaching the upper pelvic inlet. Placenta previa arises from damage to the endometrium, impacting implantation in the lower uterine segment and placental expansion as uterine blood flow diminishes with maternal aging (vasoconstriction and atherosclerosis). By gestational weeks 37-38, during the third trimester, there is a decline in the strength and integrity of the placental vessels (9). To diagnose placenta previa, the physician may conduct a transvaginal ultrasound if the abdominal ultrasound findings are inconclusive. The physician performs a follow-up transvaginal ultrasound to verify the delivery procedure. Transvaginal ultrasound is the most precise method for identifying placenta previa and ascertaining the placenta's placement; nevertheless, it is not advised for pregnant women experiencing vaginal bleeding. Magnetic Resonance Imaging (MRI) is another method employed to assess placenta previa, facilitating the diagnosis of complex cases by elucidating the link between the placenta and the cervix, aiding in delivery planning.

The woman consistently suffers from anemia in each pregnancy despite the absence of bleeding during gestation. In this third pregnancy, the woman has a hemoglobin level of 8.9 g/dL, indicating mild anemia necessitating treatment.

Anemia is a disorder characterized by a deficiency of healthy red blood cells; if not addressed promptly and effectively, it can pose significant risks to both the mother and fetus. Anemia may lead to enhanced placental development and an increase in terminal villi blood vessels since preplacental or postplacental hypoxia can influence the number of capillaries within a terminal villus, prompting the trophoblast to infiltrate more deeply to secure a sufficient blood vessel supply. Anemia in pregnant women may lead to placenta accreta (7). In pregnant women with anemia, the placenta will implant more profoundly and securely to obtain oxygen and nutrition for the fetus, as the upper endometrial tissue insufficiently fulfills the requirements. The mother encountered antepartum bleeding (APB) during the third trimester of her pregnancy. Following subjective and objective evaluations, a diagnosis of microcytic hypochromic anemia was established due to beta thalassemia trait, a condition in which an individual may exhibit mild or no symptoms of anemia. Consequently, the mother experiences anemia consistently during her first to third pregnancies. The MRI test results and the surgery report indicated total placenta previa, hence reinforcing the diagnosis of APB with total placenta previa. APB refers to hemorrhaging in the vaginal tract during pregnancy occurring from 20 to 28 weeks before birth. This hemorrhage constitutes an emergency that requires rapid medical intervention since it poses a risk to the lives of both the mother and the fetus. The primary sign of antepartum bleeding is vaginal hemorrhage, which may occur with or without accompanying pain. The predominant etiologies of antepartum hemorrhage are placenta previa and placental abruption (10). During the cesarean section, it was determined that the placenta entirely obscured the orifice of the uterus, resulting in maternal hemorrhaging at 34 to 35 weeks of gestation. During her third pregnancy, the mother developed mild anemia with a hemoglobin level of 8.9 g/dL, which deteriorated to 7.1 g/dL due to hemorrhage, necessitating prompt intervention through blood transfusion. A blood transfusion was administered to enhance the mother's condition before the cesarean section due to problems arising from placenta previa (18). Placenta accreta during cesarean section can result in significant hemorrhage, precisely abrupt bleeding of ≥ 5000 ml, which constitutes severe bleeding from the uterine circulation and vascularization abnormalities, potentially affecting other organs and heightening the requirement for intraoperative blood product transfusions. In the postpartum phase, Hemorrhagic postpartum (HPP) difficulties may arise, characterized by an average blood loss above 4000 ml, potentially leading to Surgical Site Infection (SSI), prolonging surgical wounds' healing process. In situations of placenta accreta and placenta previa totalis, the blood products administered to replace lost blood include Packed Red Cells (PRC) and Fresh Frozen Plasma (FFP) (11). Cesarean surgery in instances of placenta accreta can be life-threatening, as it involves the separation of the placenta that is abnormally adhered to the endometrium following fetal delivery.

Specific cases of placenta accreta necessitate hysterectomy, hence elevating the requirement for blood transfusions by the volume of blood lost during the procedure.

This case report details a pregnant woman in her third trimester, namely at 34/35 weeks of gestation, who was sustained until reaching 36/37 weeks, resulting in a total hospitalization duration of 12 days. Mothers with placenta accreta and placenta previa experienced hospitalization exceeding 7 days and necessitated blood transfusions. A hospitalization duration exceeding 7 days indicates that the mother underwent extended treatment relative to the typical hospitalization period for cesarean section patients. This transpires due to the mother's susceptibility to hemorrhage during gestation, parturition, and the postpartum period. The duration of hospitalization due to pregnancy issues, such as APB, results in anemia in pregnant women and necessitates blood transfusion. Complications during the postpartum period include HPP, which can potentially lead to SSI, hence prolonging the healing process of surgical wounds. Mothers diagnosed with placenta accreta during the second trimester of pregnancy are hospitalized for a duration that extends to a minimum of 34 weeks and a maximum of 37 weeks to mitigate difficulties associated with pregnancy and labor [1]. The duration of hospitalization is related to collaborative medical treatment for lung maturation therapy, as placenta accreta and total placenta previa provide a risk of premature delivery [12]. A 34-week-old fetus typically weighs over 2000 grams, and the development of its organs is nearly complete, except for the lungs. Therefore, collaboration with medical professionals is essential to administer fetal lung maturation therapy before a cesarean section.

Throughout the hospitalization, the mother has been prepared for termination to enhance her condition through collaboration with physicians for blood transfusions to address anemia, administering therapy to halt bleeding to prevent exacerbation of anemia, providing lung maturation therapy for the fetus to ensure favorable neonatal outcomes, and offering Information Education Counseling (KIE) for the psychological preparation of the mother in confronting termination in this third pregnancy. Furthermore, it addresses the mother's physical requirements, including personal hygiene, dietary intake, and rest during hospital treatment. Preparation for the cessation of cesarean section encompasses physical and mental readiness and health assessments. Physical preparation entails consulting a physician for a comprehensive physical examination and an in-depth explanation of the surgical procedure. Patients must fast for at least six hours before surgery, shave the surgical site as necessary, and bathe with antiseptic soap to mitigate the risk of infection. Additionally, removing makeup and nail polish is imperative to facilitate the anesthesiologist's assessment of the patient's condition during the operation. Patients should also remove and securely store dentures, glasses,

contact lenses, hearing aids, and wigs, as some may undergo general anesthesia until unconsciousness. Mental preparation involves seeking multiple credible references concerning the cesarean section procedure, consulting with the attending physician to validate the acquired references, ensuring adequate nutritional intake through a diet rich in protein to facilitate healing of the cesarean section wound, and maintaining overall well-being by prioritizing rest, mainly sufficient sleep, while fostering a positive mindset regarding the cesarean section procedure [13].

Health assessments, particularly laboratory analyses involving blood tests, are conducted to ascertain blood type and hemoglobin concentrations and identify coagulation disorders. Additionally, a triple elimination test is performed if the mother has not undergone this screening during antenatal care, as it aims to prevent the transmission of Human Immunodeficiency Virus (HIV), syphilis, and hepatitis B from pregnant women to their offspring. Urine tests, electrocardiograms (ECG), and radiological examinations in pregnant women are conducted pre-operatively solely for moms with specific problems. The assessment of fetal lung function involves quantifying the surfactant-to-albumin ratio in the amniotic fluid to ascertain the maturity of the fetal lungs. This evaluation is conducted on fetuses at risk of premature birth to prepare pediatricians for subsequent care upon delivery. The Non-Stress Test (NST) is a prenatal examination that assesses fetal health by measuring the fetal heart rate during movement or uterine contractions, thereby identifying potential fetal distress. This examination is also called a fetal heart record [13]. The mother is required to prepare the following items: medicines, which the doctor will request that she prepare preparing letters for administrative purposes at the hospital; preparing entertainment in the form of reading books, films, or song playlists to alleviate postoperative pain; preparing baby supplies in the form of a change of clothes for the baby while in the hospital and for the baby's return home, and preparing clothes and mother's supplies, including comfortable clothing with buttons on the front, nursing bras, and loose underwear for both the hospital and the mother's departure [13]. The cesarean section is preceded by preparations to guarantee the success of the operation and the optimal recovery of the mother and baby, thereby reducing the duration of hospital stay.

The role of midwives in reducing morbidity and mortality rates necessitates preventive measures through ongoing education of patients and families regarding the risk factors associated with placenta accreta and placenta previa during pregnancy check-ups. Additionally, screening is essential for the early detection of placenta accreta and total placenta previa. This enables health professionals to assess severity, schedule terminations, determine delivery methods, ensure adequate surgical preparation, select appropriate surgical techniques, and plan referrals [14].

Mothers undergo extended hospital stays exceeding seven days, necessitating the role of midwives in tertiary referral hospitals. Midwives deliver physical midwifery care with other health professionals and offer psychological support to mothers. Physical midwifery care involves the assessment and enhancement of maternal and fetal health, promoting maternal hygiene to mitigate infection risks during pregnancy, particularly in cases with a history of APB. It also addresses nutritional requirements through High-Calorie, High Protein, and iron-rich diets. Psychological midwifery care addresses the necessity for rest, particularly for mothers requiring long-term care, as this can impact their psychological well-being and disrupt sleep patterns. The midwife offers the mother emotional support and positive affirmations, facilitating a joyful and enthusiastic pregnancy experience. The midwife clarifies the conditions or issues encountered and offers solutions through Information, Education, and Communication (IEC) to alleviate anxiety and promote a calmer experience for the mother during her pregnancy. Midwives can provide education on relaxation techniques, including deep breathing and light meditation, to manage stress levels. These techniques effectively reduce cortisol, thereby minimizing potential impacts on fetal development.

CONCLUSIONS

The diagnosis and management of pregnant women with placenta accreta and total placenta previa adhere to established local and international guidelines. Early detection via obstetric ultrasound examination is crucial for informing clinical decisions regarding the timing and method of delivery. The observation results serve as a foundation for physicians to implement prompt interventions to reduce potential complications for both the mother and the infant. Management encompasses various health professions, employing a comprehensive approach to stabilize the conditions of both mother and fetus. Safe delivery planning is facilitated through midwifery care in tertiary referral hospitals, which offer advanced health services, complex techniques, and higher levels of specialization. Delivery planning that prioritizes the safety of both the mother and fetus is essential in cases of placenta accreta and total placenta previa, particularly for planned or emergency cesarean section procedures. Planned and emergency cesarean section operations possess distinct characteristics and address various cases of abnormal placentation. However, cesarean sections are linked to both short-term and long-term physical and psychological risks, yet they share a common objective: achieving optimal maternal and neonatal health outcomes. Midwives play a crucial role in the early detection of placenta accreta and placenta previa totalis during antenatal care, collaborating with physicians. Additionally, they provide essential psychological support, as mothers facing these conditions often experience extended hospital stays.

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