CASE STUDY IN HIGH RISK PREGNANCY

Siti Munawaroh 1* Wiwin Widayani 2
1,2)Department of Midwifery Health Polytechnic Bandung, Indonesia
Email: sitimunawrh10@gmail.com

Abstract: Background: The period of pregnancy, childbirth, postpartum and newborn is a physiological condition. However, normal conditions can become pathological so that every pregnant woman has a risk of experiencing complications. One condition that can cause complications is a high-risk pregnancy. Some categories of high-risk pregnancies are too young, too old, too close, and too many. With comprehensive midwifery care, midwives can perform early detection of complications that occur both during pregnancy, childbirth, postpartum and newborns.

Methods: The aim of this case report is to provide comprehensive midwifery care for high risk pregnancies. The process of childbirth and the puerperium went normally without complications.

Results: The client uses a depo progestin injection contraception device and the baby has received Hb0, BCG and Polio I immunizations and has gained 800 grams of weight. Conclusion: Optimal comprehensive midwifery care can prevent complications.

Keywords: comprehensive midwifery care, high risk pregnancy

INTRODUCTION

In Indonesia, in one hour there are two pregnant women or in a year 15,000-17,000 pregnant women are identified as experiencing complications of pregnancy, childbirth and childbirth. The problem of complications is a serious risk factor for maternal and infant mortality, so it requires treatment efforts to save the mother and baby. 

One condition that can cause complications is a high-risk pregnancy. Pregnant women who are classified as at high risk include those aged less than 20 years, because at that age biologically the condition of the uterus and pelvis of the mother has not yet fully developed, her mentality is immature so she is prone to shocks which results in a lack of attention to meeting the needs of nutrients during pregnancy her pregnancy.

Pregnancy, childbirth, childbirth and newborns are physiological processes, meaning that any changes that occur in women during these processes are natural/normal. In some cases, pregnancy, childbirth, postpartum and newborns can become pathological/abnormal if complications occur early before pregnancy or occur during that period or process.

The role of midwives in improving the health of mothers and babies is carried out through comprehensive care, namely carrying out continuous care or Continuity of Care namely a model of care that ensures women receive all care from midwives, starting from pregnancy, childbirth, postpartum to newborns.
The purpose of this case study is to carry out comprehensive midwifery care through a midwifery management approach and is documented in the form of SOAP.

METHODS
The method used is observation with case study approach namely the method used to collect and analyze data relating to a case.

The subjects in this study were mothers who were observed during their third trimester of pregnancy (gestational age 39-40 weeks), childbirth, postpartum and newborns, from April to July 2021.

Data collection techniques used are primary data and secondary data. Primary data obtained from anamnesis, physical examination and observations made to respondents. Meanwhile, secondary data was obtained from the MCH book and pregnancy register records. In addition, through the use of personal social media (whatsapp), short message services, and voice calls as an effort to complete the data.

The instrument used is the format for assessing care for pregnancy, childbirth, postpartum and newborns, including partograph sheets and observation sheets. The tools used are personal protective equipment, antenatal care sets, delivery sets, postpartum examination sets, newborn examination sets and laboratory examination sets.

RESULTS
Pregnancy
The visit was carried out once on May 18 2021, the mother’s age was 19 years. History of pregnancy: first pregnant woman, never given birth, no history of miscarriage. HPHT: 17-08-2020, TP: 24-05-2021 (22-05-2021), gestational age 39-40 weeks. Mothers have special concerns, namely anxiety because they will undergo the birth process.

Examination results: vital signs within normal limits, TFU 33 cm, estimated fetal weight 3410 grams, fetal heart rate 140 x/minute, regular. Laboratory examination: Hb 11.4 g/dl, urine protein: negative, urine glucose: negative.

Diagnosis established G1P0A0 gravida 39-40 weeks, single fetus alive. The problem found in high risk pregnancies is the mother’s age of 19 years. The midwifery care provided explains the results of the examination, immediately contacting the health worker if there are complaints and giving birth to the health worker

Labor
Mother came to PMB complaining of having heartburn since 8 hours ago, regular contractions and bloody mucus coming out since 2 hours ago but there has been no unbearable discharge of water from the birth canal.

Vital signs within normal limits, TBJ 3.225 grams. FHR: 146 x/min, regular. His 2 x 10' 25". Internal examination: vulva/vagina no abnormality, thick soft portion, positive amniotic fluid, 3 cm dilated, head presentation, decreased Hodge II, molasses 0, no small protruding part. The established diagnosis was G1P0A0 term parturiet first stage of latent phase, single live fetus, cephalic presentation. Management given DJJ observation, progress of labor and other care as needed. Four hours later, the heartburn was getting more frequent and stronger, mucus mixed with blood more and more. Vital signs within normal limits, DJJ: 145 x/minute, His: 4x10'40". Internal examination: Portio thin soft, positive amniotic fluid, dilated 7 cm, decreased hodge III. Diagnosis G1P0A0 term parturiet first stage of active phase, single live fetus, cephalic presentation. Two hours later, spontaneous rupture of membranes, TTV within normal limits, FHR: 150 x/minute/ regular, His: 5x10'50". Internal examination: the portio is not palpable, amniotic fluid is negative, opening 10 cm. Diagnosis: G1P0A0 parturient term II stage, single fetus is alive. The care provided is observing the fetal heart rate and contractions and leading the delivery with normal delivery care. The delivery lasts 20 minutes Subsequent examination, vital signs within normal limits, unilateral TFU, hard uterine contractions, no second fetus, normal bleeding. The diagnosis is P1A0 Kala III. The management carried out was active management of stage III (giving 10 IU
oxytocin injections, stretching the controlled umbilical cord, delivering the placenta, doing uterine massage for 15 seconds and checking the completeness of the placenta. Stage III lasted 10 minutes.

In the fourth stage, the mother still feels weak and has heartburn. Vital signs are within normal limits, uterine contractions are good, there are tears in the perineum from the perineal skin, vaginal mucosa and perineal muscles. The diagnosis in this case was P1A0 Kala IV with grade II perineal laceration. The management is carried out by sewing the perineum, observing the fourth stage and others according to the needs of the mother. The results of monitoring stage IV lasted normally for 2 hours, there were no complications or complications.

Postpartum

The first visit was made at 6 hours postpartum, on May 23, 2021. Mother still feels heartburn. Vital signs are within normal limits. Uterine fundus height 2 fingers below center, good uterine contractions, empty bladder. Genitalia: there is lochia rubra, and perineal wound sutures

The diagnosis is P1 A0 Post Partum 6 Hours. The management given included explaining that complaints felt by the mother were normal for postpartum mothers for 6 hours, providing Counseling, Information and Education (IEC) regarding the treatment of suture wounds, giving amoxicillin 500 mg 3x1, paracetamol 500 mg 3x1, Fe tablets 60 mg 1x1 and metronidazole 500 mg 3x1.

The second visit was carried out on the 7th day postpartum, there were no complaints felt by the mother, but she often woke up at night because she was breastfeeding her baby. Vital signs within normal limits, no palpable TFU, lochia sanguinolenta, dry sutures, no signs of infection. The diagnosis is P1 A0 Post Partum Day 7. The care provided includes advising the mother to meet her needs for rest, nutrition, rest and sleep, danger signs during the puerperium and informing her about repeat visits.

The next care is carried out on the 14th day of the puerperium via telecounseling due to the COVID-19 pandemic. The results of the anamnesis of the mother had no complaints, the lactation process also went smoothly. The diagnosis in the third postpartum care is P1 A0 Post Partum day 14. The management given is to give appreciation because the mother has made an effort to provide exclusive breastfeeding, reminds her again regarding the need for rest, nutrition, danger signs during the postpartum period and plans to use contraceptives.

Postpartum care was then carried out at 42 days postpartum. From the results of the anamnesis, the mother had no complaints. The mother has received 3-month injectable family planning services on July 1, 2021 at PMB and received the support of her husband. Overall physical examination results were within normal limits. The diagnosis at the fourth examination was P1 A0 post partum day 42. The care given was to provide information about the side effects of 3-month injectable birth control (progestin depot), reminding about family planning repeat visits, recommending immediate visits to a health facility if there are complaints.

Newborn baby

Baby born on 23-05-2021 at 04/50 WIB. Baby born spontaneously, crying immediately, reddish skin color, active movements. Vital signs within normal limits, anthropometric examination: BB 3,200 grams, PB 50 cm, LK 33 cm. The results of the head to toe physical examination were normal.

The diagnosis in this case is a full-month neonate - according to gestational age, 1 hour old. The management given is giving an intramuscular injection of Vitamin K with a dose of 0.5 mg in the baby’s left thigh, giving eye ointment to both baby’s eyes, and advising the mother and family to always keep the baby warm.

The first visit is for newborns 6 hours. Mother said there were no complaints about her baby. From examination vital signs within normal limits. The diagnosis that was enforced was a Full Month Neonate - According to the Gestation Period, 6 hours old. The care given is in accordance with the needs of infants aged 6 hours. namely washing and giving Hb0 immunization, explaining the benefits of Hb0 immunization, providing counseling to mothers to prepare for going home on how to care for the
umbilical cord with the principle of clean and dry.

The second visit was made on May 30, 2021. The mother said the baby was in good health, the umbilical cord had fallen off on day 4. Vital signs were within normal limits, BB 3,400 grams, PB 50 cm, physical examination within normal limits. The diagnosis in this case was a full-month neonate – according to gestation period, 7 days old. The care provided is to remind the mother of the next immunization schedule, namely BCG and Polio 1 immunization at 1 month of age, danger signs in infants, exclusive breastfeeding and subsequent repeat visits. Subsequent care was carried out when the baby was 14 days old via telecounseling, because the giver was still a COVID-19 pandemic. The mother said her baby was in good health and had no complaints, the lactation process was going smoothly. The diagnosis in this case was a Full Month Neonate - According to Pregnancy Period (NCB-SMK) aged 14 days.

Fourth visit on July 3, 2021. Mother said her baby was in good health and had no complaints. The mother is still breastfeeding only her baby's milk. The baby has received BCG and Polio I immunization on July 1, 2021. From the results of a physical examination, vital signs are within normal limits. BB 4,000 grams, PB 54 cm. The diagnosis at the fifth visit was a 42 day old baby. The care provided is to provide support to mothers for exclusive breastfeeding, explaining again the benefits and side effects of immunization that the baby has received, reminding the next immunization schedule, namely DPT I and Polio II one month later, and advising the mother to immediately go to the nearest health facility if there are complaints.

**DISCUSSION**

**Pregnancy**

This midwifery care is carried out on clients aged 19 years, gestational age 39-40 weeks. The problem found was that the mother’s age during pregnancy was below the healthy reproductive age. Healthy reproduction is known as a safe age for pregnancy, namely the age of 20-35 years, because in women starting at the age of 20, the uterus and other body parts are really ready to accept pregnancy, and at that age women usually feel ready to become mothers. Based on the explanation above, the client's age is included in a high-risk pregnancy. To overcome this, it is recommended that clients give birth at health workers considering the possible complications that can occur in the client's condition. As an effort to prevent complications in pregnancies at this risky age, there are many government programs that are recommended, including the Integrated ANC program, the P4K Program (Delivery Planning and Complications Prevention Program) and the Mother and Baby Movement.

During pregnancy checks, from the beginning of pregnancy the client has done 6x pregnancy checks. Examinations were carried out at PMB, posyandu and doctor's clinic (undertook ultrasound). The results of all examinations were well monitored. This shows that there is conformity regarding the frequency of maternal prenatal checks based on Ministry of Health, Republic of Indonesia (2020)in the Guidelines for Antenatal, Childbirth, Postpartum and Newborn Services in the Era of Adaptation to New Habits, that pregnant women visit at least 6 times, meaning that mothers already have the awareness to check their pregnancies.

Another problem found was feelings of anxiety before delivery. This is one of the psychological impacts that can occur in high-risk pregnant women. The anxiety that is felt generally ranges from fear of bleeding, fear of having a baby with defects, to fear of not being able to care for and raise children properly. Therefore, the client is given psychological support so that he always prays so that it goes well during childbirth. Based on research resultsMaharani, TI, & Fakhrurrozi, (2014), it is known that the higher the social support that is owned, the lower the anxiety before birth experienced by pregnant women.

**Labor**

During the first stage of labor, the latent phase or the active phase, no gaps or problems were found. The first stage lasted for 8 hours 30 minutes. This shows when I on the client runs normally.Febrianti & Aslina, (2019)say usually in primigravidas the first stage lasts about 13 hours. Even so, it can occur as a result of factors that affect
childbirth. These factors are known as the five P’s: power, passage, passenger, psychological and helper.\(^{17}\)

In Kala II there are no gaps or problems. Second stage of labor lasts 20 minutes. According to Prawirohardjo, the duration of stage II usually lasts 2 hours in primiparas.\(^{18}\)The care given in stage II refers to normal delivery care according to the 60 APN standard steps. This care is in accordance with the competence of midwives in Kepmenkes 369 of 2007 concerning delivery care.\(^{18}\)

The third stage of the client takes place within 10 minutes. In stage III, active management of stage III was carried out, namely giving IM 10 IU oxytocin injections, conducting controlled cord stretching, and uterine fundal massage and delivery of the placenta.\(^{19}\)Based on research Widiaeutik, (2020), that the implementation of active management of the third stage was carried out perfectly in 26 mothers (80.6%) could prevent primary postpartum hemorrhage.

In the fourth stage, there is no gap between theory and practice. Care is given according to the conditions and needs of the client. No complications or complications were found for 2 hours postpartum.

### Postpartum

The first visit was made after 6 hours post partum. In the provisions that apply at PMB Bd.T, clients go home after 6 hours post partum if there are no complaints. There is a gap found between theory and practice, namely when the mother returns home after childbirth. In the care that was carried out, postpartum mothers were sent home after 6 hours postpartum. According to Wahyuningsih 2018, it is estimated that 60% of deaths occur in the postnatal period, and 50% of puerperal deaths occur due to bleeding in the first 24 hours postnatally.\(^{21}\)Therefore, postpartum mothers and their babies should be sent home after 24 hours postpartum.

Then, another gap was found between theory and practice, namely the administration of drug therapy to postpartum mothers. In practice, the client is given therapy including paracetamol 500 mg 10 tablets 3x1, Amoxicillin 500 mg 10 tablets 3x1, metronidazole 500 mg 10 tablets 3x1, and fe tablets 60 mg 10 tablets 1x1. Based on recommendations WHO, (2013) in the care of postpartum mothers, giving antibiotics to postpartum mothers is not recommended if there are no appropriate indications because they can lead to antibiotic resistance.

On the 7th postpartum day, the Uterine Fundal Height (TFU) was not palpable. Uterine involution on the 7th day postpartum is mid-central and symphysis.\(^{25}\) However, clients experienced a more rapid decline in TFU. Based on several studies, it states that there is a relationship between the process of uterine involution which takes place quickly in clients with early mobilization and the process of breastfeeding. According to Hadi (2014), explained that the role of mobilization on uterine involution is explained as follows, mobilization increases the contraction and retraction of the uterine muscles after the baby is born. These contractions and retractions are necessary to clamp the blood vessels that burst as a result of the detachment of the placenta. With the existence of continuous contractions and retractions this causes disruption of blood circulation in the uterus causing the muscle tissue to lack the necessary substances, so that the size of the muscle tissue becomes small. Thus, mothers who do early mobilization have a decrease in the uterine fundus more quickly.

Based on other studies, uterine involution is also associated with breastfeeding. Proper breastfeeding is through baby suction, when suction occurs the nerves in the areola area of the breast will send impulses to the hypothalamus, from the hypothalamus to the pituitary and will release oxytocin. One of the functions of oxytocin is to stimulate uterine smooth muscle contractions so that the uterine involution process can take place more quickly.\(^{25}\)

At postpartum and on the 42nd day the client has used the 3-month injectable family planning method (progestin depot) which does not affect milk production for mothers who are breastfeeding.

### Newborn baby

Care given to newborns is another 6 hours, namely bathing the baby 6 hours after the baby is born. Delaying bathing the baby until six hours after birth will reduce the risk
of hypothermia in newborns. In line with the Ministry of Sex in the Pocket Book of Essential Neonatal Health Services, that babies should be bathed at the right time, which is not less than six hours after birth and after their condition is stable.

Another care is giving the first Hepatitis B immunization (HB0). According to the 2010 Ministry of Health, HB0 immunization must be given at 0-7 days because administration as early as possible will protect about 75% of babies from transmission of Hepatitis B. There is a gap regarding the time of discharge of newborns. Based on the theory, babies born in health care facilities should be sent home at least 24 hours after birth, if no abnormalities are found during supervision. In babies born normally and without problems, the midwife leaves the delivery site no later than 2 hours after birth.

The next baby visit, namely at the age of 7 days and 14 days, found no complaints or signs of danger, the baby was in good health without being accompanied by any complications. At the next examination, the 42 day old baby had no complaints. The baby has also received BCG and Polio I immunizations at the age of 40 days. This is in accordance with the theory that BCG and Polio I can be given at the age of 1 month.

Based on the results of the assessment from birth to 42 days, it can be concluded that the baby is in normal and healthy condition.

CONCLUSION

Comprehensive midwifery care for high-risk pregnancies is very important to be provided according to standards, so that possible problems and complications during pregnancy, childbirth and the puerperium can be prevented.

REFERENCES

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