



COMPREHENSIVE MIDWIFERY CARE TO MRS. S 17 YEARS OLD WITH MILD ANEMIA, PREMATURE RUPTURE OF MEMBRANES AND PRETERM LABOR WITH VACUUM ECTRACTION IN ROEMANI'S HOSPITAL

Zaini Mukaromah¹, Siti Istiana², Nuke Devi Indrawati³, Fitriani Nur Damayanti⁴

Diploma Midwifery Department, Faculty of Nursing and Health, University of Muhammadiyah
Semarang^{1,3}

Bachelor of Midwifery Department, Faculty of Nursing and Health, University of Muhammadiyah
Semarang^{2,4}

Email : zainimukaromah2118@gmail.com

ABSTRACT

According to the Health Profile Data of Central Java Province, the maternal death rate was 76.9 per 100,000 live births in 2019 and would rise to 98.6 per 100,000 live births in 2020. In contrast, the rate of infant mortality decreased to 7.8 per 1000 live births in 2020 from 8.24 per 1000 live births in 2019. Based on information from Roemani Hospital's Maternal Mortality Rate in 2022, there was a single instance of maternal mortality brought on by cardiac arrest and labor obstruction. The reasons of 6 instances in the Infant Mortality Rate data were severe asphyxia, neonates delivered by caesarean section, intestinal blockage, delayed fetal development, and singletons. The goal of this study is to provide comprehensive midwifery care starting with pregnancy, childbirth, newborns, postpartum, and family planning services in the form of a case study on Ny. S is a 17-year-old woman who experienced a premature rupture of the membranes and delivered her baby at Roemani Hospital using a vacuum extraction technique. The outcomes of midwifery care provided to Mrs. S, a 17 year old G1P0A0 who was 35 weeks and 5 days pregnant, had premature membranes, had a history of labor involving vacuum extraction, and had a healthy postpartum period without any complaints. Family planning care was also provided, including KIE family planning for breastfeeding mothers. In accordance with the BBL history, the woman is in good health, and the baby was delivered weighing 2,750 grams and measuring 48 cm. Additionally, there is a gap in the usage of PPE when assisting with delivery. The application of midwifery care has led researchers to the conclusion that there is a disconnect between the field's theory and the practice of midwifery care.

Keywords: *anemia, premature rupture of membranes, preterm, vacuum ectraction.*

1. INTRODUCTION

Data from the Indonesian Demographic and Health Survey (IDHS) show that 4,627 maternal fatalities occurred in Indonesia in 2020, up from 4,221 in 2019. In 2020, hemorrhage accounted for 1,330 incidents of maternal mortality, pregnancy-related hypertension for 1,110 cases, and circulatory system abnormalities for 230 cases (Kemenkes RI, 2020).

Maternal fatalities increased from 76.9 per 100,000 live births in 2019 to 98.6 per 100,000 live births in 2020, according to the Health Profile Data of Central Java Province in 2020. MMR increased by as much as 61.3 percent during the puerperium in the region of Central Java, by 26.6 percent during pregnancy, and by 12.1 percent during delivery. The causes of maternal death in Central Java Province in 2020 include hypertension in pregnancy up to 25.5%,

hemorrhage up to 17.5%, circulatory system diseases up to 5.7%, infection up to 4.2%, and metabolic disorders up to 1.9%, with the remaining 45.3% being other factors (Dinkes Prov Jateng, 2020).

In 2020, the infant mortality rate will drop to 7.8 per 1000 live births from 8.24 in 2019. Low birth weight caused 25.0% of newborn deaths in the province of Central Java, followed by asphyxia 16.7%, pneumonia 16.7%, congenital abnormalities 9.4%, diarrhea 2.2%, and sepsis 1.6%, as well as gastrointestinal diseases 0.5% and neurological disorders 0.3% (Dinkes Prov Jateng, 2020).

In contrast to the coverage in 2019, which was 98.41 percent, the coverage for postpartum care in the Central Java Province was lower in 2020 at 94.36 percent. EFA is among those taking part in postpartum family planning. In Central Java, the post-delivery family planning participation rate in



2020 was 28.6%, which is an improvement above the 26.8% coverage in 2019. In Central Java, the post-delivery family planning participation rate in 2020 was 28.6%, which is an improvement above the 26.8% coverage in 2019 (Dinkes Prov Jateng, 2020).

According to Roemani Hospital's yearly records, there will be 1 case of maternal mortality from cardiac arrest and obstructed labor in 2022. And there were six infant deaths at Roemani Hospital, with the causes being severe suffocation, caesarean-delivery babies, intestinal obstructions, sluggish fetal development, and singelton (Data Rekam Medik RS Roemani, 2022).

Giving devoted moms the right to obtain continuity of care contributes to efforts to lower maternal and newborn mortality. Every woman is expected to have access to high-quality maternal health services, including family planning, prenatal care, skilled labor help provided in medical facilities, postpartum care for mothers and newborns, specialized treatment, and referrals in the event of problems (Kemenkes RI, 2020)

Thus, the author's decision to provide ongoing midwifery care for Ny. S at the Roemani Muhammadiyah Hospital in Semarang may be supported by the facts and action plan shown above. The goal of the study is to lower the rates of maternal and newborn mortality.

2. METHOD

Case study research is conducted by looking at actual examples through single-unit challenges that already exist. From May 25 to June 25, 2022, the study was conducted at Roemani Hospital. Mrs. S, who is 17 years old, was the sample used in this investigation. Observation, interviews, and documentation studies of midwifery care, including the stages of pregnancy, labor, new-born care, postpartum, and family planning, are the instruments employed. The equipment and supplies used during the examination follow standard midwifery care practices.

3. RESULT

The Roemani Hospital provided Mrs. S, a 17-year-old G1P0A0, with midwifery care that complies with industry requirements. According to the assessment's findings from May 25, 2022, the mother's membranes had prematurely ruptured and she had a slight case of anemia. The overall examination, which included a general examination,

vital sign examination, anthropometric examination, physical examination, and laboratory examinations, was completed. The results of the ultrasound examination, however, revealed a single head presentation alive with reduced amniotic fluid (fluid index), gestational age 35–36 weeks, and amnion 7). The interventions included telling the mother's relatives and friends about her illness, providing her with emotional support, urging her to relax, and having her sleep on her left side.

Mrs. S. was delivered using midwifery care at a premature gestational age of 36 weeks. At 12.30 WIB on May 27, 2022, Mrs. S started to have nausea and a mucus and blood discharge, and her mother started to worry about his condition. When the patient has been brought into the birth room, the care given is to encourage the family to bring refreshments. Support the mother fully, support her, and lightly massage her waist. Encourage the mother to continue sleeping on her left side and teach her relaxation methods as she takes a deep breath through her nose before gently exhaling through her mouth. The duration of the first stage of labor is around four hours, followed by intervals of one hour, fifteen minutes, and two hours of observation until the fourth stage. Because she was exhausted and the baby needed to be delivered right away, the mother naturally gave birth with the aid of vacuum extraction. The treatment is in line with the requirements of Normal Childbirth Care.

Because infants do not cry loudly, midwives first dry the baby's body and then quickly examine the baby's skin tone, respiration, and movement before doing suction. IMD is done after which the cord is severed. The fourth stage of care for infants included anthropometric assessments, physical examinations, the use of eye ointments, vitamin K injections, and Hb 0 vaccination. Female, 2.750 grams, 48 cm in height, 33 cm in girth, and three visits to neonates were made: KN 1 for newborns younger than 6 hours, KN 2 for those younger than 6 days, and KN 3 for those younger than 2 weeks. The baby's health appeared to be in fine shape, and his or her vital signs were within normal ranges, but an inspection of the baby's head at 4 days old revealed that the succedaneum's head was still missing. The assistance offered includes advise on exclusively breastfeeding, vaccination, and reassurance to moms to keep their infants warm at all times.

Midwifery care is provided during the puerperium in accordance with midwifery care guidelines. Four postpartum visits were made; the first one was made between six hours and six weeks



after the birth. Vital indicators were within normal ranges, and the physical examination of the mother turned up positive results for her overall condition. The care given is to explain that it is normal for the mother's uterus to shrink. counseling on the dietary requirements of new mothers, advice on maintaining personal cleanliness, instruction on breast care, warning signals for new moms and BBL, and a reminder to return. The care given includes reassuring the mother that the discomfort she is experiencing is still normal, reminding her to maintain personal hygiene, counseling for nutritional needs of postpartum mothers, counseling on danger signs for postpartum mothers and BBL, advising them to perform postpartum exercises at home, and reminding them for follow-up visits. urging the mother to utilize family planning right now, and take her to the nearest medical center.

During the third postpartum visit, Mrs. S received family planning midwifery care, including advice about contraceptives because she had chosen to utilize KB implants. The mother chooses to utilize the KB implant, with the husband's consent. Mrs. S presently plans her family by wearing a condom when she has sex with her husband and wife.

4. DISCUSSION

1. Pregnancy care from a midwife

The mother's hemoglobin test results showed that it was 10.8 g/dl at the time of the evaluation at the Roemani Hospital. According to Nugroho in the magazine (Hidayah, 2021) and the Indonesian Ministry of Health in the book, moms have moderate anemia if the Hb level is below 11 g/dl (Reni Yuli .A dan Dewi Artiana, 2018). Abortion, intrauterine mortality, premature delivery, low birth weight, congenital abnormalities, and susceptibility to infection are some of the impacts of anemia on the fetus. However, in pregnant women, it can result in abortion, early birth, the risk of cardiac decompensation, and premature membrane rupture (I. D. A. Nurjanah, 2021). This demonstrates a connection between the findings of the analysis of moms who had preterm membrane rupture. Premature membrane rupture during pregnancy is characterized by the leakage of amniotic fluid that leaks from the vagina (Annisa et al., 2018). The age of the mother during pregnancy is one of the elements that influences the amount of risk of pregnancy and childbirth, including the incidence of preterm rupture of membranes, in accordance with Wiknjastro's 2005 hypothesis published in the journal (A.

Nurjanah, 2021). Because the reproductive organs are in peak condition between the ages of 20 and 35, this is the best time for women to become pregnant. When a woman falls pregnant before the age of 20, her reproductive organs are not prepared for pregnancy, which causes an improper amniotic membrane to develop, and the pregnancy is regarded as high-risk.

The treatment provided to Mrs. S included consultation with Sp. OG physicians, medical advice provided by administering 500 ml (16 tpm) of RL infusion, 500 mg of amoxillin administered orally three times per day, ultrasound examination, labor induction, and attentive observation. If the pregnancy is carried on, the mother and fetus may get an infection (Mohd. Andalas dkk, 2019). The author describes the mother's illness, offers emotional support, and requests that her family always be with her.

2. Initial labor care provided by a midwife

Was completed on May 27, 2022, at 8:00 WIB, and documented in the partograph sheet. Because they can swiftly make clinical judgments and track the progression of labor and the wellbeing of the mother and fetus, the partograph facilitates midwives' ability to provide delivery care. First-stage midwifery treatment consisted of message effleurage and breath relaxation. Message effleurage will aid breathing during labor and lessen back discomfort in the mother. It will also enhance blood circulation and minimize muscular tension and pain (Fitriana & Vidayanti, 2019)

At 11.30 WIB, the second stage of labor began. A doctor with specialization in obstetrics oversaw the birth. According to the examination findings at 12:20 PM, labor had not progressed and the woman reported feeling exhausted. A vacuum extraction is carried out by the doctor with the family's approval. The following requirements must be met before performing a vacuum extraction: full opening, back of the head presentation, term fetus, and HODGE III-IV head descent (RSUD SYAMRABU BANGKALAN, 2016). In the meanwhile, vacuum extraction labor can be carried out at a preterm gestational age of 34-36 weeks conservatively in preterm labor, according to (Katarina Berg, Mikael Norman, 2018). According to study (Siti Qomariyah, 2018), there are a number of reasons why labor has to be ended by vacuum extraction, including primiparous parity, a mother's first pregnancy, a narrower birth canal, and a mother's lack of prior delivery experience. According to the scenario that



the author researched, Mrs. S was expecting her first child when the second stage of labor stalled due to Mrs. S's exhaustion. At 12.30 WIB, the baby was delivered. In primiparas, the second stage lasts an hour, according to (Martina, 2019).

Controlled uterine fundus massage and cord stretching were conducted during the third stage of labor. Postpartum hemorrhage is thought to be preventable by active care of the third stage (Irdayanti dkk, 2021). The placenta was delivered at 12.30 and 12.45 WIB, along with a uterine massage and an examination of the umbilical cord's integrity. On Mrs. S, Stage III lasts for 15 minutes. The third stage, according to (Martina, 2019), doesn't go on for more than 30 minutes.

Two hours after birth, the fourth stage of labor began. Vital signs are within normal ranges, the TFU is 2 fingers below the center, there are forceful contractions, and the PPV is less than 50 cc, according to the examination results. A rip in the vaginal mucosa, perineal skin, and perineal muscle necessitated heating the perineum using the subcutis method. In delivering prenatal care, it adheres to the APN guideline of 60 stages as stated in (Nurjasmii, 2016).

3. Newborn baby care provided by midwives

According to By Ny, Mrs. S newborn care has been provided in compliance with (Kurniarum, 2016) newborn essential services. Following birth, the baby's airway was cleaned, he or she was dried off with a dry cloth, early breastfeeding was started, the umbilical cord was cut and then clamped, 1 percent tetracycline antibiotic ointment was applied to both eyes, a vitamin K injection was given intramuscularly (IM) on the left anterolateral thigh, 0.5 ml of Hb 0 immunization was given in the anterolateral right. The baby was born spontaneously using a vacuum extraction device on May 27, 2022, at 12.30 a.m., weighing 2.750 grams, measuring 48 cm in length, 33 cm in width, 30 cm in depth, and 31 cm in height. The baby's heart rate was 120 beats per minute, and its spontaneous breathing rate was 40 breaths per minute. Its temperature was 36.5 °C. The midwifery care given entails keeping the infant warm at all times as well as giving advice on how to care for the umbilical cord and newborn danger indications.

According to (Anjani dan Evrianasari, 2018), the characteristics of normal newborns include weight between 2500 and 4000 grams, birth length between 48 and 52 cm, head circumference between 33 and 35 cm, chest circumference between 30 and 38 cm, heart sounds between 120 and 160 breaths per minute,

breathing between 40 and 60 breaths per minute, and skin that is smooth and red due to tissue and vernix caseosa. Lanugo hair is visible, head hair usually looks perfect, nails are a little long and loose, sucking and swallowing reflexes have been formed well, the morrow reflex or hugging movement when startled is good, the grasping or grasping reflex is good, genitalia if the female labia majora has covered the labia minora, while the male testicles have descended and the scrotum is present, good elimination if urine and meconium have passed within 24 hours.

Neonatal visits were performed three times; the anamnesis results showed that the baby was in good health, that his vital signs were within normal ranges, that he appeared healthy physically, and that the head of the succedaneum had vanished by the fourth postpartum day. However, by the time the baby was six days old, he had developed facial jaundice. The midwifery care given consists of keeping the infant warm at all times and encouraging moms to nurse exclusively for six months without giving the child any additional food because breast milk may satisfy a baby's nutritional and energy demands for four to six months (Ade Devrianzy dkk, 2018). The author states that babies in their first week of life have a normal metabolism of bilirubin when the baby exhibits jaundice. Elevated amounts of neonatal erythrocytes, a shorter erythrocyte age, and immature liver function are the causes of high bilirubin levels on the first day of a baby's life (Triyani, 2018). The midwifery care is to inform the mother that the baby is still in a normal condition, the mother does not need to worry about the complaint, the yellow baby on the fourth day is still normal, and the mother only needs to dry the baby in the morning sun at 07.00–09.00 WIB for 15 minutes and give the baby enough nutrition, particularly breast milk to meet the nutrition because the fourth day yellow baby will disappear if accompanied by yellow breast milk on the baby's face. The author advises and urges women to immunize their infants after one month at the closest puskesmas and to return on the timetable that the midwife has provided. Remind moms to participate in posyandu activities and to keep the infant warm so that they don't get hypothermic (Murni Tania, 2020).

4. Puerperium-specific midwifery treatment

There were 4 visits conducted in the postpartum period. First visit was made six hours after delivery, second visit six days later, third visit two weeks later, and fourth visit six weeks later (Kemenkes R.I, 2018). According to the author's background, the



mother is in good health, her vital signs are within the usual range, and her physical examination appears to be positive.

According to (Kemenkes R.I, 2021), postpartum mothers receive midwifery care that includes explaining to them the process of uterine involution, exclusively breastfeeding counseling, encouraging them to eat nutrient-dense foods and drink nine glasses of water per day, and counseling for personal and breast care. cleanliness and advice on babies' and postpartum moms' risk indicators. And youtube may be used to teach postpartum gymnastics to mothers. According to study, postpartum gymnastics is beneficial for uterine involution, blood circulation, muscular tone, and regaining the mother's physical form (Ika Nur Saputri dkk, 2020). The mother received midwifery care during her two-week postpartum appointment, which included an explanation of how the mother's lack of sleep was the root of her disorientation. Educate mothers on the need of family planning after puberty. Inquiries on the mother's challenges with childrearing and family planning advice were supplied at the fourth visit during the puerperium.

5. Attention to family planning

Mrs. S stated during a visit to a family planning service that there are currently no intentions to utilize contraception. The author of family planning care describes the definition of family planning, the goal of the family planning program, various postnatal contraceptive techniques, and various family planning kinds. For the postpartum contraceptive technique, it is the use of contraception to prevent conception within the first six weeks following birth, especially in the first one to two years postpartum (Patadungan, 2021).

The author provides information about IUD and implant contraceptives, including how long they may be used. Additionally, it was mentioned that this approach has a number of advantages, including the fact that it is quite safe for married women of reproductive age to use as a contraceptive and that it does not affect breastfeeding moms' ability to produce breast milk (BKKBN, 2021)

According to Mrs. S, who wishes to utilize birth control implants, the author's reasoning makes sense. But Mrs. S will bring it up once more with her husband. Mrs. S opted to utilize KB implants after some deliberation. With the husband's consent, the mother may utilize the KB implant at her discretion. The mother currently wears condoms for short periods of time when having sex with her husband

and wife. According to the author, Mrs. S's idea and choice to have an implant, KB, is the best option for spacing out pregnancies since it does not affect the production of breast milk or fertility and may be utilized in the long run.

5. CONCLUSION

The author has offered full-service midwifery care, including everything from family planning services through obstetric care during pregnancy. Due to the mother's preterm rupture of membranes at 35 weeks and 5 days of pregnancy and her need for childbirth care, Roemani Hospital provided the necessary treatment. S had a little case of anemia. A midwife aided vacuum extraction was used to deliver the baby at 36 weeks of gestation since the mother was exhausted and the baby needed to be delivered right away. Three neonatal visits were conducted by a midwife in line with the standard of essential care for infants; there were no difficulties throughout the visits. The puerperium was treated by a midwife four times, from the first visit at six hours after delivery until the fourth appointment at six weeks. Mrs. S is doing OK; her general health is good; her vital signs are within normal ranges; and she is in good physical shape.

We may draw the conclusion that comprehensive care, when delivered by skilled midwives, can reduce maternal and newborn mortality. According to the author's research, pregnancy in a person under the age of 20 increases the likelihood of difficulties. Therefore, it is hoped that this research would inspire the public to support efforts to avoid early pregnancy, such as promoting the existence of youth posyandu activities and government initiatives to do so.

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