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# Complete Midwifery Care In Very High-Risk Pregnancy

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ABSTRACT

A very high-risk pregnancy is a risk group for pregnant women with the highest number of maternal and neonatal deaths. One way that can be carried out to prevent maternal and infant complications is to provide complete midwifery care. The purpose of this case study is to provide complete midwifery care to Mrs. "W" from pregnancy to family planning. The research design used is a case study with the research subject of Mrs. "W". Methods of collecting data through interviews, observation, and documentation studies. The results of midwifery care for Mrs. "W" found data during pregnancy classified as very high-risk pregnancy with a Poedji Rochjati score of 14 (anemia, height < 145 cm, and a history of childbirth with infusion). Problems during pregnancy are the lack of adequate nutrition and optimal rest as well as the discomfort of swollen legs and back pain. During labour, the diagnosis of premature rupture of membranes was obtained. In the puerperium, the problem of suture wound pain was found. During the newborn period, jaundice was diagnosed. During family planning, the mother chose 3 months of injectable contraception. Management was given according to the diagnosis and problems found from the time of pregnancy to family planning. Complete midwifery care can increase the effectiveness of health care for the mother as a whole so that it does not endanger the mother and baby and increase patient satisfaction in getting midwifery services.

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## 1. Introduction

Pregnancy is a critical period experienced by a woman caused by a physiological process characterized by different physical, mental and social changes [1]. According to the World Health Organization (WHO) in 2017, 830 mothers die every day due to complications of pregnancy or childbirth [2]. In Indonesia, the maternal mortality rate (MMR) in 2015 was 305 per 100,000 live births [3]. In 2019, the MMR in East Java Province was 89.81 per 100,000 live births [4] and in Kediri Regency, there were 14 maternal deaths [5]. One of the causes of high MMR is high-risk pregnancy. The high-risk pregnancy group in Indonesia in 2015 was around 34% with the high-risk category of pregnancy reaching 22.4% [6].

A high-risk pregnancy is any pregnancy in which the mother or fetus (or both) are at high risk of morbidity or mortality during the labour or the puerperium and thus require special medical attention [7]. One of the efforts that have been used in general to detect early risk factors in pregnancy that can adversely affect the mother and fetus is using the Poedji Rochjati Score Card [8]. The Poedji Rochjati Score Card classifies pregnant women into low-risk pregnancies (total score of 2) means pregnancy without risk factors, high-risk pregnancy (total score of 6-10) means pregnancy with single or multiple risk factors and very high-risk pregnancy (total score of ≥ 12 ) means pregnancy with two, three or more risk factors [9]. A very high-risk pregnancy is a risk group for pregnant women with the highest number of maternal deaths due to conditions that are always preceded by very severe disease conditions with very high-risk factors before death [8].

The results of a preliminary study conducted on 2 May 2019 by interview at the Independent Practice of Midwife Ida Sunarsih, Gayam Village, Gurah District, Kediri Regency, obtained a pregnant woman with a very high-risk pregnancy, named Mrs. "W" aged 31 years old, $G_3P_{2002}$ with an SPR of 14. A score of 14 was obtained from an initial score of 2, the score of 4 for the maternal height of ≤ 145 cm, i.e. 141 cm, the score of 4 for the maternal history of labour by intravenous infusion due to labour bleeding, and a score of 4 for maternal disease, namely mild anemia (hemoglobin 9.4 gr%). The low or short height of pregnant women is one of the risk factors for labour dystocia which will be at great risk for labour assistance with actions such as emergency cesarean section, vacuum labour, and forceps [10]. In some conditions, fatal complications to the mother and fetus such as bleeding, infection, and asphyxia can occur during labour dystocia aid [11].

In addition to labour dystocia, one of the causes of the increased bleeding rate is a history of bleeding and infusion or transfusion in previous labour. The results of recent studies have reported

that mothers who have a history of bleeding at the time of labour have about 3 times the risk of experiencing bleeding in the next labour [12]. Anemia during pregnancy is also included in the category of risk factors for labour bleeding [13]. Anemia in pregnant women is one of the important indicators to see the nutritional status of the mother during pregnancy which can affect the health of the mother and fetus [14] such as weight gain disorders, immune system disorders, increased risk of heart disease, antepartum and postpartum infections, maternal mortality [15], intrauterine growth retardation, low birth weight, small babies for gestational age, premature labour, asphyxia, stillbirths and perinatal death and the risk of stunting in childhood (under 2 years of age) [16].

One of the efforts that can be made to help overcome these problems by improving comprehensive and quality services to mothers and babies within the scope of midwifery is to carry out complete and continuous midwifery care. Complete midwifery care can increase the effectiveness of health care, consistency in the care provided, and also patient satisfaction. Continuous midwifery care ensures that every mother has access to quality maternal health services starting from pregnancy, labour assistance by health workers in health care facilities, postnatal care for mothers and babies including special care and referrals in case of complications, as well as access to family planning [17], [18] to help prevent an increase in the number of pregnancy risk factors that can cause complications for the mother and fetus during subsequent pregnancy and labour [19]. Based on the above background, the researchers are interested in conducting complete midwifery care for Mrs. "W" with a very high-risk pregnancy in the Independent Practice Work Area of Midwife Ida Sunarsih, Gayam Village, Gurah District, Kediri Regency.

## 2. Methods

The research design used is descriptive qualitative research with a single case study approach. The subject of the case study is Mrs. "W" aged 31 years old, $G_3P_{2002}$ with a very high-risk pregnancy (Poedji Rochjati score of 14) since the third trimester of pregnancy, childbirth, postpartum, neonates, and family planning. This case study was carried out in the Independent Practice Work Area of Midwife Ida Sunarsih, Gayam Village, Gurah District, Kediri Regency from 9 November 2019 to 23 February 2020. The care provided was 14 times, consisting of 4 visits during the third trimester of pregnancy, 1 visit at the time of labour, 3 visits during the puerperium and neonates, and 3 visits during family planning. Methods of collecting data were interviews, observations, and documentation studies using medical record data from mother and child health books and the medical status of patients from hospitals. The certificate of ethical feasibility was obtained from the Research Ethics Commission of STIKES Karya Husada Kediri Number 005/EC/LPPM/STIKES/KH/XI/2019.

## 3. Results

### Results of Midwifery Care During Pregnancy

The results of midwifery care carried out on 9 November 2019 Mrs. "W" has mild anemia with problems of lack of fulfillment of nutritional needs and optimal rest and edema in the legs. The treatment given was to recommend increasing eating portions, i.e. eating little but often and providing a nutritional menu according to the nutritional needs of pregnant women in the third trimester by adding food ingredients derived from vegetables and fruits such as nuts, moringa leaves, seaweed, broccoli, cabbage, red beets, sweet potatoes, ginger, tomatoes, apples, grapes, papaya and those derived from animal proteins such as liver and red meat; increasing the portion of drinking water at least 8 glasses/day; reminding to regularly consume iron tablets; telling how to overcome sleep problems at night by relaxing while listening to classical music; drinking a glass of warm milk and taking a warm bath before going to bed and teaching pregnancy exercises to help reduce swelling in the legs as well as recommend elevating the legs with a pillow while sleeping. Evaluation result on 15 November 2019 Mrs. "W still has mild anemia with discomfort back pain and decreased edema in the legs. The follow-up treatment given was by telling to take iron tablets combined with red and orange and guava juices, soaking the feet in warm water, compressing the sore back with warm water, a comfortable sleeping position, and giving effleurage massage. Next evaluation results on 21 November 2019 and 24 November 2019 the mother said she did not experience back pain anymore and her legs were no longer swollen but the mother still had mild

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anemia. The treatment given was to continue the treatment that has been given at the previous visit.

**Results of Midwifery Care During Labour**

Midwifery care during labour for Mrs. "W" begins on Monday, 25 November 2019 at 23.00, the mother began to feel heartburn in the stomach and amniotic fluid came out continuously so that she came to the midwife's independent practice at 06.30 to check herself and was referred to the emergency departments of Aura Syifa Hospital. The results of the labour process obtained from the Patient's Medical Record from the hospital are: on 26 November 2019 at 07.20, the diagnosis of latent stage I labour was established with a history of intravenous infusion, mild anemia and premature rupture of membranes. The treatment provided was that the mother was transferred to the VK room, when she arrived in the VK room, she was given counseling and informed consent by the doctor to end the pregnancy (termination) by giving birth induction. Induction of labour started with the administration of 1 tablet of misoprostol (200 mcg) followed by the administration of oxytocin drip 1 kolf with 10 units of oxytocin in 500 ccs of NaCl with 8 drops/minute given at 09.35. After 15 minutes, an evaluation was carried out and the results were inadequate so that the drops were increased to 20 drops/minute. At 12.00, the second evaluation was carried out and the results Mrs. "W" entered the first stage of active labour. The treatment given was to continue the existing interventions and the mother's motivation to do distraction and relaxation techniques. At 13.00, the mother began to feel like pushing like she wanted to defecate. Evaluation of labour progress showed Mrs. "W" entered the second stage of inpartu. The treatment given was to assist with normal vaginal labour. The results of the evaluation at 13.23, the baby was born spontaneously vaginally with female gender, cried loudly, active movements, reddish skin, weighed 3.350 grams, body length of 51 cm and no abnormalities and the baby was placed on the mother's chest for early initiation of breastfeeding for ±1 hour. At 13.23, analysis of the data confirmed was in the third stage of labor with the good maternal condition. The treatment given was active management of the third stage and the results of the evaluation were obtained at 13.35, the placenta was born complete with intact membranes. Follow-up treatment was carried out by massaging the uterus until the uterus contracts and checking the completeness of the placenta and laceration of the birth canal. At 13.45, observations began for 2 hours postpartum until 14:40. The data analysis confirmed in the fourth stage of inpartu with the good mother condition. The treatment given was to provide information about signs of bleeding; teach how to assess uterine contractions and early mobilization in stages; recommend taking medication and vitamins (amoxicillin 500 mg, mefenamic acid 500 mg, vitamin A 200,000 IU) and help mothers to breastfeed their babies.

**Results of Midwifery Care During Postpartum**

Midwifery care during postpartum in Mrs. "W" was conducted 3 visits on 26 November 2019, 30 November 2019, and 12 December 2019. The results of the assessments carried out on the three visits showed that the mother's general condition was good, vital signs were within normal limits, the involution and lactation processes were running normally. Complaints felt by the mother only at 6 hours postpartum, i.e. pain in the perineal suture, it could be resolved by giving KIE to suture pain which was a common condition in mothers with perineal tears, relaxation if the stitches were painful, advising not to eat with high protein and fiber foods, the correct method of washing, applying cold water compresses to the perineal suture area and giving oxytocin massage, also teaching husbands the steps of oxytocin massage to be practiced at home in the morning after bathing and at night before going to bed. After being given an oxytocin massage, the mother felt more comfortable. At the second postpartum visit, i.e. postpartum on the fifth day, from the results of the assessment, it was found that the mother's husband routinely did oxytocin massage every morning and evening, the breast milk was also more and smoother than before.

**Results of Midwifery Care During Newborn**

Midwifery care for newborns of Mrs. "W" was carried out for 4 visits on November 26 2019, November 30 2019, December 12, 2019 and January 3, 2020. The results of the first visit (age 0 days) showed the general condition of the baby was good. The problem in the baby was found on the second visit (5 days old) that the baby had physiological jaundice. The treatment given is the fulfillment of optimal nutrition for babies by breastfeeding every 2-3 hours or when the baby wants, the correct way to dry the baby is to dry the baby in the sun naked for 30 minutes (15 minutes in a

supine position and 15 minutes in the prone position) and advice to take the baby to the hospital. The results of the evaluation at the third visit (14 days old baby) revealed that the baby had been admitted to the hospital on November 27, 2019 and had received phototherapy for 2 x 24 hours. The results of the examination showed that the baby's general condition was good, there were no signs of jaundice in the baby, it was marked by white sclera and no yellow skin color. The follow-up management provided is providing complementary baby massage care. The results of the fourth visit (babies aged 38 days), after being given baby massage care, the frequency of feeding the baby was more frequent and the baby slept more comfortably.

**Results of Midwifery Care During Family Planning**

Family planning midwifery care for Mrs. "W" was carried out for 3 visits on 3 January 2020, 8 January 2020, and 23 February 2020. The results of the assessment carried out on the three visits showed the mother's general condition was good, vital signs were within normal limits and there was no abnormality. At the first visit, Mrs. "W" was given the treatment of various types of contraception for breastfeeding mothers regarding the advantages, disadvantages, indications, contraindications of each contraceptive device, namely the minipill, progestin injection, implant, and IUD; and also motivated to use long-term contraceptive methods considering the mother has a history of cysts and a history of very high-risk pregnancies. As the result of the second visit, Mrs. "W" decided that she wanted to use a 3-month injectable contraceptive. The mother and her husband did not want to use long-term contraceptive methods, especially IUDs because they were considered to interfere with sexual comfort and mother's fear during the contraceptive installation process as well as other reasons i.e. did not interfere with breastfeeding, easy use, economical and had obtained approval from the husband. The results of the evaluation on the third visit found that Mrs. "W" had received the first 3-month injectable contraceptives on 19 February 2020 in a midwife with her first menstruation on 7 February 2020, the plano test was negative and there were no complaints or side effects of contraception. The follow-up treatment given was telling the mother not to use hormonal contraception for more than 5 years and changing to non-hormonal contraceptive methods to prevent the risk of cervical cancer, cysts, and breast cancer.

## 4. Discussion

**Midwifery Care During Pregnancy**

Midwifery care during pregnancy for Mrs. "W" aged 31 years old, $G_3P_{2002}$ was given since gestational age of 34 $^{1/7}$-37 $^{3/7}$ weeks with a Poedji Rochjati score of 14, namely the pregnant woman's initial score of 2, maternal anemia with a score of 4, maternal height < 145 cm with a score of 4, and a history of intravenous infusions in labour with a score of 4 so that it is classified as a very high-risk pregnancy. The "Poedji Rochjati" score is one of the efforts in carrying out early detection of high-risk pregnant women by health workers which aims to detect early condition or status of a mother's pregnancy whether she is included in the group of mothers who are not at risk or at risk. Values and scores written in the referral model can classify referrals to pregnant women at risk based on risk groups [20]. The scoring method is as follows, score 2, namely "Low-Risk Pregnancy" is given as the initial score for age and parity for all pregnant women. Low-Risk Pregnancy is pregnancy without any problem or risk factor, physiological and most likely followed by normal labour with the mother and baby living healthy. A score of 4 "High-Risk Pregnancy" is assigned to each risk factor in the High-Risk Pregnancy classification. A High-Risk Pregnancy is a pregnancy with one or more risk factors from both the mother and the fetus and has a crisis risk but is not an emergency. A score of 8 "Very High-Risk Pregnancy" is given to pregnant women with previous cesarean section, breech position, transverse position, antepartum bleeding, and severe preeclampsia/eclampsia. A Very High-Risk Pregnancy is a pregnancy with risk factors for bleeding before the baby is born, has an urgent and emergency impact on the soul of the mother and or her baby, requires a timely referral and immediate action for adequate treatment to save the life of the mother and baby [9]. This proves how important it is to carry out early detection of pregnancy risks for Mrs. "W" to facilitate planning for pregnancy and labour according to the level of risk experienced so as not to endanger the mother and fetus [21].

**Anemia in Pregnancy**

On 9 November 2019, the first pregnancy visit was carried out with data analysis confirmed that

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Mrs. "W" had mild anemia. Anemia is a condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiological needs and is conventionally measured by the hemoglobin (Hb) value [16]. According to WHO guidelines, anemia in pregnancy is defined as a hemoglobin level of <11 g/dL with a classification of Hb levels of 10-10.9 g/dl (mild anemia), Hb levels of 7-9.9 g/dl (moderate anemia) and Hb levels of < 7g/dl (severe anemia) [22]. In addition, pregnant women with anemia show various symptoms such as the pale face, shortness of breath, palpitations, hair loss, headaches, vertigo, leg cramps, dizziness, and quick to anger [23].

The anemia experienced by Mrs. "W" is probably caused by parity, lack of nutrition, and rest or sleep. Multigravida (gravida 3-4) has a greater likelihood of experiencing anemia during pregnancy compared to primigravida [24]. In addition, the prevalence of anemia is caused by nutritional deficiencies in pregnant women. Unbalanced nutritional intake in meeting macro and micro nutrients such as lack of consumption of green vegetables and animal protein is an important contributor to anemia culminating in folic acid and iron deficiency [25]. Lack of animal protein and dark green leafy vegetables in the meals is associated with two to five times the likelihood of experiencing anemia [26]. In addition the need for rest or sleep that cannot be fulfilled will also harm the body because the biological processes that occur during sleep will be disturbed, including the formation of disturbed hemoglobin levels so that they become lower than their normal values [27].

The treatment given to Mrs. "W" is the nutritional needs of mothers during pregnancy require a balanced diet. A balanced diet can consist of various food intakes in appropriate amounts and portions to meet a person's nutritional needs with a minimum of 3 meals per day, for example by consuming milk, fruits, green vegetables, carbohydrates, good vegetable protein such as tofu, tempeh, beans and animal protein such as chicken, meat and eggs and folic acid [28]. Vegetables and fruits such as beans, moringa leaves, seaweed, broccoli, cabbage, red beets, sweet potatoes, ginger, tomatoes, apples, grapes, and papaya can help increase the concentration of iron, hemoglobin, and ferritin in the body [29]. In addition, oral administration of iron tablets is the first treatment in cases of mild anemia [22], [23].

The treatment of sleep disorders can be carried out by non-pharmacological methods which are safe alternative options given to pregnant women, one of which is listening to classical music, taking a warm bath, and drinking milk before bed. Classical music has a therapeutic aspect so that it can be used for healing, calming, and improving physical and physiological conditions. The benefits of music are lowering blood pressure through rhythmic stable music, providing a regular rhythm to the heart system and stimulating the brain so they can sleep soundly, providing balance to heart rate and pulse so that it accelerates sleep time early [30]. A warm bath makes the body more relaxed, gets rid of aches and stiffness in the muscles, and leads to a more restful sleep [31]. Milk contains a lot of the tryptophan amino acid which is one of the basic ingredients of serotonin, so it is recommended to drink milk before bed so that the body can rest well [32].

After the treatment was carried out, an evaluation was obtained at the second pregnancy visit on 15 November 2019, the Hb level of Mrs. "W" decreased to 9.8 g%. This was due to the mother's disobedience in consuming food ingredients to meet daily needs and Fe tablets that had been given a previous visit. Obedience of pregnant women in consuming Fe tablets and consuming nutritious foods or food ingredients that help increase iron needs and increase hemoglobin levels in the body greatly affects anemia in pregnant women. If pregnant women are not obedient in taking Fe tablets, they are 4 times at risk of experiencing anemia [26], [33]. Follow-up treatment was given that food diversity is very important to improve nutritional quality and also reduce the risk of anemia, it is necessary to take appropriate actions such as continuous nutrition education to change attitudes and behavior of pregnant women [34]. In addition, it is recommended that mothers consume iron tablets combined with red guava and orange juices can increase hemoglobin levels around 0.63-2.96 gr/dl [35]. At the time of the labour, the last evaluation was carried out and found that there was an increase in the hemoglobin level to 10.4 g% even though it had not reached the normal limit.

**Edema in Legs**

At the first pregnancy visit with gestational age of $34^{1/7}$ weeks edema problems in the right and left legs were found. Leg edema or swelling of the legs is found in about 80% of pregnant women in the third trimester. It occurs as a result of uterine compression which inhibits venous return and the pull of gravity, causing greater fluid retention. Edema can indicate danger signs in pregnancy if

edema is in the face or fingers, severe headache, blurred vision as a result of preeclampsia [36]. In addition, the leg edema experienced by Mrs. "W" might be exacerbated by her work since she had not applied for maternity leave, causing her to stand for too long at work without changing her position [37]. In this case, the edema experienced by the mother was not accompanied by high blood pressure and proteinuria, so it was a physiological thing experienced in the third trimester of pregnancy.

The treatment given by teaching the mother pregnancy exercise. This exercise has benefits, one of which is improving poor blood circulation in pregnant women. Poor blood circulation can cause swelling in the legs. By regularly doing pregnancy exercises, the fluid that was originally held in the legs can be expelled through urine or sweat [38]. In addition, edema in the legs can be overcome by elevating the legs with a pillow while sleeping. The leg elevation position is a position setting where the lower limbs are set at a higher position than the heart so that blood returns to the heart will increase and blood accumulation in the lower limbs does not occur [39].

Evaluation of edema in the legs was carried out at the second visit of pregnancy, it was found that the mother's legs were still edematous but had reduced so that the treatment provided continued the intervention that had been given previously and told the mother to combine it by soaking the legs in warm water to help reduce edema in the legs. Soaking the legs in warm water can improve blood circulation by widening the blood vessels so that more oxygen is supplied to the swollen tissues. The results of previous research showed that soaking the legs in warm water is also effective in reducing leg edema in third-trimester pregnant women [36], [37]. Evaluation at the third visit of pregnancy found that the mother had no edema in the legs.

**Back Pain**

At the second pregnancy visit with gestational age of $36^{1/7}$ weeks found back pain. Back pain is common in the third trimester of pregnancy with the reported incidence varying from 50-70%. Predisposing factors for back pain include uterine growth that causes changes in posture, weight gain, the effect of the hormone relaxin on ligaments, previous history of back pain, parity, and activity [38]. As gestational age increases, a woman's posture changes to compensate for the weight of the growing uterus. The shoulders are pulled back as a result of a protruding abdominal enlargement, and to maintain body balance, the inward curvature of the spine is exaggerated. The relaxation of the sacroiliac joints that accompanies changes in posture causes varying degrees of back pain after excessive tension, fatigue, slouching posture, or lifting something [40].

The treatments given to the mother were teaching the mother to compress the sore back with warm water, telling her a comfortable sleeping position, and giving an effleurage massage. Warm compresses can provide a warm feeling to meet the need for comfort, reduce or relieve pain, reduce or prevent muscle spasms and provide a warm feeling in certain areas. Warm compresses can soften fibrous tissue, make the body's muscles more relaxed, reduce or eliminate pain and increase blood flow [41]. In addition, a comfortable sleeping position on the left side using a pillow can reduce pressure on the large veins (vena cava inferior) at the front of the spine that returns blood from the lower body to the heart [42]. Effleurage massage helps reduce back pain in pregnant women by having a distraction mechanism that can increase the formation of endorphins in the descending control system so that it can make it more comfortable due to muscle relaxation [43]. Evaluation at the third visit of pregnancy found that the mother was no longer complaining of back pain.

**Midwifery Care During Labour**

The place of labour for Mrs. "W" was carried out at the hospital because the Poedji Rochyati score of 14 was a very high-risk pregnancy, so in this case, the mother was given a planned referral. Based on these groupings, planned referrals have 2 models, namely early planned referrals and timely referrals. Early referrals are planned to be carried out on pregnant women with Potential Obstetric Emergencies (*Ada Potensi Gawat Obstetri*, APGO) and Obstetric Emergencies (*Ada Gawat Obstetri*, AGO) who are estimated to still experience complications in labour, while timely referrals are made to save the lives of mothers and babies in mothers with Obstetric Emergencies (AGO) and mothers of early obstetric complications in the labour [44]. Arriving at the hospital, Mrs."W" was diagnosed with premature rupture of the membranes. Premature rupture of membranes is the rupture of the membranes before there are signs of labour. It usually occurs as a sudden burst of fluid from the vagina that lasts continuously, leaks uncontrollably, some patients may complain of slight wetness

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or a drip that comes out little by little [45].

The possible causes of premature rupture of membranes experienced by Mrs. "W" were due to parity and anemia during pregnancy. Parity and anemia are associated with the incidence of premature rupture of membranes. Increased parity of 2-3 (multipara) allows cervical damage during the previous birth process. The arrangement of the cervix in multiparas has more nerve fibers than connective tissue than the normal cervix. The destruction of cervical tissue allows the basic muscles of the uterus to stretch. The stretching process occurs mechanically which stimulates several factors in the amniotic membrane such as prostaglandins and interleukin-8 causing disruption of the balance of the process of synthesis and degradation of the extracellular matrix which eventually causes the membranes to rupture. Nutritional deficiencies that cause anemia can affect the body's response to infection and the strength of the collagen membrane, abnormalities in the structure of collagen, and changes in the extracellular matrix so that it affects the strength of the body's response to infection and immune function which results in a decrease in cell ability. The mechanism of infection will disrupt the collagenolytic process, resulting in a disturbance in the balance between the production of matrix metalloproteinases (MMP). The amniotic membrane will respond to inflammation so that it becomes thin and breaks easily [46].

The treatment given was an induction of labor. In the case of premature rupture of membranes, induction of labor is carried out once the diagnosis is established without considering the high or low Bishop value. Induction of labor is an action taken to pregnant women who are not yet inpartu to stimulate labour. Induction of labor occurs between 10% to 20% of all labours with various indications from both the mother and the fetus [45]. After the treatment, it was found that the progress of labour started with a 3 cm dilatation up to a complete dilatation (10 cm) which lasted for 4.5 hours. The second stage lasted for 23 minutes. The treatment provided is vaginal labour assistance in accordance with the conditions in the field that the success rate of induction of labor with vaginal labour is about 90% while about 10% ends with sectio caesarea [45]. The third and fourth stage was normal and did not bleed. Anemia has complications of postpartum hemorrhage [22] can occur due to premature rupture of membranes are postpartum hemorrhage, infection during the puerperium, and increase maternal morbidity and mortality [47]. Side effects of induction are nausea, vomiting, diarrhea, water intoxication and uterine rupture [48]. The history of postpartum hemorrhage and the incidence of postpartum hemorrhage so that the possibility of postpartum hemorrhage with infusion could be repeated at the time of the current labour [49]. The discrepancy between the theory and the fact that occurs in the mother is probably due to the treatment of labor in accordance with the procedure. One of them is handling premature rupture of membranes by giving labour induction in accordance with the doctor's advice and periodic evaluation. The use of induction of labour with premature rupture of membranes is safe for the progress of labour, but observation must still be carried out (FHR, his and the danger signs of labour) [48].

**Midwifery Care During Postpartum**

The results of midwifery care during the postpartum of Mrs. "W" went normally. This can be seen from the results of the assessment at the three visits which showed that the general condition of the mother was good, vital signs were within normal limits, the process of uterine involution, lactation, and lochea release were running normally. The mother during the postpartum undergoes physiological changes including the occurrence of uterine involution or contraction which is the process of returning the uterus to its original state or state before pregnancy, lochia release, vital signs, and cardiovascular, hematological, digestive, and urinary systems. Monitoring the physiological changes during the postpartum is very important to carry out comprehensive screening, early detection, treatment, or referral if complications occur during the postpartum [50].

The complaint experienced by Mrs. "W" during the postpartum was only pain in the perineal suture which was a physiological complaint experienced by postpartum mothers. Perineal wound pain can be interpreted as when a mother feels pain due to an injury to the perineal area after going through the birth of her baby. This pain can occur due to spontaneous tears or episiotomy in the perineum [51]. Suture wounds due to spontaneous tears or episiotomy will experience an inflammatory process. Inflammation is a normal reaction and is important to ensure wound healing and serves to isolate damaged tissue and reduce the spread of infection that will cause pain. However, the intensity of pain felt by each individual will be different [52].

The treatment given was to teach relaxation techniques if the sutures are painful and apply cold water compresses to the perineal suture wound area. Relaxation techniques are carried out by deep breathing, slow breathing (holding maximum inspiration), and exhaling slowly. It has the benefit of reducing pain intensity, increasing pulmonary ventilation, and increasing blood oxygenation [53]. Cold compresses have a physiological effect, i.e. having vasoconstrictive properties, slowing the flow of pain impulses by slowing down the speed of nerve conduction [54]. The results of the evaluation at the next visit, Mrs. "W" no longer felt pain in the perineal suture wound. On this first visit, the researchers also provided oxytocin massage to Mrs. "W" as well as taught her husband the steps of oxytocin massage to be practiced at home. Oxytocin massage is effective in increasing breast milk production. Oxytocin massage in the spinal area is useful in reducing tension, stress, and increasing levels of the hormone oxytocin which plays a role in producing breast milk with the help of baby sucking [55]. On the next visit, it was found that Mrs. "W"'s milk production was more and smoother than before.

**Midwifery Care During Newborn**

The results of the assessment of the baby's midwifery care of Mrs. "W" at the first visit (age 0 days) showed that the baby's condition was normal. Problems in the baby were found on the second visit (5 days old), i.e. the baby had jaundice which had been visible since 1 day ago marked by yellow sclera symptoms, the baby's skin (head, neck, upper body, lower body to legs) was yellow. However, the baby was not lazy to drink, did not have diarrhea, the baby's position when breastfeeding was correct, the baby's mouth was attached well and the baby sucked effectively. Physiological jaundice is an icteric condition in infants that usually appears on days 2 to 4, has peak symptoms between 4 to 5 days, and can heal within 2 weeks, never occurs in the first 24 hours of the baby's birth [56]. Besides, physiological jaundice is characterized by normal appearance, drinking well and weight gain, and serum bilirubin levels in term infants not more than 12 mg/dl, and low birth weight of 10 mg/dl. One of the ways that can be carried out to check the degree of jaundice in newborns according to Kramer is "with the index finger pressed on places where the bones protrude such as bones, nose, chest, knees" [57]. In the case of Mrs. "W"'s baby, looking at the degree of jaundice based on Kramer, it included grade III jaundice because the extent of jaundice extended to the lower body (below the umbilicus) to the upper limbs (above the knee) with an estimated bilirubin level of 11 mg/dl. The data above supported the diagnosis of Mrs. "W"'s baby experiencing physiological jaundice.

The treatment provided was the fulfillment of optimal nutrition in the baby by breastfeeding every 2-3 hours or whenever the baby wanted, sunbathing the baby, and making referrals to the hospital because these led to danger signs for the newborn and prevention of complications. Furthermore, the results of the evaluation of the treatment that had been given, Mrs. "W"'s baby was hospitalized for 3 days with further treatment of phototherapy for 2x24 hours. The treatment that can be given to physiological jaundice conditions is the need for sun exposure for the baby, adequate nutritional intake, and phototherapy. Physiological jaundice in infants does not require treatment and can heal on its own, but if there is an increase in the level of indirect/unconjugated bilirubin, further treatment with phototherapy is needed along with adequate breastfeeding [56]. At the third visit (14 days old baby), there were no signs of jaundice in the baby, it was marked by white sclera and no yellow skin color. The researchers also provided complimentary baby massage care for Mrs. "W". Baby massage is useful in increasing baby's weight, baby's sleep quality, appetite, and concentration because massage will stimulate hormones that regulate sleep function, appetite, memory, and learning [58] can increase in the quality of baby sleep after a baby massage from 11 hours/day to 15 hours/day [59]. The results of the evaluation at the next visit, it was found that after being given baby massage care, the breastfeeding frequency of Mrs. "W"'s baby was more frequent and the baby slept more comfortably.

**Midwifery Care During Family Planning**

The results of the screening for a 3-month injectable contraceptive showed that the mother fulfilled the requirements to become an acceptor of a 3-month injectable contraceptive. 3-month injectable contraceptive containing the hormone progestin is given every 3 months and is suitable for breastfeeding mothers because it does not affect milk production [60]. Judging from the fact that it was found that Mrs. "W" had a history of cysts and a history of pregnancy which was classified as a very high-risk pregnancy so that if the mother was pregnant again, she would have a much greater

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risk of complications. Therefore, the use of hormonal contraceptives is not appropriate. The use of long-term hormonal contraceptives can disrupt the balance of the hormone estrogen in the body, resulting in normal cell changes becoming abnormal [61]. Therefore, the use of hormonal contraceptives for more than 4 or 5 years can increase the risk of cervical cancer and can affect the history of cysts in the past. The use of hormonal contraception causes increased exposure to the hormones estrogen and progesterone which can cause cell proliferation in the breast glands and inhibit the process of apoptosis. The treatment given was telling the mother not to use hormonal contraceptives for more than 5 years and changing to non-hormonal contraceptive methods to prevent the risk of cervical cancer, cysts, and breast cancer [62]. Therefore, researchers continued to motivate the mother to use other methods of family planning and she chose 3-month injections that did not affect breast milk production.

## 5. Conclusion

The results of complete midwifery care from the period of pregnancy to family planning on Mrs. "W" found various kinds of diagnoses and problems that can be overcome by providing appropriate midwifery care according to the case so that complications that can occur in the mother and baby can be prevented and overcome as much as possible. It is expected that the profession can improve the quality of midwifery services by implementing complete midwifery care for women throughout the life cycle to help government programs to reduce maternal and infant mortality.

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