NEWBORN MIDWIFERY CARE FOR NY "H" BABY WITH LOW BIRTH WEIGHT (BBLR) AT BUNGI HEALTH CENTER

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A B S T R A C T

Background: *Low birth weight is a condition when a baby is born weighing less than 2500 grams. This LBW condition will have a negative impact on the baby's growth and development in the future.* ***Objectives****: This Final Assignment Report aims to carry out "Newborn midwifery care for baby Mrs. "H" with low birth weight at the Bungi Health Center, Baubau City.* ***Method****: using an approach with the 7-step midwifery care management method of Varney and Soap. Data collection techniques using interview techniques, physical examinations and documentation studies.* ***Subject:*** *the subjest in this study were babies with low birth weight at the bungi community health center, baubau city.* ***Results****: from a case study obtained from Mrs "H", with low birth weight (LBW), namely the general condition of the baby is good, weight 2.400 gr, body length 48 cm, chest circumference 29 cm, female gender, vital signs heart rate 145x/minute, temperature 36.5º c. implementation of midwifery care, namely approaching the mother and family, monitoring vitals signs and progress.* ***Conclusion :*** *from the care of By Ny "H" has been obtained proper midwifery care so that the problem of low birth weight has been resolved. Suggestion for clients to breastfeed their babies as often as possible*.

INTRODUCTION

Newborns weighing less than 2,500 grams are called low birth weight babies (BBLR). Premature labor that occurs less than a month or less than 37 weeks of pregnancy can cause babies with BBLR, such as term pregnancies that occur for full term or 37-42 weeks. Babies with low birth weight are more susceptible to aches and diseases. (Utami et al., 2023). Therefore, premature babies require special care from medical professionals to avoid death.(Ansi & Hardiyanti, 2022)

Risk factors for low birth weight include low socioeconomic status, low education levels, and maternal age, which can range from under 20 to over 34 years. The incidence of lung damage related to low birth weight (LBW) is also influenced by the mother's prenatal medical risks, which include parity, height, weight, and distance from the place of birth. The mother's nutritional status, infections, and illnesses during pregnancy (LBW) pose risks to her reproductive health. Results related to pregnancy can also be influenced by the state of prenatal care. (pregnancy check-ups during early prenatal visits, the frequency and quality of antenatal care dll.) (Ismayanah et al., 2020). It is important to pay attention to the health of low birth weight infants because these children typically have low birth weight and may face health issues such as respiratory, digestive, neurological, cardiovascular, hematological, and immunological disorders..(Ismayanah et al., 2020).

Newborns with low birth weight may experience poorer cognitive development compared to newborns with normal birth weight. The causes of low birth weight include prematurity or low gestational age. Intrauterine growth restriction (IUGR), also known as fetal growth restriction (FGR) in English. Both of these causes are influenced by risk factors such as the mother, placenta, fetus, and environment. These risk factors can lead to the fetus not feeling satisfied naturally during pregnanc.. (Ismayanah et al., 2020).

Low Birth Weight (LBW) infants are a very complex and intricate issue because, in addition to contributing to high mortality rates, their unstable physical condition can also lead to disabilities, disorders, or hindered growth and cognitive development, as well as chronic diseases later in life. Findings from various studies indicate that low birth weight will have a significant impact on future health. Less than 2,500 grams at birth is strongly associated with degenerative disorders in adulthood. (Rahmadani et al., 2022).

BBLR is more vulnerable to obesity and at risk of suffering from NCDs (Non-Communicable Diseases) in adulthood, even as a fetus in the womb. Routine examinations related to pregnancy or Antenatal Care (ANC) are two strategies to prevent low birth weight infants. During pregnancy, antenatal care visits should be conducted at least four times. A newborn with low birth weight presents serious challenges in maintaining a healthy and balanced diet tailored to individual needs.(Mutia et al., 2023),

The World Health Organization (WHO) reports that 2.7 million neonatal deaths occur each year out of 20 million births, with 15-20% of those deaths caused by low birth weight infants. In other words, there will be at least 3 million births of children with low birth weight. (BBLR). The incidence of low birth weight (LBW) shows significant regional and national variation. Nevertheless, people from low- and middle-income countries are the most vulnerable, and they also have the highest rates of low birth weight. Southeast Asia (28%) had the highest regional estimate of Low Birth Weight (LBW) in 2015, followed by Sub-Saharan Africa (13%) and Latin America (9%). The lowest Low Birth Weight (LBW) rate was found in the Asia Pacific (6%).(Lailatul Mufidah, 2021).

According to RISKESDA data from 2020, 6.2% of babies born in Indonesian provinces have a birth weight below 2500 grams (low birth weight). This percentage represents the average of all low birth weight cases occurring throughout the country. (Budiarti et al., 2022)..

Research conducted by (Survey, 2021) Regarding the analysis of the risk of low birth weight (LBW) events, it shows that 57% of newborns have LBW. Compared to mothers who give birth to full-term children, mothers who give birth to babies at less than one month (<37 weeks of gestation) are 66 times more likely to give birth to a low birth weight baby. To reduce the likelihood of low birth weight incidents, it is hoped that mothers will refrain from getting pregnant when they are at risk (under 20 years old or over 35 years old), and information about risk factors will be shared

Research conducted by (Wahyuni E., Ruhaya, 2023) In developing countries, the factors related to the incidence of low birth weight (LBW) include the mother's age, particularly in the range of 35-49 years, gestational age, inadequate antenatal care, illiteracy associated with education level, low socioeconomic status, and insufficient maternal nutrition. The nutritional status of a mother can be assessed through body mass index (BMI), weight gain during pregnancy, measuring mid-upper arm circumference (MUAC), and checking hemoglobin levels to support adequate care.(Damayanti et al., 2022)

METHODOLOGY

The method used in this research is a descriptive method with a case study model. With the case study "Midwifery Care for Baby 'H' with Low Birth Weight (LBW) at Bungi Health Center in 2024," it is analyzed in depth using the Varney's 7-step method and SOAP. (data assessment, subjective data, objective data, data analysis, and management).

Subjective data includes information gathered from the medical history papers and interviews with Ms. "H". Documentation arising from physical examinations and diagnostic tests is known as objective data, and it is the primary type of data used to support the provision of healthcare services. Information about identification procedures collected from the results of subjective and objective data analysis is included. The documentation from management explains how the planned steps that will soon be implemented are organized.

RESULTS AND DISCUSSION

Subjective Data

The 32-year-old "H" visited the Bungi Community Health Center on February 5, 2024, at 4:15 PM WITA. The mother visited healthcare facilities five times during her pregnancy and received vaccinations once. Mother has never suffered from hypertension, diabetes, asthma, or heart disease. The mother stated that May 9, 2023, is the date of her last menstrual period. He stated that the fifth child (the fifth) has never been miscarried. During the first visit, the mother stated that the baby's condition was good; he was able to suck the nipple well, he slept a lot, he was exclusively breastfed, and he was being cared for at home. During the second visit, the baby's condition improved further; he was sucking the nipple strongly and swallowing well, he slept a lot, and he was still exclusively breastfed.

Objective Data

During the general physical examination, the face is not pale, both eyes are symmetrical, the mouthhas a strong sucking reflex, there is no nasal discharge, the tongue is clean and pink, the lips appear slightly dry and pale, the baby is not crying loudly, the baby's neck does not appear enlarged or swollen, the chest is symmetrical, and there are no signs of bleeding or infection at the umbilical cord. On the genitalia, the labia majora cover the labia minora, there are no Mongolian spots, there is an anal opening, strong grasp reflex, full finger range in both the left and right hands, and smooth movements; active leg reflexes, with good Babinski and Moro responses and left and right toe reflexes. The skin integration is thin, the subcutaneous fat is simple and appears reddish, and there is no lanugo. Positive glabellar reflex, the baby closes their eyes when their forehead is tapped, positive rooting reflex, the baby seeks touch when the corners of their mouth are touched, positive sucking reflex, the baby can suck well while breastfeeding, positive swallowing reflex, the baby can swallow well while breastfeeding, positive palmar reflex, the baby grasps their hand when touched, positive plantar reflex, the baby grasps their toes when touched, Babinski reflex, the toes grasp and then flex when touched, Moro reflex, the baby raises both arms and legs simultaneously when the table is shaken.

During the first visit, the baby weighed 2,400 grams, measured 48 cm in length, had a head circumference of 30 cm, a chest circumference of 30 cm, and an abdominal circumference of 29 cm, and overall, the baby appeared weak during the first visit. The baby is a girl with the following vital signs: body temperature 36.6ºC, heart rate 140 beats per minute, respiratory rate 45 breaths per minute. There is a slight increase in fat, and the skin appears thin and yellowish. The umbilical cord has been cut and appears clean, and the swallowing and sucking reflexes are still intact. The baby is currently receiving care at home.

Analysis

Now Enough Month (NEM), Small Gestational Age (SGA), Percentage of Occipital Presentation (POP) with Low Birth Weight. (BBLR)

Management

Based on the results of the research data, both subjective and objective, as well as the analysis, the management provided is that since there is no supporting data in this situation, immediate action or collaboration is not required. The author advises mothers to keep their homes clean, change their babies' clothes and diapers when they are wet or damp, and breastfeed their children as often as possible. Advising mothers on proper breastfeeding techniques, monitoring vital signs, weighing the baby regularly, and looking for warning signs of danger in newborns, such as refusal to breastfeed, seizures, difficulty breathing, continuous crying or wailing, paying attention to the baby's umbilical cord for any redness, foul smell like pus, fever, and temperatures above 37.5ºC or feeling lower than 36.5ºC. The baby has pus-filled eyes, diarrhea, sunken eyes, unresponsive, and if the skin on the abdomen is pinched, it returns slowly. The skin looks yellow. In addition, the author also advises mothers to consume a balanced diet, care for the umbilical cord with sterile gauze, and monitor the baby's elimination.

The author also advises women to ensure that the room is well-ventilated and to closely monitor their baby's body temperature. Encouraging mothers to strictly regulate the baby's body temperature and advising mothers and families to always maintain the baby's cleanliness by washing their hands before and after handling the baby. A temperature of 36.6 degrees Celsius, 45 breaths per day, a heart rate of 145 beats per minute, and a newborn weight of 2,555 grams have all been recorded.

Table. 1. Apgar Score at birth 8/9

No.	Aspects being evaluated	0	1	2	Time	
					1 minute	5 minute
1	Appearance colour (warna kulit)	Whole body (blue or pale)	Red body, upper extremities.	Whole body	2	2
2	Pulse (denyut jantung)	none	<100 x/minute	>100x/minute	2	2
3	Grimace (reaksi/ refleks)	none	a little movement	RX to fight against	1	2
4	Activity	none	The extremities are slightly flexed.	Move a little.	1	2
5	Respiratory effort (pernapasan)	none	Lambat	crying	2	1
	amount				8	9

Source: Data Primer, 2024

DISCUSSION

Subjective Data

The 32-year-old "H" visited the Bungi Community Health Center on February 5, 2024, at 4:15 PM WITA. On February 4, 2024, at 10:25 PM WITA, the mother entered with the latent phase; her dilation was 2 cm, and the amniotic fluid was still intact. At 4:15 PM WITA on February 5, 2024, full dilation would occur. Stage II: The baby was born on January 5, 2024, spontaneously at 4:15 PM WITA, with a head presentation in the posterior position, birth weight: 2400 grams; length: 48 cm. Stage III: The placenta was delivered at 4:25 PM WITA. Stage IV: The mother's general condition is good and the baby's condition is also good. Bleeding approximately 20 ml, fundal height at the level of the umbilicus. Infants with low birth weight are those who weigh less than 2,500 grams. (BBLR) .(Pitriani et al., 2023).

The probability of survival, growth, health, and psychological development of infants can all be inferred from their birth weight. The weight, length, upper arm circumference, and head circumference of newborns are measured using anthropometric methods to assess their nutritional status. This measurement has a significant impact on the mobility and mortality of infants in the long run..(Hanum et al., 2022)

The mother of the baby stated that the baby's nutritional needs are being met, that she breastfeeds the child every two hours, and that the baby is in normal condition with a temperature of 36.6ºC and A/S 8/9. The baby's vital signs are within the normal range, with the baby breathing 45 times per minute and a heart rate of 140 beats per minute. The baby weighs 2400 grams. According to the theory (Juliani, 2023), It is stated that the typical temperature of a baby is between 36.5°C and 37.5°C, and their heart rate should be between 120 and 160 beats per minute.

The mother stated that the baby's basic needs are being met quite well in terms of nutrition, that the baby has good sucking and swallowing reflexes, that the baby has eliminated through bowel movements and urination, that the baby has not been bathed, that she has changed the diaper and blanket every time they were wet, and that the baby has slept for about one to two hours since birth.

Through contact and stimulation, especially of the muscle tissue around the mouth, which can enhance blood flow, improve muscle function, and activate the sucking reflex in infants, particularly those with low birth weight, as well as enhance the operation of other body parts. (Sari Agustin & Ferina, 2022)

Objective Data

The baby was born weighing 2,400 grams, with a length of 48 cm, a head circumference of 30 cm, and a chest circumference of 30 cm, and an Apgar score of 8/9. At 38 weeks of gestation, the baby is healthy and active overall. On February 16, 2024, the baby is exclusively breastfed and has strong sucking and swallowing reflexes. A baby with a birth weight of less than 2,500 grams is considered to have low birth weight. The normal parameters are 36.5ºC, 145 beats per minute, and 60 breaths per minute. Newborns require adequate nutrition, and breast milk serves as an antibody that can reduce the rates of morbidity and mortality in infants. (Aprilliani & Lestari, 2020).

The objective examination shows that the skin appears red, thin, and slightly fatty. The sucking and swallowing reflexes are good. The chest movement corresponds to the breathing pattern of a baby. The umbilical cord is clamped, still wet, and looks clean. Denyut jantung 145 kali per menit, pernapasan 45 kali per menit, dan suhu 36,6ºC adalah indikator vital. (Suryani, 2020).

Analysis

Low birth weight (LBW), small for gestational age (SGA), and head circumference (HC) in term infants are the sources of analysis for this research.(Syahmanis & Prasetyorini, 2020).

Management

There are no supporting data for management recommended in this case, so there is no need to work with a doctor based on the analysis that has been carried out and the research data both subjective and objective. The authors advise mothers to breastfeed their babies as much as possible. The posterior pituitary is stimulated to secrete the hormone oxytocin for breast milk secretion, and the anterior pituitary is stimulated to secrete the hormone prolactin for breast milk production (Nurhasanah et al., 2019)

The writer also advises mothers on the proper way to breastfeed, including cleaning the nipples and areola with a wet cotton ball or by expressing a little milk, then applying it to the nipple and around the breast, positioning the baby facing the mother's abdomen or breast, and stimulating the baby's rooting reflex (mouth opening) by touching the side of the baby's mouth or cheek. After the baby opens its mouth, the thumb is held above the breast and the other fingers support underneath, without pressing too hard on the nipple or the breast tissue. As soon as the baby opened its lips, the mother quickly brought her breast to her head to reach for it and inserted the nipple into its mouth. Burping helps to move air in the baby's stomach, preventing vomiting after feeding. This can be achieved by carrying him upright and resting on the mother's shoulder, then gently patting his back. Another alternative is to sleep face down on your mother's lap and gently pat her back. (Angka et al., 2021).

CONCLUSION

Newborns with low birth weight (BBLR) are managed by midwives using the Varney seven-step technique. This method requires organizing, implementing, assessing, elaborating, and identifying problems and forecasting future problems.

Identify the basic data in the case of Mrs. Baby." H" with low birth weight babies using Varney's 7-step management management, the main complaint was that Mrs. Baby." H" with a low birth weight baby of 2400 grams. Identify the diagnosis and actual problems with low birth weight babies in Mrs. babies." H" got an obstetric diagnosis of Mrs. Baby." Hinfants who have low birth weight (BBLR). Using Varney's 7-step management method, diagnose potential problems for Mrs. "H" babies, who have low birth weight babies. Although Mrs. H.'s baby did not have hypothermia during 10 days of monitoring, no problems were found. In Mrs. Baby." H". Immediate action or collaboration on Mrs. baby." H", was not carried out because after a thorough examination was carried out there were no signs of symptoms that required immediate action or collaboration. Comprehensive obstetric care for Mrs. Baby." H" with low birth weight babies, namely carrying out kangaroo method care, giving breast milk to the baby (exclusive breastfeeding). After obstetric care until 10 days the baby was born, the results were obtained that Mrs. H had a good general condition, composmentis consciousness, and vital signs within normal limits, namely DJB: 134x/I, P: 42x/I, S: 36.5°C. Anthrometry measurements include BB: 2900 grams, PB: 48 cm, LK: 30 cm, LD: 31 cm, LP: 30 cm, and APGAR score: 10/10. Evaluation of obstetric care in Mrs. H's baby with low birth weight has been carried out well and without problems.

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