Midwifery Care of Newborn Baby Mrs "N" with Low Birth Weight in BLUD Tenriawaru Public Hospital in Class B, Bone Regency

Hasnidar\textsuperscript{a}, Mustar\textsuperscript{b*}, Musni\textsuperscript{c}, Hasrianti Nur\textsuperscript{d}

\textsuperscript{a,b,c,d} Midwifery Academy of Bina Sehat Nusantara, Bone Regency, South Sulawesi, Indonesia
\textsuperscript{c} hasnidar@gmail.com
\textsuperscript{b} mustarbinasehat@gmail.com

Abstract

Low Birth Weight (LBW) remains a problem throughout the world, because it is a cause of morbidity and mortality in the neonatal period. The prevalence of LBW is still quite high, especially in countries with low socio-economic. Statistically showed 90% incidence of LBW found in developing countries and the death rate 35 times higher than in infants with a birth weight $> 2500$ g. This observational study was also conducted interviews with the client's family and midwives related to the client's problem. The author obtained the data by viewing and monitoring directly on the patient. Then physical examination, The author conducted a physical examination of the patient through inspection, palpation, auscultation and percussion systematically from head to toe and laboratory examinations as investigations. Result revealed that data on infant Mrs "N" as a whole is a sign of low birth weight as described in the theory portion of the signs and symptoms experienced by clients that LBW gestational age 37-42 weeks with body weight $<2500$ grams. The actual problem was LBW which upheld basic diagnostic determination in accordance with the literature. It seems clear that there are similarities between the existing theory with case studies in infants Mrs "N". The low birth weight are very susceptible to hypothermia and nutritional disturbances fulfillment. To sum up, all the actions to be performed on infants Mrs "N" has been planned well to handle a baby with low birth weight as well as the complications that may occur. In the implementation of Midwifery Care in infants Mrs "N" planned action has been fully implemented.

Keywords: Midwifery care; low birth weight; infant.
1. Introduction

Based on data from the WHO (World Health Organization) reported that from 2012 until 2013 continued to increase, the data detailed LBW 2012 were 9.6% of the 25 million births per year in the world and almost all occur in developing countries. The incidence of LBW in 2013 was 10.5% [1]. Based on estimates from the Indonesian Demographic and Health Survey (IDHS), in 2011 amounted to 21 184, or about 3.73%. 2012 that nationally the proportion of infants with low birth weight 18.33%. In 2013 in Indonesia the figure LBW with vulnerable 43% [2].

Based on data from the profile of South Sulawesi Provincial Health Office in 2011 the number of live births BBL approximately 148 070 of that number are 370 (2.28%) cases of low birth weight (LBW). In the year 2012 was approximately 112 082 live births BBL of 435 (3.65%) lbw. Meanwhile, in 2013, approximately 119 437 live births with low birth weight baby born as a result of about 448 (3.77%) [3]. Based on data from the Department of Health, Bone, the incidence of low birth weight in 2011 BBL number 13 254, while the stillbirth around 48 infants, of which 104 cases of low birth weight babies, 2012. Total BBL around 13642, the number of stillborn at 46 babies. About 120 cases LBW infants, and in 2013 about 13 471 Number of BBL, the number of stillborn about 70 people and about 152 cases of low birth weight babies. Based on the data BLUD RSU Tenriawaru Class B, Bone in 2011 around 306 cases of low birth weight babies, in 2012 approximately 149 cases of low birth weight, and in 2013 about 245 cases of low birth weight.

In connection with the high incidence of low birth weight were found as well as the magnitude of the risk posed if LBW did not receive prompt and appropriate treatment. Based on these data, the authors are interested in discussing the case of LBW by making paper with the title "Midwifery Care Newborn Infant Mrs" N "with Low Birth Weight Babies in BLUD, General Hospital Tenriawaru, Bone Regency.

2. Materials and Method

The method used in the writing of this Scientific Writing systematically include: Literature review; author reading and studying books / literature, data from the internet relating to the case of Low Birth Weight Infants. Then, case studies, with a problem-solving approach in midwifery care which includes identification of basic data, identification of diagnosis / actual problem, identification of diagnosis / potential problems, immediate action / collaboration, midwifery care plan, the implementation of midwifery and midwifery care documentation, evaluation and documentation of midwifery midwifery care with using the method: a. interview

The author conducted interviews with the client's family and midwives related to the client's problem. b. observation; The author obtained the data by viewing and monitoring directly on the patient. c. physical examination; The author conducted a physical examination of the patient through inspection, palpation, auscultation and percussion systematically from head to toe and laboratory examinations as investigations. Lastly, study the documentation; authors read and learn the status of the patient and interpret data related to the patient's problem both from the record midwife or from other sources that support.
3. Results


Subjective Data; Last menstrual period date July 30, 2013.

Objective Data

1. TP dated May 7, 2014
2. The baby was born on May 7, 2014, at 23:25 pm
3. BBL: 2400 grams
4. PBL: 44 cm
5. Head circumference: 30 cm
6. Bust: 28 cm

Analysis and interpretation of data including; Characterized LBW newborn birth weight less than 2,500 grams (weight infants with 2,499 grams), this is done because not all birth weight less than 2,500 grams at birth premature baby [4, 5,6].

3.1. Formulation of diagnosis / potential problems

1. Potential for hypothermia on the first day
   Subjective Data
   Objective Data
   a. Weight: 2400 grams
   b. Body temperature: 36.5 ° C
   c. The baby wrapped in a warm cloth and perform maintenance in the incubator.

Analysis and interpretation of data

Heat is lost through evaporation process depends on the speed and humidity (heat transfer by changing the liquid in the vapor). Evaporation is influenced by the amount of heat is used, the level of humidity, air flow through. If the newborn is left at room temperature 25 ° C, then the baby will lose heat through convection, radiation and evaporation [7]. To prevent heat loss in newborns, among others, carefully dry the baby, wrap the baby with a blanket or cloth is clean, dry and warm, cover the baby's head, do not immediately bathe a newborn baby, put the baby in a warm environment [8].

3.2 Potential for disturbance of nutrition on day II

Subjective Data

Objective Data
a. Weak sucking reflex.

b. Babies assisted by formula

Analysis and interpretation of data

In LBW suction reflex, swallow and cough is not perfect, still a little stomach capacities, provision of drinking begins at the time the baby was 3 hours so that the baby does not suffer from hypoglycemia. Before administering the first drink must be done gastric suctioning [9, 10, 11].

3.3. Implementation of Immediate Action and Collaboration.

Immediate action and collaboration with Doctors are Doing care in incubators and infant nutrition.

3.4. Formulation of Midwifery Care Action Plan

1. Purpose

   a. Baby weight was down.
   b. Hypothermia does not occur.
   c. Disorders of nutrition are met.

2. Criteria

   a. No decrease in body weight.
   b. Baby's temperature in the normal range (36.5 to 37.5 ° C)
   c. No signs of infection such as dolor (pain), color (heat), rubor (red), and tumor (swelling), and the smell of the umbilical cord.

3. Plan of action (Dated May 8, 2014, at 1:00 pm)

   a. Weigh the baby weight every day.

      Rational: Birth weight was important to set a calorie and fluid needs baby, also can reflect the condition of the baby in the care of LBW.

   b. Keep the baby's body temperature to stay wrapped and performed maintenance on the Incubator with temperature of 36.5 ° C. Rational: infant care while wrapped and carried out in the incubator care will prevent conduction and evaporation.
c. Observation TTV

Rational: Vital signs provide a picture of the baby in determining further action.

d. Change clothes / diapers whenever wet.

Rational: Baby clothes wet will affect the baby's temperature is going on evaporation.

e. Giving a little milk and regular with 12 cc in every 2 hours.

Rationale: By giving a little drinking and regularly will help infant nutrition that nutritional deficiencies can be overcome gradually.

f. Advise the mother to consume a balanced diet.

Rationale: With the fulfillment of nutrition in nursing mothers will affect milk production and quality of breast milk.

g. Vitamin K Inject 0.1 ml intramuscular

Rationale: To prevent bleeding in the newborn brain.

h. Give prophylactic antibiotic eye drops by way of rubbing the eyes.

Rationale: To prevent eye infection.

3.5. Actions Midwifery Care ; Dated May 8, 2014, at 1:05 to 3:00 pm

1. Considering the baby's weight every day.

Results: Weight 2400 grams

2. Maintain the baby's body temperature to stay wrapped and with a treatment at a temperature of 36.5 °C incubator.

Results: It has been implemented

3. Observe TTV

Results: Temperature: 36.5 °C

Breathing: 42 x / minute

Heart rate: 120 times / min

Results: Clothes, baby diapers are dry and clean.

5. Provision of drinking a little and regularly with 12cc in every 2 hours.

Results: Providing drinking a little and irregular have been done.

6. Advise the mother to consume a balanced diet.

Results: I understand and are willing to implement.

7. Inject 0.1 ml vitamin K intramuscularly

Results: It has been implemented

8. Provide prophylactic antibiotic eye drops by way of rubbing the eyes.

Results: It has been implemented.

3.6. Evaluation of Midwifery Care ; Dated May 8, 2014, at 1:20 pm

1. Low birth weight babies have not been resolved is characterized by:
   a. Nutritional needs have not been met.
   b. Weight 2400 grams.

2. Disorders of nutrition has not been met is characterized by:
   a. Weak sucking reflex.
   b. Weight 2400 grams.
   c. Nutrition coupled with formula

3. Hypothermia does not occur characterized by:
   a. Babies stay wrapped with a warm cloth and clean and do maintenance in an incubator at 36.5 ° C.
   b. 36,5oC baby's body temperature.
   c. Palpable baby body dry and warm.

4. Discussion

Step I: Basic Data Collection

The data obtained from various sources, namely the client and family and midwife records without finding a significant obstacle. This is because the response Mothers who are active in providing information as well as family or midwife who cared for so I easily obtain the desired data. In the literature review described that low
birth weight babies are newborns with a birth weight less than 2500 grams. In a review of cases as the initial step of data collection is done anamnesis which includes the identification data of biological / physiological and spiritual Data. Further physical examination that includes inspection, palpation, auscultation, percussion and other examinations. This will show no gap theory and application of midwifery.

**Step 2: Identify Diagnosis / Actual Problems**

In the literature review pointed out that babies born weighing <2500 grams, thin skin, subcutaneous fat little, weak cry called low birth weight babies. Problematic in LBW one of them on the digestive system of nutritional problems because of reduced intestinal motility and esophageal cardio work that has not been perfect so poor sucking reflex.

In a review of cases, obtained birth weight 2400 grams and on physical examination found thin hair, fat under the skin a little, poor sucking reflex that diagnosis is established low birth weight infants with problems of nutrition disorders in infants. This suggests a similarity between a literature review and a review of cases [12].

**Step 3: Anticipation Diagnosis / Potential Problems**

In the literature review described that LBW difficult to maintain body temperature due to increased evaporation due to the lack of fat tissue under the skin so easily happen hypothermia and immunological disorders that infants are susceptible to infection. In case review of obtained weight <2500 grams, the body temperature of 36.5 ° C, a little subcutaneous fat, umbilical cord still wet so that the authors identify potential occurs hypothermia. This shows there is no difference between a literature review with a review of the case [13, 14].

**Step 4: Implementation of the Immediate Action / Collaboration**

In the literature review, immediate action and collaboration is done based on the indications that require fast and precise handling that require collaboration with health workers a higher level of health. In case reviews conducted immediate action and collaboration with physicians that perform at Incubator baby care and infant nutrition. This will show no gap theory and application of midwifery.

**Step 5: Midwifery Care Action Plan**

In the literature review treatment given to low birth weight babies is strictly maintain body temperature, preventing infection, nutritional surveillance / ASI, and weighing and then treating in the incubator.

In midwifery care plan in infants review cases is balanced body weight, keep the baby's body temperature, observation TTV, whenever wet dressing, giving drinking a little and gradually, encourage the mother to consume a balanced nutrition. Thus what is described in the literature and are carried on a review of cases in outline indicates no gaps.
Step 6: The act of Midwifery Care

Plan of action that has been made in the review of cases all been held on May 08 and May 9, 2014 in BLUD RSU Tenriawaru Kab.Bone class B, no significant obstacles due to the cooperation and good acceptance of the family as well as the support, guidance, and direction of mentors in the field of practice. In a literature review Midwifery Care that the action plan must be approved by the baby's family. Therefore, prior to be discussed with the family of all actions taken by the relevant rational recognized as true by the circumstances of the actions that can be analyzed theoretically. This will show no gap theory and application of midwifery.

Step 7: Evaluation of Midwifery Care

Evaluation is the final step of the process of Midwifery Care is an assessment of the success rate of the care given to infants based on the issues and objectives that have been set previously. The results of the evaluation after two days of treatment is nutritional needs have not been met, the weight has not reached 2500 grams and hypothermia does not occur. With the results obtained it can be concluded that most problems can be resolved properly and in accordance with the objectives and criteria to be expected but there are still some unresolved issues, namely an increase in body weight has not reached 2500 grams and nutrition are still requires the fulfillment and subsequent supervision.

5. Conclusion

1. Assessment and analysis of baseline data on infant Mrs "N" as a whole is a sign of low birth weight as described in the theory portion of the signs and symptoms experienced by clients that LBW gestational age 37-42 weeks with body weight <2500 grams.

2. In the case of infants Mrs "N" diagnosis / actual problem was lbw which upheld basic diagnostic determination in accordance with the literature. It seems clear that there are similarities between the existing theory with case studies in infants Mrs "N".

3. Diagnosis / potential problems in infants Mrs "N" with Low Birth Weight Infants in which infants with low birth weight are very susceptible to hypothermia and nutritional disturbances fulfillment.

4. Immediate action and collaboration, where the baby Mrs "N" was born with a low birth weight with Apgar Score 7/9 then immediate action is necessary for the baby to breathe immediately regular and strong cry, but found indications for action in collaboration with that treatment incubator and nutrition on a regular basis.

5. All the actions to be performed on infants Mrs "N" has been planned well to handle a baby with low birth weight as well as the complications that may occur.

6. In the implementation of Midwifery Care in infants Mrs "N" planned action has been fully implemented.
7. At the end of the baby care Mrs "N" LBW marked with TTV within normal limits, nutritional needs have not been met because of the weight that has not reached 2500 grams and does not occur hypothermia.

References


