



**MIDWIFERY CARE FOR INFANT MOTHERS WITH HYPERBILIRUBIN IN THE PERISTI
ROOM OF ROEMANI MUHAMMADIYAH HOSPITAL SEMARANG**

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ABSTRACT

Background: The most common complaint in neonates, Hyperbilirubin (12.8%), Sepsis (7.95%), Hypoxic Ischemic Encephalopathy (HIE) stage 2 – 3 (3.68%), Major Congenital Disorders (2.94%), Transient tachypnoea in newborn (2.89%), Respiratory Distress Syndrome (RDS) (2.78), Meconium aspiration (1.52 %), Persistent Pulmonary Hypertension of the Newborn (PPHN) (1.29%), Apnea (1.18%), and Necrotizing Enterocolitis (NEC), (0.63%). It can be seen that hyperbilirubin has the highest percentage of complaints in neonates. **Objective:** To be able to carry out midwifery care in infants with hyperbilirubin using 7 Varney steps **Method:** The writing method used by the author, by collecting data by interview, physical examination, observation, literature study, and documentation. **Conclusion:** in the application of midwifery care, the care provided is in accordance with that given to the patient, so there is no gap between theory and practice in the field.

Keywords: *Hyperbilirubin, neonates*

INTRODUCTION

The most common complaints that arise in neonates, Hyperbilirubin (12.8%), Sepsis (7.95%), Hypoxic Ischemic Encephalopathy (HIE) stages 2 – 3 (3.68%), Major Congenital Disorders (2.94%), Transient tachypnoea in newborns (2.89%), Respiratory Distress Syndrome (RDS) (2.78), Meconium aspiration (1.52%), Persistent Pulmonary Hypertension of the Newborn (PPHN) (1.29%), Apnea (1.17%), and Necrotizing Enterocolitis (NEC), (0.63%). It can be seen that hyperbilirubin has the highest percentage of complaints in neonates (Manish R. N, 2017).

1. RESEARCH OBJECTIVES

This research collect data through interviews, physical examinations, observations, literature studies, and documentation.

2. SIGNIFICANCE

Able to carry out midwifery care in infants with hyperbilirubin using the 7 steps of Varney

METHOD

The writing method used by the author is to collect data by means of interviews, physical examinations, observations, literature studies,

and documentation.

DISCUSSION

Based on the results of the study conducted on By Ms. D age 8 days obtained anamnesis yellow baby. and on the results of the objective examination, the results of the examination of the baby's head to thighs appeared yellow and from the supporting examination, the total bilirubin was 19.88 mg/dL. From the results of the examination above, it can be concluded that the baby has hyperbilirubin which causes his body to be yellow or icteric.

Neonatal jaundice is a yellow discoloration that occurs in neonates or newborns. This discoloration can be seen in the eyes, oral cavity, and skin. Neonatal jaundice can be physiological or normal in infants and pathological or abnormal in newborns and can be life threatening. In premature babies, there is an increase in the incidence of neonatal jaundice compared to term babies (Noorbaya, 2019). This problem is often caused by maternal factors such as ABO and Rh incompatibility, breastfeeding and other factors, preterm infants, gestational age, low birth weight, and perinatal (infection, hypoglycemia and type of delivery).

Based on the results of further anamnesis,



it was found that the mother's delivery was carried out at 36 weeks of gestation, which means that the pregnancy was preterm. According to Radis (2018), in infants with premature labor, hyperbilirubin occurs due to immaturity of liver function, premature babies have high iron levels in their red blood cells. The process of breaking down hemoglobin occurs at the end of the red blood cell age, which is 120 days, while premature babies have red blood cells whose lifespan is short, which is 80-90 days, therefore red blood cells must be replaced more quickly. This is in line with research (Anggraini, 2014) which states that there is a relationship between preterm labor and the incidence of hyperbilirubin.

Apart from maternal factors, hyperbilirubin is also influenced by breastfeeding. Based on the results of observations that have been made, babies are given breast milk and formula milk because the mother's milk is little. This is one factor in the occurrence of hyperbilirubin because colostrum in breast milk is a protective fluid that is rich in anti-infective substances and contains high protein that comes out from the first day to the 4th or 7th day after giving birth (Marni, 2012). Colostrum contains fat-soluble vitamins, immunoglobulins Ig A, Ig G and Ig M compared to mature milk, but has lower total energy. The amount of colostrum is still limited because it is still inhibited by high levels of estrogen (Marni, 2012). The use of formula milk will actually interfere with development and cause damage to the digestive tract (Dasnur, 2018). This theory is supported by research results (Sulendri, et al, 2020) which state that exclusive breastfeeding has a lower risk of hyperbilirubin than infants who are breastfed and formula-fed. Another cause is the blood type of parents who are different according to research conducted by Galuh Haryaninggar (2017) ABO incompatibility occurs in the mother who has blood type O and the fetus has blood type A, B or AB. This condition occurs in incompatible marriages where the blood of the mother and baby causes anti-substances from the mother's blood serum to meet the antigens of the baby's erythrocytes in the womb so that hemolytic processes can occur in the neonate's blood.

Management carried out in cases of

hyperbilirubin, phototherapy 2x24 hours and evaluation of bilirubin post phototherapy. The goal of phototherapy is to convert hyperbilirubin to yellow photoisomers and colorless oxidation products that are less lipophilic than bilirubin and do not require hepatic conjugation for excretion. Photoisomers are excreted mainly in bile and oxidation products mainly in urine. Based on the results of research (Labir, et al, 2012) stated that there is a relationship between the provision of phototherapy with a decrease in hyperbilirubin levels in the blood. The longer the phototherapy, the greater the decrease in bilirubin levels in the blood. This is in line with research (Dewi et al, 2016) which stated that the decrease in total bilirubin levels after phototherapy in 24 hours was 2.5 ± 0.8 mg/dL, decreased by 16.3% in 24 hours. In addition to photo therapy, the author also provides support and education to mothers and families to provide exclusive breastfeeding. Breast milk is the best nutrition for babies because it contains antibodies, protein, carbohydrates, fats, and vitamins. Some of the ingredients contained in breast milk, beta glucuronidase, will break down bilirubin into a fat-soluble form so that indirect bilirubin will increase and will then be reabsorbed by the intestines. Breastfeeding will increase intestinal motility and also cause the introduction of bacteria into the intestine. Based on research (Indanah, et al, 2019) stated that the average decrease in bilirubin levels of babies who were breastfed every 2 hours was 7.17 mg/dL. In infants who are breastfed every 3 hours, the average decrease in infant bilirubin levels is 7.01 mg/dl, This shows that breastfeeding every 2 hours is effective in reducing bilirubin levels in infants with hyperbilirubin. This study is in line with the results of other studies which state that the duration of phototherapy in breastfed infants is shorter than those given additional formula milk (Rahmah et al, 2012).

AUTHOR CONTRIBUTIONS

- a. Nurmina as researcher
- b. Dewi Puspitaningrum, S.SiT, M.Kes as academic supervisor
- c. Indri Astuti Purwanti, S. ST, M.Kes as one



- examiner
- d. Erna Kusumawati, S.ST, M.Kes as examiner two
 - e. Mrs. D since the baby is the respondent
 - f. Roemani Muhamadiyah Hospital Semarang as a research place
 - g. UNIMUS which has facilitated this research.

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