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Overview of Early Initiation Breastfeeding and Increasing Temperature in Newborn

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ABSTRACT

This study aims to determine the description of initiation early breastfeeding and increased body temperature of newborns. This research is an observational study with a cross-sectional design. The study was conducted at the Suratmi midwife maternity clinic in Batam City. The study population was mothers who had just given birth from February to March 2022. The inclusion criteria in this study were mothers who had just given birth at the clinic, aged 20-40 years, and were willing to participate in the study. Sampling was done by the purposive sampling technique. The results showed that the early initiation of breastfeeding (EIB) was achieved by 36 respondents with an increase in temperature of 0.2°C as many as 18 respondents (45%) and an increase in temperature of 0.30°C by 4 respondents. In conclusion, most of the new mothers have achieved early initiation of breastfeeding and there is an increase in the baby's body temperature of 0.1-0.2°C.

1. Introduction

According to the World Health Organization (WHO), every year about 3% (3.6 million) of the 120 million newborns experiences asphyxia. In Indonesia, of all under-five deaths, as many as 38% died during the newborn period. The causes of newborn mortality in Indonesia are mainly due to prematurity (32%), asphyxia (30%), infection (22%), congenital abnormalities (7%), and others (9%). A study in Iran stated that delaying the early initiation of breastfeeding would increase newborn mortality.² If the baby is allowed to breastfeed in the first hour by allowing skin-to-skin contact with the mother, then 22% of the lives of babies under 28 days can be saved. If the first feeding when the baby is over two hours old and under the first 24 hours, only 16% of babies' lives

under 28 days can be saved.¹

Early initiation of breastfeeding (EIB) is when a baby starts breastfeeding itself immediately after birth.³ Provided that the baby's skin is in contact with the mother's skin, for at least one hour after birth. It turns out that early initiation of breastfeeding is not only the success of exclusive breastfeeding. More than that, it saves the baby's life. Therefore, breastfeeding in the first hour of a newborn plays a very important role in reducing infant mortality. If all babies immediately after birth are allowed to breastfeed themselves by allowing skin-to-skin contact between the mother and the baby, the baby's life can be saved. The mechanism for regulating body temperature in newborns (BBL) has not functioned perfectly, therefore

if it is not immediately taken to prevent body heat loss, newborns can experience hypothermia.^{4,5} This study aims to determine the description of early initiation of breastfeeding and the increase in body temperature of newborns.

2. Methods

This research is an observational study with a cross-sectional design. The study was conducted at the Suratmi midwife maternity clinic in Batam City. The study population was mothers who had just given birth from February to March 2022. The inclusion criteria in this study were mothers who had just given birth at the clinic, aged 20-40 years, and were willing to participate in the study. Sampling was done by the purposive sampling technique. The total participants who took part in this study were 40 mothers. The research procedure has received ethical approval from the ethical committee of the Faculty of Medicine,

Batam University. Data analysis was performed using SPSS for Windows software.

3. Results and Discussion

The results showed that the early initiation of breastfeeding (EIB) was achieved by 36 respondents with an increase in temperature of 0.2°C as many as 18 respondents (45%) and an increase in temperature of 0.3°C as many as 4 respondents (10%) (Table 1). The mother's skin is a thermoregulator for the baby's temperature. This will reduce the mortality of newborns due to cold (hypothermia). The body temperature of the mother who gives birth becomes 1°C hotter than the temperature of the mother's chest before giving birth, if the baby placed on the mother's chest is too hot, the temperature of the mother's chest will drop 1°C. If the baby is cold, the mother's chest temperature will increase by 2°C to warm the baby.

Table 1. Achievement of early breastfeeding initiation and newborn's temperature increase

Variable	Total (%)
Early initiation of breastfeeding	
Yes	36 (90%)
No	4 (10%)
Increase in baby's temperature	
0.1°C	18 (45%)
0.2°C	18 (45%)
0.3°C	4 (10%)

Lactation is the production and the production of breast milk in which both must be equally good. During pregnancy, breast milk is usually inhibited by estrogen levels which are still high on the second or third day postpartum, estrogen levels drop drastically and this is when milk secretion occurs. So that with early breastfeeding, it is hoped that the secretion of breast milk will be faster (lactation management). If the baby is allowed to breastfeed in the first hour by allowing skin-to-skin contact with the mother, then 22% of the lives of babies under 28 days can be saved. If the first feeding happens when the baby is over two hours old and under the first 24 hours, only 16% of babies' lives under 28 days can be saved.

The mechanism for regulating body temperature in newborns (BBL) has not functioned perfectly, therefore

if it is not immediately done to prevent body heat loss, the newborn can experience hypothermia. The normal temperature of a newborn is 36.5 – 37.5°C (axillary temperature).³ Cold stress in newborns will cause physiological and metabolic problems in all newborns regardless of gestational age and other conditions.

The kangaroo method is very effective in preventing hypothermia in premature infants. The principle of this method is skin-to-skin contact which is similar to one of the EIB principles. Skin-to-skin contact will transfer the mother's body heat to the baby. The body temperature of mothers with EIB experienced a higher increase when compared to the body temperature of mothers without EIB. The mother's body temperature will increase when the baby starts to cool down and when the baby is warm, the mother's body temperature

will decrease again. This shows that mothers can be good mediators for their babies and newborns do not always have to be treated with incubators.⁶

Mothers can function as heat mediators and a bonding attachment process occurs so that babies feel more comfortable in their mother's arms. In addition, the baby can also move on all fours to find the mother's nipple and suckle on its own so that the lactation process can run smoothly.⁷ Normal infants may try to increase body temperature by crying or increase motor activity in response to discomfort due to lower ambient temperatures.⁸ on the baby's body can keep the body warm and prevent heat loss and encourage the mother to breastfeed her baby immediately after birth. Breastfeeding should be started within the first hour of birth.⁹⁻¹⁰

4. Conclusion

Most of the new mothers have achieved early initiation of breastfeeding and there is an increase in the baby's body temperature of 0.1-0.2°C.

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