ABSTRACT

Background Early Breastfeeding Initiation (IMD) is the first step in the success of exclusive breastfeeding. IMD is also useful for the relationship between mother and baby and makes babies feel calm. The mother's chest is a temperature stabilizer that can regulate and warm the baby's body temperature who is at risk of cold due to adaptation to the air outside the womb after giving birth. with IMD the risk of heat loss (hypothermia) in newborns can reduce mortality. Researchers are then interested in conducting research on the relationship between early initiation of breastfeeding and changes in body temperature of newborns.

Method The research that will be conducted is using analytical observation method with a cross section design involving 30 samples. The technique that will be used is accidental sampling, while the data collection will use an observation sheet for the IMD implementation procedure and axillary digital thermometer. Data collection includes coding, editing and tabulating, then the data is analyzed manually and on a computer with the chi-square test. Results Statistical test results obtained P value = 0.002 (probability value (p) < (0.05 ) Ha is accepted so it can be concluded that there is a relationship between Early Breastfeeding Initiation (IMD) with changes in body temperature of newborns at UPT Puskesmas Wuluhan, Jember Regency.

Conclusion So that the results of this study are expected to add insight into knowledge about the relationship between early initiation of breastfeeding and changes in body temperature of newborns in the future.

Suggestion There are a lot of suggestion that need to share for develop further research especially The researcher expected that they would like to convey to various parties and hoped that it can be used as research material for next research. and then for Health Service Institutions is expected to be able to provide education to pregnant women patients regarding the relationship between IMD and changes in body temperature at BBL.

Keywords : Early Initiation of Breastfeeding, Changes in body temperature in newborns.
INTRODUCTION

Early Breastfeeding Initiation (IMD) is the first step in the success of exclusive breastfeeding. IMD is also useful for the relationship between mother and baby and makes babies feel calm. The mother's chest is a temperature stabilizer that can regulate and warm the baby's body temperature who is at risk of cold due to adaptation to the air outside the womb after giving birth. With IMD the risk of heat loss (hypothermia) in newborns can reduce mortality. Researchers are then interested in conducting research on the relationship between early initiation of breastfeeding and changes in body temperature of newborns. Colostrum contained in breast milk is useful for increasing the baby's immunity and reducing IMR due to hypothermia. IMD is done by placing the baby on the mother's chest or stomach for at least the first hour after the baby is born. Babies who are given the opportunity for IMD are not given clothes, so that their skin sticks to the mother's skin. Within the first 1 hour of life a baby is born into the world, the baby is guaranteed to immediately get the opportunity to do IMD (RI Ministry of Health, 2017). Newborns cannot regulate their body temperature properly, so they are easy to experience stress with changes in temperature from inside the uterus to temperatures in the outside the uterus / ambient temperature. As a result of this imbalance between heat production and heat loss, it results in hypothermia according to what has been explained that according to (WHO) the World Health Organization defines neonatal hypothermia as an underarm temperature of less than 36.5°C so that with this temperature it can regulate and warm the temperature. The baby's body is at risk of cold due to adaptation to the air outside the womb after childbirth. Hypothermia is one of the important causes of death and neonatal morbidity in developing countries, which increases mortality five times, every 1 °C decrease in body temperature increases mortality by 80% (Demissie BW 2018, 2018). The effects of untreated hypothermia will cause several complications including: metabolic acidosis caused by the body carrying out anaerobic metabolism. A further impact due to an increase in norepinephrine causes systemic blood vessel vasoconstriction resulting in impaired oxygenation and tissue perfusion which continues with death. (Simbung et al., 2021). According to research conducted by (Darmayanti, 2021), the results found that 31 respondents (59.6%) successfully carried out IMD, and most of the babies, namely 37 respondents (71.2%) did not experience hypothermia. The results of this study IMD is significantly related to the incidence of hypothermia. Based on what was described above, the researcher was then interested in conducting research on the relationship between early initiation of breastfeeding and changes in the body temperature of newborns so that the hope is that the implementation of IMD can provide knowledge to all communities so that mothers and babies are saved from the dangers of hypothermia. Neonatal as the axillary temperature is less than 36.5°C so that with this temperature it can regulate and warm the baby's body temperature which is at risk of cold due to adaptation to the air outside the womb after childbirth. Hypothermia is one of the important causes of death and neonatal morbidity in developing countries, which increases mortality five times, every 1 °C decrease in body temperature increases mortality by 80% (Demissie BW 2018, 2018). The effects of untreated hypothermia will cause several complications including: metabolic acidosis caused by the body carrying out anaerobic metabolism. A further impact due to an increase in norepinephrine causes systemic blood vessel vasoconstriction resulting in impaired oxygenation and tissue perfusion which continues with death. (Simbung et al., 2021). According to research conducted by (Darmayanti, 2021), the results found that 31 respondents (59.6%) successfully carried out IMD, and most of the babies, namely 37 respondents (71.2%) did not experience hypothermia. The results of this study IMD is significantly related to the incidence of hypothermia.

RESEARCH METHODS

This study uses a correlation design based on a cross sectional approach. Nursalam (2017) explains that correlation research is research that examines the relationship between variables and aims to find, explain a relationship, estimate and test based on existing theory. Based on this concept, this research was conducted with the aim of finding the relationship between early initiation of breastfeeding and changes in body temperature of newborns at the Wuluhan Health Center, Jember Regency. In addition, Notoadmodjo (2017) explained that cross sectional is a research approach to study the dynamics of the correlation between risk factors and effects, by way of
approach, observation or data collection at one time. In this study the focus was on all newborns at UPT Puskesmas Wuluhan Jember Regency as many as 30 people using accidental sampling. According to Nursalam (2017) Accidental sampling is a sampling technique based on coincidence, namely consumers who coincidentally/accidentally meet with researchers can be used as samples, if it is deemed that the person met by chance is suitable as a data source. In this study using two variables, namely the independent variable and the dependent variable. The independent variable or variable X is the variable that is seen as the cause of the emergence of the dependent variable which is thought to be the result. Meanwhile, the dependent variable or Y variable is the variable (effect) that is presumed, which varies according to changes in the independent variables. (Sugiyono, 2017). This research was carried out at UPT Puskesmas Wuluhan Jember Regency on August 3 - September 3 2022. The data source used in this researchh.

This is significantly related to the incidence of hypothermia. Based on what was described above, the was then interested in conducting research on the relationship between early initiation of breastfeeding and changes in the body temperature of newborns so that the hope is that the implementation of IMD researchers can provide knowledge to all communities so that mothers and babies are saved from the dangers of hypothermia. The coding used in this study includes:

**Data Analysis**

Statistical test results obtained Pvalue = 0.002 (probability value (p) < $\alpha$(0.05) Ha is accepted so that it can be concluded that there is a relationship between Early Breastfeeding Initiation (IMD) and Changes in body temperature of newborns at UPT Puskesmas Wuluhan, Jember Regency.

**RESEARCH RESULTS**

**Frequency distribution of respondents based on the age of mothers who gave birth at the Wuluhan Health Center,** Jember Regency

Based on table 1, it was found that the majority of respondents aged 20-30 years were 13 people (43.8%).

<table>
<thead>
<tr>
<th>Age Responden</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 tahun</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>20 - 30 tahun</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>&gt; 30 tahun</td>
<td>12</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Frequencies distribution of the characteristics of respondents based on the education of mothers who gave birth at Wuluhan Health Center, Jember Regency.

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (SD, SMP)</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>Middle (SMA)</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>High (PT)</td>
<td>8</td>
<td>26.7</td>
</tr>
</tbody>
</table>

No Education Frequency Percent Low (SD, SMP) 13 43.3, Intermediate (high school) 9 30.0, High (PT) 8 26, Total 30 100.0

Based on the education level of the respondents, the majority of them had low education (SD, SMP) 13 respondents (43.3%)

Frequency distribution of the characteristics of respondents based on the occupation of mothers who gave birth at the Wuluhan Health Center, Jember Regency.

<table>
<thead>
<tr>
<th>Job</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>No Work</td>
<td>22</td>
<td>73.3</td>
</tr>
</tbody>
</table>

Based on the level of work that most of the respondents did not work 22 people (73.3%)
Frequency distribution of the characteristics of respondents based on the parity of mothers who gave birth at the Wuluhan Health Center, Jember Regency.

Table 4
Distribution of frequency characteristics of respondents based on parity of mothers who gave birth at the Wuluhan Health Center, Jember Regency

<table>
<thead>
<tr>
<th>Parity</th>
<th>Frequency</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primipara</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Multipara</td>
<td>12</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Based on maternal parity, most of the Primipara respondents were 18 people (60%).

Frequency distribution of the characteristics of respondents based on Early Breastfeeding Initiation for mothers who gave birth at the Wuluhan Health Center, Jember Regency

Table 5
Frequency distribution of respondents’ characteristics based on Early Breastfeeding Initiation (IMD) for mothers who gave birth at the Wuluhan Health Center, Jember Regency.

<table>
<thead>
<tr>
<th>IMD</th>
<th>Frequency</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are not done</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Done</td>
<td>24</td>
<td>80.0</td>
</tr>
</tbody>
</table>

Frequency distribution of Newborn Body Temperature at the Wuluhan Health Center, Jember Regency.

Table 6
Frequency distribution of newborn body temperature at the Wuluhan Health Center, Jember Regency.

<table>
<thead>
<tr>
<th>Body Temperature</th>
<th>Frequency</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Up</td>
<td>26</td>
<td>86.7</td>
</tr>
</tbody>
</table>

Shows that the majority of respondents Sutu Body Increase 26 respondents (86.7%).

Frequency distribution of the relationship between Early Breastfeeding Initiation (IMD) and Changes in Body Temperature of Newborns at the Wuluhan Health Center, Jember Regency.

Table 7
Frequency distribution of the relationship between early initiation of breastfeeding (IMD) and changes in body temperature of newborns at the Wuluhan Health Center, Jember Regency.

<table>
<thead>
<tr>
<th>Implementation of IMD</th>
<th>Body temperature BBL</th>
<th>Σ</th>
<th>%</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Still</td>
<td>Up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are done</td>
<td>3</td>
<td>21</td>
<td>87.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Not done</td>
<td>5</td>
<td>1</td>
<td>16.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>
DISCUSSION

The results of the study in table 5 showed that the majority of respondents did IMD as many as 24 respondents (80%). According to (Jenny J.S, 2016) Early initiation of breastfeeding or early initiation of breastfeeding is when the baby begins to breastfeed on his own immediately after birth. Early initiation of breastfeeding must be done immediately when born, without being delayed by weighing or measuring the baby. Babies also shouldn't be cleaned, only dried except for their hands. This process must take place skin to skin between baby and mother (Dzakiyyah Wildan & Febriana, 2017).

Babies who are given the opportunity for IMD are not given clothes, so that their skin sticks to the mother's skin. IMD is also useful for the bonding of mother and baby affection and makes the baby feel calm. IMD is beneficial for mothers because it can help speed up the postpartum recovery process. Within the first 1 hour of life a baby is born into the world, it is certain that the baby will get the opportunity to do IMD (RI Ministry of Health, 2017).

Newborns are not yet able to regulate their body temperature properly, from inside the womb to the temperature outside the uterus/environmental temperature. In a cold environment, the formation of temperature without a shivering mechanism is the baby's main effort to regain body heat. The formation of temperature without shivering is the result of using brown fat for heat production, whereas to burn brown fat babies must use glucose to get energy which will turn fat into heat. Shortly after the baby is born he will be in a place where the temperature is lower than in the womb and in a wet state. If the baby is left at room temperature 25°C, the baby will lose heat through evaporation, convection, conduction and radiation of 200 calories/kg/min (Jenny J.S, 2016).

Newborns lose heat four times more than adults, resulting in a decrease in temperature. In the first 30 minutes a baby can experience a temperature drop of 3-4°C. In a room with a temperature of 20-25°C, the baby's skin temperature drops by about 0.3°C per minute. The newborn's temperature can drop several degrees because the external environment is colder than the environment inside the uterus (Jenny J.S, 2016).

In the first 30 minutes a baby can experience a temperature drop of 3-4°C. In a room with a temperature of 20-25°C, the baby's skin temperature drops by about 0.3°C per minute. The decrease in temperature is caused by heat loss by convection, evaporation, radiation and conduction. The baby's immature ability to produce heat causes the baby to be prone to hypothermia. Decreased thermal stability has long-term physiological effects leading to death from hypoxia and hypotension. Although the mother's body temperature will stabilize the baby's temperature automatically. Because the mother's body temperature is 1°C higher than the baby's temperature, if the baby feels hot, the mother's temperature will also drop by 1°C.

Changes in Body Temperature of Newborns at the Wuluhan Health Center, Jember Regency.

The results of the research in table 5.6 show that most of the respondents' Sutu Body has increased by 26 respondents (86.7%). Normal body temperature in newborns is between 36.5°C – 37.5°C.

Relationship between Early Breastfeeding Initiation (IMD) and Changes in Body Temperature of Newborns at the Wuluhan Health Center, Jember Regency.

Those who did IMD were 24 respondents with temperatures rising 21 (87.7%). So Based on the statistical test results, P-value = 0.002 (probability value (p) < α(0.05 ) Ha is accepted so that it can be concluded that there is a relationship between Early Breastfeeding Initiation (IMD) and Changes in body temperature of newborns at UPT Puskesmas Wuluhan, Jember Regency. Mothers who do IMD correctly, the baby's temperature is normal. This is due to the baby's contact with the
mother. Early initiation of breastfeeding (IMD) has many benefits, not only for newborns, but also for mothers who give birth. The benefits for newborns with IMD are lowering the risk of hypothermia, speeding up the heart rate, and breathing becomes more stable, and the baby more quickly obtain colostrum as antibodies. The baby is at a safe temperature if it makes skin contact with the mother. The temperature of the mother's breast increases 0.5 degrees in 2 minutes if the baby is placed on the mother's chest. That the chest temperature of mothers who give birth is 1 0 C hotter than the temperature of mothers who do not give birth. If the baby placed on the mother's chest is hot, the mother's chest temperature will drop by 10 C. If the baby is cold, the mother's chest temperature will increase by 20 C.

Mothers who get more family support can do IMD compared to mothers who do not get support from their families. This illustrates that the implementation of IMD really needs support from the husband or family where this support is really needed. by breastfeeding mothers. A stable emotional condition determines a positive attitude from the mother. This emotional stability can be achieved if the husband or family provides maximum support and motivation. Support gives an impression that he is loved and cared for, has self-esteem and is valued. So that by itself it will affect the mother's emotions where she is more calm, comfortable, confident in carrying out the IMD process on her baby. The involvement of a husband in implementing IMD will motivate the mother to breastfeed and through implementing IDM correctly can cause the baby's body temperature to become more stable so that hypothermia does not occur.

CONCLUSION
Initiation of early breastfeeding for newborns at UPT health center wuluhan as many as 24 people (80%). Changes in the body temperature of newborns at UPT health center wuluhan as many as 26 people (86.7%). There is a relationship between early initiation of breastfeeding and changes in the body temperature of newborns at the UPT health center wuluhan.

SUGGESTION
There are a lot of suggestion that need to share for develop further research especially The researcher expected that they would like to convey to various parties and hoped that it can be used as research material for next research. and then for Health Service Institutions is expected to be able to provide education to pregnant women patients regarding the relationship between IMD and changes in body temperature at BBL.

Then for the Midwifery Profession is hope that can provide comprehensive early initiation of breastfeeding care so as to improve the quality of care.

Also for society this study are expected to be used as a source of information by the public, especially pregnant womb.

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