Relationship between Early Breastfeeding Initiation and Postpartum Bleeding at PMB Griya Mazaya

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Abstract. Background: Sixty percent of all maternal deaths occur within the first 24 hours postpartum (WHO, 2018). Steps that can prevent postpartum bleeding management include active third stage, administration of uterotonics and early initiation of breastfeeding. Oxytocin hormone levels will increase in the third stage after separation of the placenta and when early initiation of breastfeeding is carried out because the pituitary gland releases the oxytocin hormone through the baby's stomping, touching and licking of the mother's skin so that it can prevent postpartum bleeding and speed up the expulsion of the placenta naturally. Objective: To determine the effect of early initiation on the number of post-delivery events at the Griya Mazaya midwifery clinic in 2023. Method: The research method uses analytical observational analysis with case control. The research design used a retrospective approach with a sample size of 44 respondents divided into 22 groups of respondents who did IMD and did not do IMD with a data processing test using Mann Whitney. Results: The results of Mann Whitney data processing showed a p value of 0.000, which means p value < sig (0.05) thus proving that there is a difference in the incidence of post-delivery bleeding. Mothers who did IMD had less bleeding than mothers who did not do IMD. Conclusion: Management of early initiation of breastfeeding is immediately after the new baby is born can significantly reduce the rate of postpartum hemorrhage.

Keywords: Early Initiation Of Breastfeeding, Childbirth, Postpartum Bleeding

LATAR BELAKANG

Maternal Mortality Rate (MMR) is one indicator in determining the level of public health. Indonesia, as a developing country, currently has a high Maternal Mortality Rate (MMR) of 305 per 100,000 live births, which has not yet reached the specified target of 183 per 100,000 live births in 2024 (Ministry of Health, 2022). Every day around 830 women die from preventable causes of pregnancy and childbirth, of which 99% of maternal deaths occur in developing countries. Sixty percent of all maternal deaths occur in the postpartum period and 45% of cases occur within the first 24 hours postpartum (WHO, 2018).

Postpartum bleeding can be influenced by the presence of risk factors in the antenatal period and intrapartum. Based on Wardani’s research (2017:55), there are several factors that cause postpartum hemorrhage, namely parity, age, delivery distance, long labor, history of postpartum hemorrhage, and anemia. Anemia in pregnancy is common and is associated with postpartum hemorrhage due to uterine atony.

In primiparas, the mother may be unprepared to deal with complications that occur during pregnancy and childbirth, such as lacerations of the birth canal. Meanwhile, in multiparous or grandemultiparous mothers, the uterus experiences overdistension or weakness of the myometrium so that they have a greater risk of experiencing uterine atony. Women who give birth at the age of < 20 years or > 35 years are at risk of experiencing postpartum hemorrhage because at the age of < 20 years the reproductive function is not yet fully developed, causing postpartum complications, while women aged > 35 years experience a decline in the reproductive system.

According to research by Stanton et al, the effort to treat postpartum bleeding is by administering oxytocin, where oxytocin has an important role in stimulating uterine smooth muscle contractions to prevent bleeding. Supported by research conducted by Thornton et al that oxytocin can be produced by the body naturally during the birth process. Oxytocin hormone levels will increase in the third stage after separation of the placenta and when Early Breastfeeding Initiation is carried out because the pituitary gland releases the oxytocin hormone through the baby's stomping, touching and licking of the mother's skin so that it can prevent postpartum bleeding and speed up the expulsion of the placenta naturally (Mochtar, R. (2012).
THEORETICAL STUDY
Theoretical Foundations of Early Breastfeeding Initiation Understanding Early Breastfeeding Initiation

Early initiation of breastfeeding is when the baby begins to breastfeed on its own immediately after birth. (Ariescha, P. A. (2018). So, in fact human babies are the same as other mammal babies who have the ability to breastfeed themselves. As long as they are allowed to have contact with the baby's skin with the mother's skin, for at least one hour immediately after birth. In the first 1-2 hours the baby is more responsive and easily attached to the breast. This way babies initiate early breastfeeding is called the breast crawl or crawling looking for the breast (Roesli, 2013).

Causes of Early Initiation of Breastfeeding
According to UNICEF (2017), there are several things that cause babies to be able to find their mother's nipples and start breastfeeding, namely:
1) Sensory Inputs
2) Central Component
3) Motor Outputs

Benefits of Early Initiation of Breastfeeding
According to Roesli (2013), the benefits of early initiation of breastfeeding are:
Improves baby's breastfeeding reflex optimally
Breastfeeding in newborn babies is an integration of three reflexes, namely the rooting reflex, the sucking reflex, the swallowing reflex and breathing. Immediately after birth, the baby does not yet show readiness to breastfeed. The baby's sucking reflex appears 20-30 minutes after birth. Signs of a baby's readiness to breastfeed include making small sounds, yawning, stretching, mouth movement. Next, moving the hand to the mouth, the rooting reflex arises, moving the head and crying as a signal for early breastfeeding. With the senses of touch, inhalation, sight, hearing, reflexes, newborn babies can find and touch the breast without help. Development of the senses (sensory inputs)
Newborn babies have extraordinary sensory abilities consisting of:
   a. The sense of smell of the mother's characteristic odor after giving birth.
   b. The sense of sight because babies are new to black and white patterns, babies will recognize the nipple and areola.
   c. Although the sense of taste only tolerates sweet tastes in the period immediately after birth, babies are able to taste the amniotic fluid attached to the fingers so they prefer to lick their own fingers.
   d. A baby's sense of hearing has developed since he was in the womb, and his mother's voice is the sound he most recognizes.
   e. The sense of taste, skin-to-skin touch between baby and mother is the first sensation that provides warmth and other stimulation.
Reduces the incidence of hypothermia, hypoglycemia and asphyxia
The insulating layer of fatty tissue under a baby's skin is so thin that the rate of heat loss in a newborn's body is ± 4 times faster than that of an adult. According to research by Dr. Niels Bergman, the mother's skin functions as a natural incubator. If At birth the baby experiences hypothermia, with skin to skin contact the mother's skin temperature will automatically increase by 2° Celsius. On the other hand, if the baby experiences hyperthermia, the mother's skin temperature will drop by 1° Celsius (Roesli, 2013).
Increase baby's immunity
The baby will get colostrum (Liquid Gold) for the first drink which is the gift of life. Colostrum contains many active immune substances, antibodies, protective proteins as immune substances that the baby receives for the first time and will fight many infections. Colostrum contains growth factors that will create a layer that protects the baby's immature intestines while maturing the baby's intestines and making its function more effective. Efficient early breastfeeding is correlated with reduced blood bilirubin levels (Safira, K. 2018). The high protein content in colostrum makes it easier for bilirubin to bind and the laxative action of colostrum to facilitate the passage of meconium. Apart from that, colostrum is rich in vitamin A which will help maintain eye health and prevent infections (Saifuddin, 2004).
Facilitates bonding attachment
Bounding or inner bond shows the relationship between parents and baby at the beginning of birth. Babies who are given early breast milk will often be in the mother's warm arms while breastfeeding so they will be
calm, pleasant, loved and protected just like when they were in the womb. Babies like this will grow up in a safe atmosphere or secure attachment. This feeling of being protected and loved will be the basis for good emotional development and form a confident personality that will easily socialize with the environment. Mother and father will feel happy to meet the baby for the first time where they will be united in one feeling, namely love. This is very good to do in the first 1-2 hours, because at that time the baby is allergic, after 2-3 hours the baby will sleep longer. Roesli. (2013).

Increasing the success of exclusive breastfeeding

Early initiation of breastfeeding in the first minute to the first hour of life, starting with skin to skin contact, will help the mother and baby receive optimal breastfeeding. Delaying the start of breastfeeding for more than one hour causes difficulty breastfeeding (Roesli, 2013). Early initiation of breastfeeding will increase the mother’s chances of establishing and continuing exclusive breastfeeding. Monika, F. (2014)

The Concept of the Postpartum Period. Understanding the Postpartum Period

The postpartum period (PostPartum) is the period that begins after the birth of the placenta and ends when the uterus returns to its normal state before pregnancy, which lasts for 6 weeks or 42 days. During the recovery period, the mother will experience many physical changes that are physiological in nature and cause a lot of discomfort in the early postpartum period, which does not rule out the possibility of becoming pathological if not followed by good care (Yuliana & Hakim, 2020).

Postpartum Bleeding Definition

According to WHO (2001), postpartum hemorrhage (Postpartum hemorrhage) is blood loss of 500ml or more from the genital tract after giving birth. Postpartum blood loss which is still considered within normal limits is a maximum of 300 ml, whereas before the placenta is born it should not be more than 90 ml. Risa & Rika (2014).

Classification

According to Pranoto (2001), postpartum bleeding based on time is divided into three, namely:

a. Second stage bleeding: bleeding that occurs after the baby is born until the placenta is born.

b. Third stage bleeding: bleeding that occurs after the placenta is delivered until immediately afterwards.

c. IV stage bleeding: bleeding that occurs after the third stage up to two hours later.

Reason

According to WHO (2001), there are two causes of bleeding, namely: Direct causes of primary postpartum bleeding include:

1) Atonic uterus (occurs because the placenta or amniotic membranes are retained).

2) Genital trauma (includes spontaneous causes and trauma due to implementation, for example birth using equipment including caesarean section, episiotomy)

3) Disseminated intravascular coagulation.

4) Uterine inversion.

Direct causes of secondary postpartum hemorrhage include:

1) Fragments of the placenta or amniotic membranes are retained.

2) Discharge of dead tissue after obstructed labor (can occur in the cervix, vagina, bladder and rectum)

RESEARCH METHODS

This research method uses analytical observational analysis with case control. Case control research design is a study that studies risk factors using a retrospective approach and data collection using secondary data. This type of quantitative research analysis is defined as a research method carried out to examine a certain population or sample (Sugiyono, 2017)

The case control research design can be described as follows:
Figure 1.1 Case Control Research Design Source: (Notoatmodjo, 2018)

Place and Time of Research

The place where this research was conducted was PMB Griya Mazaya.
The reason the researcher took the research location at PMB is because PMB Griya Mazaya is an independent midwife practice that implements a combination of Normal Childbirth Care (APN) and Tibbunabawi-based midwifery services which is a reference for birth assistance, as well as supporting the loving care of mother and baby, one of which is by applying the Initiation technique. Early Breastfeeding makes it easier for researchers to conduct research.

Research time

This research has been carried out since April-May 2020 and April-May 2023.

Types and Methods of Data Collection

The type of data collection using primary data is a data source obtained directly from original sources (not through intermediary media). The primary data obtained were age, education, occupation and the amount of postpartum bleeding obtained directly from observations and interviews conducted on mothers from childbirth from the second to the fourth stage of labor.

The data collection method used in this research was by using bends, scales and observation sheets. The bend used here can accommodate around 100 cc. Postpartum bleeding occurs if the amount of blood coming out of the birth canal is more than 500 cc. After getting the results, they are written on the observation sheet provided. So, the amount of bleeding in the second stage to the fourth stage is obtained from the difference in the bending measurements that have been used, namely the amount of bleeding from mothers who did not have IMD and how much bleeding from mothers who did IMD.

RESULTS AND DISCUSSION

Frequency Distribution of Respondent Characteristics

a. Age

The following is a table of respondent characteristics based on age.

<table>
<thead>
<tr>
<th>Umur</th>
<th>IMD</th>
<th>Tidak IMD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 tahun</td>
<td>1 (2,3 %)</td>
<td>2 (4,5 %)</td>
<td>3</td>
</tr>
<tr>
<td>20 – 35 tahun</td>
<td>9 (20,5%)</td>
<td>12 (27,3%)</td>
<td>21</td>
</tr>
<tr>
<td>&gt;35 tahun</td>
<td>12 (27,3%)</td>
<td>8 (18,2 %)</td>
<td></td>
</tr>
<tr>
<td>Jumlah</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
</tbody>
</table>
Based on table 1.2, it shows that the majority of mothers who do IMD are more than 35 years old, 12 people (27.3%).
a. Parity
The following is a table of respondent characteristics based on parity.

### Table 1.3
Karakteristik Responden Berdasarkan Paritas

<table>
<thead>
<tr>
<th>Paritas</th>
<th>IMD</th>
<th>Tidak IMD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primipara</td>
<td>9 (40,9%)</td>
<td>12 (54,5%)</td>
<td>21</td>
</tr>
<tr>
<td>Multipara</td>
<td>13 (59,1%)</td>
<td>10 (45,5%)</td>
<td>23</td>
</tr>
<tr>
<td>Jumlah</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
</tbody>
</table>

Based on table 1.3, it can be seen that the majority who performed IMD on multiparous respondents were 13 people (59.1%) and those who did not perform IMD on primiparas were 12 people (54.5%).

a. Distribution of Postpartum Bleeding Events
The following is a table of distribution of the incidence of postpartum hemorrhage.

### Table 1.4
Distribution of Postpartum Bleeding Events

<table>
<thead>
<tr>
<th>Karakteristik</th>
<th>IMD</th>
<th>Tidak IMD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terjadi perdarahan</td>
<td>22</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tidak terjadi perdarahan</td>
<td>19</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Jumlah</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
</tbody>
</table>
Based on table 1.4, it shows that 22 mothers who did IMD did not experience postpartum bleeding and 3 people who did not do IMD experienced postpartum hemorrhage.

a. Differences in Postpartum Bleeding Incidence Rates

The following is a table of differences in the incidence of postpartum hemorrhage.

<table>
<thead>
<tr>
<th></th>
<th>IMD</th>
<th>Tidak IMD</th>
<th>Hasil uji Mann Whitney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terjadi perdarahan</td>
<td>0</td>
<td>3</td>
<td>0,000</td>
</tr>
<tr>
<td>Tidak terjadi perdarahan</td>
<td>22</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

Relationship between Early Initiation of Breastfeeding and Bleeding Events
Postpartum at PMB Griya Mazaya

Based on table 1.5, it can be seen that respondents who underwent IMD did not experience postpartum bleeding and if IMD was not performed, 3 people experienced postpartum bleeding. The results of Mann Whitney data processing show a p value of 0.000, which means p value < sig (0.05) thus proving that there is a difference in the incidence of postpartum hemorrhage. Mothers who underwent IMD did not experience bleeding compared to mothers who did not undergo IMD.

Discussion

a. Respondent Characteristics

Based on table 1.2 of the age characteristics of respondents above, it is known that the majority of respondents who did not carry out IMD were over 35 years old, namely 12 people (27.3%). According to Sumarah at al (2018) from previous research, the age of mothers considered to be at risk for postpartum hemorrhage is ~20 years and 35 years. In this study, age did not influence the amount of postpartum bleeding because age does not directly determine whether a person will perform IMD, but it does influence a person's understanding. Younger people tend to be more active and receptive to new information, especially regarding family health, especially information about IMD.

b. Parity Characteristics of Respondents

Based on table 1.3 above, it is known that the majority of respondents in this study were multiparous, 23 mothers of whom 13 did IMD and 10 mothers did not do IMD. Multiparous parities are easier to initiate early breastfeeding because they have experience from previous births, most of the mother's milk has already come out, making it easier for the baby's instinct to move closer to the mother's breast compared to primigravida parities whose breast milk has not yet come out.

c. Characteristics of Postpartum Bleeding

After IMD was carried out. Based on table 1.4, it shows that 22 mothers who did IMD did not experience postpartum bleeding and 3 people who did not have IMD experienced bleeding. The results of bivariate analysis showed that IMD had a significant relationship with the amount of postpartum bleeding. The hypothesis that the average amount of postpartum bleeding in mothers who undergo IMD is less than the average amount of bleeding in mothers who do not undergo IMD can be accepted.

d. Differences in the Incidence of Postpartum Bleeding

Based on table 1.5, the majority of respondents who underwent IMD did not experience bleeding, 22 people. The results of Mann Whitney data processing show a p value of 0.000, which means p value < sig (0.05), thus proving that there is a difference in the incidence of postpartum hemorrhage. Mothers who underwent IMD experienced less bleeding than mothers who did not undergo IMD.

Relationship between Early Initiation of Breastfeeding and Bleeding Events
Postpartum at PMB Griya Mazaya

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Based on the results of research and discussion regarding the effect of early initiation of breastfeeding on the incidence of postpartum hemorrhage at the Griya Mazaya midwifery clinic with 44 respondents conducted in the group that underwent early initiation of breastfeeding and the group that did not undergo early initiation of breastfeeding, it can be concluded that:
1. The incidence of bleeding in the group that initiated early breastfeeding mostly did not experience postpartum bleeding.
2. The incidence of bleeding in the group that did not initiate early breastfeeding mostly experienced postpartum bleeding.
3. There is a difference in the incidence of bleeding in the groups who initiated early breastfeeding and those who did not initiate early breastfeeding.

Suggestion
1. For Educational Institutions
   It is hoped that it can be used as input to improve and develop the insight of educators and students regarding early initiation of breastfeeding.
2. For Health Services
   It is hoped that early initiation of breastfeeding can be implemented so that it can help minimize maternal deaths due to postpartum hemorrhage.
3. Divide the research location
   It is hoped that it can improve and maximize early breastfeeding initiation services for mothers in labor so that they can prevent postpartum bleeding.
4. For the Community
   It is hoped that we can play an active role in preventing postpartum hemorrhage in ourselves by initiating early breastfeeding and increasing insight into the benefits of childbirth by initiating early breastfeeding for mothers and babies.

DAFTAR REFERENSI

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