The Relationship of Parity and Malpresentation with The Incident of Premium Rapture of Amnitude among Later Women at The Cikupa District Tangerang Health Center

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Abstract
Premature rupture of membranes is one of the complications in pregnancy and childbirth that can result in morbidity and death both maternal and perinatal, the most common cause is due to infection, so that the amniotic membranes which are a barrier to the entry of germs are no longer there so that it can be dangerous for the mother and her fetus. The World Health Organization (WHO) in 2010, estimated that the maternal mortality rate was more than 300-400 per 100,000 live births, one of which was caused by 15% premature rupture of membranes, the incidence of premature rupture of membranes approaching 10% of all deliveries (Manuaba, 2010) . Methods: this study used a cross-sectional study design taken from medical record data (secondary), with a sample of 128 respondents and the analysis used was univariate and bivariate analysis. Results: Most of the pregnant women with primigravida p value 0.535 and pregnant women with mal presentation had p value 0.031 with premature rupture of membranes. In conclusion, there is a significant relationship between mal presentation and premature rupture of membranes and no significant relationship between parity and premature rupture of membranes.

Keywords: Premature Rupture of Membranes, Mal Presentation, Parity

Introduction
According to the World Health Organization (WHO) in 2010, estimates that maternal mortality is more than 300-400 per 100,000 live births, caused by bleeding 28%, premature rupture of membranes 15%, eclampsia 12%, abortion 13%, prolonged labor 18%, and other causes 2%. The maternal mortality rate in Indonesia is still the highest in ASEAN, namely 230/100,000 live births. This figure is still far from the target of the Millennium Development Goals (MDGs), which is only 102/100,000 births in 2015. The incidence of premature rupture of membranes approaches 10% of all...
deliveries. At gestational age less than 34 weeks, the incidence is around 4%. Some premature ruptures of membranes have a latent period of more than one week. The direct causes of maternal death in Indonesia are bleeding, eclampsia and infection. Approximately 15% of maternal deaths are caused by diseases that worsen due to pregnancy, for example heart disease and chronic infections. While the indirect causes of maternal death include anemia, chronic lack of energy and 4 T conditions, namely the age of mothers who give birth to babies mostly under 20 years, carry out the process of giving birth to more than 3 children, the deadline for giving birth to their children is too close, less than 2 years, and the age of the mother giving birth is more than 35 years.

Labor with premature rupture of membranes can usually be caused by multiparas or grandemultiparas, overdistention (hidramnion, multiple pregnancies), cephalopelvic disproportion, abnormalities in location (across and breech). Therefore, premature rupture of membranes requires close supervision and cooperation between the family and helpers (midwives and doctors) because it can cause the danger of intra-uterine infection that threatens the safety of the mother and her fetus. In this way, it will reduce or minimize the risk of death for the mother and baby.

Midwives are one of the health workers who have an important role in reducing MMR and IMR. It is hoped that midwives can improve the quality of maternal and child health services with their knowledge in a professional manner, namely implementing focused and directed care in accordance with the Five Threads of Midwifery Care, namely clinical decision making, caring for mothers and babies, infection prevention, records (medical records). delivery care, and an effective referral system.

Method

This type of research uses a cross-sectional design. The population in this study were 189 mothers who gave birth in February-May 2014. The sample is a portion of the population taken as an example of the entire object under study which is considered to represent the entire population. Determining the sample size is how many members of the sample are selected from the population. In this study, the sample size uses the formula (Notoatmodjo, 2005), so that a sample of 128 respondents.

The data source used in this study was secondary data, namely data obtained through medical records, then the data was processed with SPSS 17. Data analysis techniques in this study were carried out in stages including: univariate analysis to calculate the frequency distribution and bivariate analysis to see if there is a relationship between the dependent variable and the independent variable, using the Chi Square test.

The Chi Square test is a non-parametric statistical test to see the relationship between two nominal variables or between nominal and ordinal variables. In this study the Chi Square test was used to see the relationship between education and sources of information with the mother’s level of knowledge about post partum blues. From this test the results will be obtained: Ho is accepted or Ha is...
rejected if the p value > value α = 0.05, meaning that there is no significant relationship. And if Ho is rejected or Ha is accepted if the p value ≤ value α = 0.05, it means that there is a significant relationship.

**Results and Discussion**

The analysis was carried out to see the relationship between each independent variable and the dependent variable regarding the relationship between mal presentation and parity with the incidence of premature rupture of membranes (PROM) at the Cikupa Tangerang Health Center in the period February-May 2014, with a sample of 128 respondents.

Table-1 Relationship between Mal Presentation and Premature Rupture of Membranes at the Cikupa District Health Center, Tangerang, February-May 2021

<table>
<thead>
<tr>
<th>Presentation Mall</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>P - value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>16,7</td>
<td>105</td>
<td>83,3</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>18,0</td>
<td>105</td>
<td>82,0</td>
</tr>
</tbody>
</table>

- **OR 0.000**

Based on the table above, it was found that 100% of malpresented pregnant women had premature rupture of membranes. The results of the chi-square statistical test obtained a p-value of 0.031, which means < α value of 0.05, so it can be concluded that there is a relationship between malpresentation and premature rupture of membranes.

This research is in line with research conducted by Yuni in 2013 with the results of the chi square test obtained a p value of 0.02, this is in line with the theory of malpresentation, namely the lowest part of the fetus that is in the lower uterine segment, not the back of the head (Prawirohadjo, 2008), an abnormal location that causes premature rupture of the membranes due to pressure, uneven membrane in the amniotic sac, this can increase the risk of umbilical cord prolapse which can result in fetal death.

In the case of malpresentation when the membranes rupture immediately after the start of the contraction, because all the force of contraction is transmitted directly to the fluid in front of it, besides that in an abnormal location there is no lowest part covering the pelvic inlet so that it can block pressure on the lower membrane, this which causes premature rupture of membranes.

Table-2 Relationship between Parity and Premature Rupture of Membranes at the Cikupa District Health Center, Tangerang, February-May 2021

<table>
<thead>
<tr>
<th>Parity</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>P - value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Primi</td>
<td>9</td>
<td>20,9</td>
<td>34</td>
<td>79,1</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>100</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

The analysis was carried out to see the relationship between each independent variable and the dependent variable regarding the relationship between mal presentation and parity with the incidence of premature rupture of membranes (PROM) at the Cikupa Tangerang Health Center in the period February-May 2014, with a sample of 128 respondents.
Based on the table above, the results showed that in multiparous mothers who experienced premature rupture of membranes there were 14 people (16.5%) and primiparas as many as 9 people (20.9%), while multiparous mothers who did not experience premature rupture of membranes were 71 people (83.5%), while there were 34 primiparas who did not experience premature rupture of membranes (79.1%). The results of the chi square statistical test obtained a p-value of 0.535 which means > α 0.05, so it can be concluded that there is no relationship between parity and premature rupture of membranes at the Pasar Minggu District Health Center.

However, the results of this study are not in line with research conducted by Siti in 2012 at As'Sobirin Hospital, with the results of the chi square test obtained a p value of 0.036. In theory, the frequency of childbirth that is often experienced by mothers is a condition that can cause the endometrium to become deformed and some of it can eventually lead to complications in pregnancy (Varney, 2001), thus both parity one and parity have the same risk of premature rupture of membranes.

Another theory states that too frequent pregnancies (multipara, grandemultipara) will affect the process of embryogenesis so that the amniotic membranes formed will be thinner, causing the amniotic membranes to rupture before signs of in labor, but not always high parity experience premature rupture of membranes if the mother carry out routine and regular pregnancy checks.

Summary

The incidence of premature rupture of membranes in the period February-May 2014 out of 128 deliveries was 18% (23 people) of women who had KPD. The mal presentation variable shows a significant relationship, while the parity variable does not show a significant relationship.

References