The Influence of Age Factor on the Antepartum Haemorrhage Event in Cilacap Hospital Period of 2016-2018

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Abstract—The purpose of this study was to determine the effect of age on the incidence of antepartum hemorrhage in Cilacap District Hospital in the period of 2016 - 2018. The design of this study was descriptive analytic with the case control approach method. This research is a study using secondary data instruments in the form of maternal medical records with antepartum hemorrhage in Cilacap District Hospital. The population of this study was all antepartum mothers who experienced bleeding in the Cilacap Regional Hospital in the period of 2016 - 2018. The sampling technique in this study was total sampling. Total sample of 152 patients with antepartum bleeding. The statistical test used is Chi-Square. Results and Discussion: Based on the results of the analysis is there are significant influence of age factors on the incidence of antepartum hemorrhage with p value 0,001 < 0.05, with Odds Ratio: 2.098. Conclusion: The risk factor for age has a risk of 2.098 for the occurrence of antepartum hemorrhage is greater than the age without risk.

Keywords: antepartum bleeding, age

I. INTRODUCTION

Data from the ASEAN MDGs in 2017, Shows that in 2015 maternal mortality in Indonesia still reached 305 per 100,000, three times higher than Indonesia's MDG target, which is 102 per 100,000. This figure places Indonesia as the country with the second highest mortality rate in Southeast Asia after Laos with AKI 357 per 100,000 [5,6].

Healthy reproduction known as a safe age for pregnancy is a woman aged 20-35 years [9]. Maternal deaths in pregnant women and childbirth at age <20 years are in fact 2-5 times higher than maternal deaths that occur at the age of 20 - 35 years. Maternal deaths increase again after age 35 years [6].

Bleeding as the main cause of maternal death can occur during pregnancy, childbirth and the puerperium. The most direct causes of maternal death occur during labor and immediately after delivery, namely bleeding (28%), eclampsia (24%), infection (11%), puerperium complications 8%, parturition jams 5%, abortion 5%, abortion trauma 5%, embolism 3%, and others 11% [10,13].

Antepartum hemorrhage is vaginal bleeding that occurs at more than 24 weeks' gestation. Antepartum hemorrhage is one of the emergency conditions that need immediate treatment. WHO's definition of antepartum hemorrhage is vaginal bleeding after 29 weeks of pregnancy or more. Classification of causes of antepartum hemorrhage is a placenta previa, abutio placenta and antepartum hemorrhage whose source is not clear (idiopathic).

Bleeding can occur at any gestational age, in young pregnancies often associated with abortion, miscarriage, early pregnancy loss. Bleeding that occurs at an older gestational age, especially after passing through the third trimester is called antepartum bleeding. (12,15,16). There are several risk factors that affect antepartum bleeding. Pregnant women over 35 years old should be suspected of having antepartum bleeding. Based on data from Cilacap District Hospital 22 cases during 2018 of which 30.37% were caused due to bleeding.

II. MATERIAL AND METHOD

A. Procedure

The stages of this research can be divided into 3 stages, namely, the preparatory stage, the preparatory stage for implementation, and the final stage. The preparation phase consists of, a research survey of the research location, the preparation of a research proposal and the preparation of a research permit from an authorized institution. The implementation phase of the research includes, sorting medical records according to inclusion criteria in research, collecting data using existing instruments and processing and analyzing research data. Then the final stage of research is the writing of research reports and writing research articles.

B. Data Analysis

The design of this study was descriptive analytic with case control approach method aimed at the influence of age factors on the incidence of antepartum hemorrhage in Cilacap District Hospital. Population that is all antepartum who experience bleeding and do not experience bleeding as a control sample. The sample in this study is total sampling with inclusion criteria is a complete medical record, especially data about maternal age. The control group was pregnant women.
who did not experience bleeding with random sampling techniques. The statistical test used is Chi-Square.

Research subjects The study was all antepartum mothers who experienced bleeding in RSUD Cilacap. This study is a study using secondary data instruments in the form of maternal medical records with antepartum hemorrhage in Cilacap District Hospital. Researchers used the checklist sheet as a tool in facilitating the collection of data on the medical partner.

III. RESULTS

Effect of Maternal Age Factors on Antepartum Bleeding
Events is presented in the Table below.

TABLE 1: THE INFLUENCE OF MATERNAL AGE FACTORS ON ANTEPARTUM BLEEDING IN RSUD CILACAP PERIOD 2016 – 2018

<table>
<thead>
<tr>
<th>Age</th>
<th>No Bleeding (n=152)</th>
<th>Bleeding (n=152)</th>
<th>$X^2$</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No risk</td>
<td>f₀</td>
<td>%</td>
<td>f₁</td>
<td>%</td>
</tr>
<tr>
<td>b. Risk</td>
<td>63</td>
<td>41,4</td>
<td>116</td>
<td>76,3</td>
</tr>
</tbody>
</table>

IV. DISCUSSION

Based on the data in table 1. that most pregnant women who did not experience bleeding had a risk-free age of 89 (58.6%) and respondents who experienced bleeding mostly had a risky age of 116 (76.3%). Based on the results of the analysis with chi square, $p$ value 0.001 which means there is a significant influence of maternal age on the incidence of antepartum hemorrhage.

Healthy reproduction known as a safe age for pregnancy is a woman aged 20-35 years (Gerungan, et al, 2014). Maternal deaths in pregnant women and childbirth at <20 years or >35 years are 2-5 times higher than maternal deaths that occur at ages 20 - 35 years. Maternal mortality has increased again after age 35 years [12,15,16]. Straight (2005) states that advanced maternal age is a predisposing factor for placenta previa and placental solution. At the age of more than 30 years sclerosis often occurs in small arteries and myometrial arterioles in the uterine fundus, causing uneven blood flow to the endometrium. This can cause antepartum hemorrhage[20,21].

Table 2. shows that the age factor in the no-risk category is likely to not experience antepartum hemorrhage by 2.098 times higher than the age at risk. The effect was statistically significant ($p = 0.001$; OR: 2.098)

This study is consistent with Anasari's research [1] which conducted research on the determinants of the causes of antepartum hemorrhage as a cause of maternal death at the Prd Dr. Margono Soekarjo Purwokerto stated that mothers with age at risk were more likely to experience antepartum hemorrhage than those without age at risk. In his research Anasari stated that the age of the mother had a greater risk of 3.17 compared to the age of the mother who was not at risk. Antepartum hemorrhage is increased in women over 35 years of age. Mothers less than 20 years old have their reproductive organs immature and pelvic anatomy not yet ready for pregnancy [1,3].

V. CONCLUSION

The conclusion of this study is the maternal age factor influences the incidence of antepartum hemorrhage with a $p$ value of 0.000 and an Odd Ratio of 2.098. Which means that pregnant women at risk age (<20 years or >35 years) have a much greater risk of 2.098 for the incidence of antepartum hemorrhage compared to those who are not at risk (20 - 35 years).

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REFERENCES

[18] Sraningsih, 2011, Beberapa faktor determinan yang meningkatkan risiko terjadinya kematian ibu akibat perdarahan diPulau Lombok Provinsi NTB (study case control) PPS UDAYAN,Bali