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COMPLIANCE WITH ANTENATAL CARE WITH THE EVENT OF PREECLAMPSIA IN PREGNANT WOMEN IN GARUDA HEALTH CENTER, PEKANBARU CITY

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ABSTRACT

The World Health Organization (2021) estimates that every day, around 810 women die due to pregnancy and childbirth. Preeclampsia is the main cause of maternal and perinatal morbidity and mortality throughout the world, preeclampsia usually occurs after 20 weeks of pregnancy. According to the National Emergency Obstetric and Newborn Care in 2021, around 10% of all maternal deaths are caused by preeclampsia. The aim of this study was to analyze the relationship between compliance with ante-natal care and the incidence of preeclampsia in pregnant women at the Garuda Community Health Center, Pekanbaru City. The design of this study was an analytical study with a retrospective approach. The population of this study was pregnant women recorded in medical records in 2023 and the sample size for this study was 55 respondents with the sampling technique used was sequential sampling. The statistical test used in this research is chi-square. The results of statistical tests can be concluded that there is a relationship between compliance with ante-natal care and the incidence of preeclampsia with a P value of 0.001. Therefore, it is necessary to carry out health promotion regarding the importance of carrying out regular Ante-natal care visits, namely so that health workers can carry out early detection of symptoms of pre-eclampsia in mothers.

Keywords : Ante Natal Care Compliance, Pre-eclampsia

INTRODUCTION

Indonesia is a health problem and is one of the highest in Southeast Asia (Kepmenkes, 2021). Health development is an important consideration in improving the level of public health. One of the indicators of public health status is the maternal mortality rate (AKI) and the infant mortality rate (IMR) (Permenkes, 2021). The maternal mortality rate (AKI) is an important indicator for determining the health status of mothers in an area, especially with regard to the risk of death. pregnant and giving birth mothers (Maryunani, 2016).

Preeclampsia ranks second in the world as a contributor to morbidity and mortality among pregnant women, and can

increase the risk of fetal death by four times compared to normal pregnancy (Yunus, et al, 2021). According to the World Health Organization (WHO), every day 830 mothers in the world die from diseases or complications related to pregnancy and childbirth, as well as hypertension in pregnancy. More than 90% of maternal deaths are caused by complications during pregnancy. Complications tend to increase in pregnant women who have risk factors, although they can also occur in pregnant women who are not at risk.

Considering the high maternal mortality rate, the Indonesian Government through the Ministry of Health has made a policy to reduce the maternal mortality rate

which is realized through Making Practice Safer (MPS) activities as part of the Safe Motherhood Program, one of the MPS activities is providing antenatal care services. (ANC), carried out by health workers during pregnancy, as an effort to prevent early risk factors that occur during pregnancy (Ministry of the Republic of Indonesia, 2015)

One of the four pillars that the Indonesian government has in its efforts to detect early complications in pregnancy, especially complications in preeclampsia, is by conducting ante-natal care visits, namely a planned and comprehensive program in the form of observation, education and treatment for pregnant women. pregnant women to obtain a safe pregnancy and childbirth. Preeclampsia can be detected early by increasing ANC visits to health facilities. Prevention with early diagnosis can reduce incidence, morbidity and mortality. Health services for pregnant women through ANC visits must meet the minimum visit frequency, namely six times during pregnancy. This minimum visit standard is recommended to provide protection for the mother and fetus, in the form of early detection, risk factors, prevention and early management of pregnancy complications.

Compliance with pregnant women in carrying out ANC visits in Riau Province is still low in Indonesia, as can be seen in Figure 1.3 below, Riau is ranked third lowest (34.5%) after West Papua (32.2%) and East Kalimantan (27.5%) (%). In terms of pregnant women's compliance with ANC, the best province for pregnant women's compliance with ANC is DKI Jakarta province (98.9%). This is an important note for the Riau Provincial Government in its efforts to increase the compliance of pregnant women with ANC visits to monitor the development of a healthy and safe pregnancy, by carrying out early detection of dangerous signs of pregnancy to avoid pregnancy complications, and indirectly helping to reduce maternal mortality and baby

Compliance with ANC visits can detect signs of preeclampsia, so that preeclampsia complications do not need to occur. Unfortunately, there are still many pregnant women who are reluctant to make antenatal visits, especially since most pregnant women are not aware of the danger signs that can occur during pregnancy, one of which is preeclampsia. There are still many pregnant women who do not know the bad effects of preeclampsia. Fadilah (2018) stated that compliance with antenatal care visits influences early detection of preeclampsia. Pregnant women who regularly make antenatal visits can prevent possible dangers to their pregnancy as early as possible, while the most dominant risk factor associated with the occurrence of preeclampsia is the antenatal care examination carried out by pregnant women (Hayati, et al 2022).

RESEARCH METHODS

The research design in this study was an analytical study with a retrospective approach. In this study, we wanted to find out how ANC compliance is related to the incidence of preeclampsia. The population in this study were pregnant women registered at the Garuda Community Health Center in 2023 and the sample size in this study was 55 respondents using consecutive sampling techniques. This research uses secondary data from medical records at the Garuda Health Center. Researchers collected data from the Medical Records to obtain data about pregnant women with or without preeclampsia using a check list tool that had been prepared according to the variables to be measured. The statistical test used is the Chi Square or Kai Square test. The purpose of using the Chi Square test is to test differences in proportions/percentages between several groups of data.

RESULTS AND DISCUSSION

Table 1.
Frequency Distribution of Maternal Characteristics Based on Age and Parity, at Garuda Health Center in 2023

Characteristics	F	%
Age		
<20 Years	6	10.9
20-35Year	35	63.6
>35 Years	14	25.4
Parity		
Nulliparous	15	27.2
Primipara	19	34.5
Multiparous	9	16.3
Grandemultiparous	12	21.8
Pre-eclatement incident		
Yes	20	36.3
No	35	63.6
ANC Compliance		
Not obey	31	56.3
Obedient	24	43.6
Amount	55	100

Based on the table above, it states that of the 55 pregnant women, the majority of pregnant women are aged 20 – 35 years (63.6%) and the minority of pregnant women are aged <20 years (10.9%), based on maternal parity, the majority of pregnant women are in Primiparous parity (34.5%) and a minority in multiparous parity (16.3%), based on the incidence of preeclampsia, the majority of pregnant women do not have preeclampsia (63.6%), based on maternal compliance in carrying out ante natal care visits, the majority of pregnant women are not compliant in carrying out ante Christmas care (56.3%)

Table 2.
The Relationship between ANC Compliance and Preeclatement Incidents at the Garuda Community Health Center Year 2023

Obedien ce ANC	Preeclatement		No Preeclatement		P Value	OR	95 % CL OR Lower -Upper
	n	%	n	%			
No	16	29.0	11	20.0	0.001	3,59 8	1,636- 7,911
Obedient	4	7.8	24	43.6			
Total	20	27.3	35	72.7			

Based on the table above It can be seen that 39.0% of pregnant women who did not comply with ANC visits experienced preeclampsia, while 7.8% of those who

complied with ANC visits experienced preeclampsia. The statistical test results obtained a p value of 0.001, with a P value <0.05, meaning there is a significant relationship between ANC compliance and the incidence of preeclampsia. The results of the analysis obtained an OR of 3.5, meaning that pregnant women who do not comply with ANC visits have a 3.5 times risk of experiencing preeclampsia compared to mothers who comply with ANC visits.

Based on the research results in table 1, there are 6 mothers in the age group <20 years (10.9%), those aged 20-35 years are

35 people (63.6%) and in the age group > 35 years there were 14 people (25.4%). Pregnancy for women who are too young or too old is a situation that can pose a risk of pregnancy complications and maternal death. At the age of 20-35 years is a safe period for giving birth with the lowest risk of maternal morbidity and death (Sukesih, 2012). In the results of this study, of 55 mothers, 20 (36.3%) experienced this preeclampsia while 35 people (63.6%) did not experience preeclampsia. It can be seen that the majority of mothers' age group is in the non-risk age group, namely 20-35 years, namely 35 people (63.6%). Because in the 20-35 year age group, a woman is considered to have a mature reproductive system, which can reduce the incidence of complications during pregnancy and childbirth.

Based on the research results in table 1, there were 15 mothers (27.2%) nulliparous, 19 mothers (34.5%), primipara as many as 9 people (19.3%) and grand multiparous as many as 12 people (21.8%). Based on the research results, it shows that the majority of mothers have a parity that is at risk of preeclampsia, namely <2 children and >3 children. Parity is the number of children born to a mother both alive and dead. The unsafe parity of a mother for pregnancy and childbirth is in the first pregnancy and high parity (more than 3), parity 2-3 is the safest parity from

the point of view of maternal mortality (Saifuddin, 2010).

Based on the research results in table 2, it was found that there was a significant relationship between ANC compliance and the incidence of preeclampsia ($p=0.001$ and OR 3.598 CI 95% (1.636-7.911)).

Antenatal Care (ANC) is a health service provided by health workers to mothers during pregnancy and is carried out in accordance with midwifery service standards. Routine ANC services include a minimum of 6 visits in each trimester (at least 1 time in the first trimester, 2 times in the second trimester, and 3 times in the third trimester of pregnancy) done inspection 10T in the form of physical and mental examination of pregnant women, namely height and weight, measuring blood pressure, assessing nutritional status, measuring uterine fundus height, determining fetal presentation and heart rate, administering TT immunization, administering iron tablets (minimum 90 tablets) during pregnancy, laboratory tests (routine and special), case management and interviews or counseling (Ministry of Health of the Republic of Indonesia, 2018). The aim of this examination is to identify and control risk factors in pregnant women that can complicate the mother's birth later so that anticipation can be carried out as early as possible. The assessment of risk factors includes the risk of age, gestational spacing, number of children, minimum height, history of miscarriage, history of previous pregnancies, illnesses suffered, location of the baby and the most closely related to preeclampsia is examination of swelling on the face/legs and pressure. high blood pressure (Sudarti and Afroh Fauziah, 2013).

According to (Setyowati et al., 2018) antenatal care provided in accordance with Midwifery Care Standards greatly affects the condition of the mother and fetus, both during pregnancy, childbirth, and the postpartum period (0-42 days) and neonates (0-28 days). Risk factors can also be detected so that treatment and referrals can be carried out as early as possible. So, by carrying out regular ANC visits, you will be able to

identify the mother's risk factors as early as possible and prevent complications from occurring preeclampsia.

This is also in line with research by Isnanda et al., (2014) at Ulin Hospital Banjarmasin that there is a relationship between ANC services and the incidence of preeclampsia. ANC services can influence the incidence of preeclampsia because the ANC services provided to pregnant women are still not optimal. One of the ANC examinations that is considered important is the use of ultrasound in pregnancy examinations because it functions to determine the condition of the fetus more precisely, thereby reducing the level of risk to pregnant women.

Therefore, to increase public compliance in carrying out antenatal care visits, it is necessary to carry out health promotion about the importance of carrying out routine antenatal care visits, namely a minimum of 1 visit in the first trimester, 2 times in the second trimester and 3 times in the third trimester. So that by having regular antenatal care visits, health workers can carry out an assessment or diagnosis as early as possible regarding the presence of oreclampsia symptoms in the mother so as to reduce the risk of complications in pregnancy and childbirth in the mother.

CONCLUSION

1. Mother's characteristics based on age, the majority are in the 20-35 year age group, 35 people (63.6%)
2. Characteristics of mothers based on parity, the majority were nulliparous, 15 people (27.2%), 19 people primipara (34.5%), and 12 people multipara (21.8%).
3. The statistical test results obtained a p value of 0.001, with a p value <0.05 meaning there is a significant relationship between ANC compliance and the incidence of preeclampsia. The results of the analysis obtained an OR of 3.5, meaning that pregnant women who do not comply with ANC visits have a 3.5 times risk of

experiencing preeclampsia compared to mothers who comply with ANC visits.

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