

The Relationship of Pregnant Mother's Compliance with Antenatal Care with the Event of Preeclampsia in Tanjung Bingkung Puskesmas

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Abstract

Preeclampsia is an increase in blood pressure experienced by pregnant women, at gestational age above 20 weeks which is treated with routine antenatal visits, this research was conducted at the Tanjung Bingkung Health Center because there is a behavior of young mothers who are ashamed to admit their pregnancy. The purpose of this study was to determine the relationship between pregnant women's adherence to antenatal care with the incidence of preeclampsia at the Tanjung Bingkung Health Center. This research method includes obstetrics and gynecology, conducted at the Tanjung Bingkung Health Center from September to November 2020. The research design was correlation analytic and case control design. The research target population was 54 samples selected by simple random sampling. Data analysis using SPSS application. So the results of this study explain that the compliance of pregnant women in antenatal care is 67% seen from the age of the highest adherence at the age of 20-35 years (80%) and seen from the parity status the highest is multigravida (68%). The incidence of preeclampsia is 13%, judging by age, the highest incidence occurs at the age of 20-35 years (80%) and from multigravida pregnant women (70%). The relationship between adherence of pregnant women to antenatal care with the incidence of preeclampsia, found p value > 0.05 with the conclusion that there is no relationship between adherence of pregnant women to antenatal care with the incidence of preeclampsia.

Keywords

obedience of pregnant women;
antenatal care; incidence of
preeclampsia



I. Introduction

Maternal mortality rate (MMR) and perinatal mortality rate (AKP) are indicators that can reflect the health of a country, these two points can show how the quality of the country's health services. Pregnancy complications are the largest contributor to maternal mortality worldwide, according to WHO, around 75% to 80% of cases among 529,000 female deaths worldwide are caused by pregnancy complications. In Indonesia, the maternal mortality rate is still very high compared to other Southeast Asian countries. MMR in Indonesia from the 2007 Indonesian Demographic and Health Survey (IDHS) in the Health Profile of East Java Province (2011) was recorded at 228 per 100,000 live births, this figure has decreased when compared to the Maternal Mortality Rate (MMR) in 2002–2003, namely 307 per 100,000 live births. However, this figure is still the highest number compared to other countries in Southeast Asia (Akbar & Cahyanti, 2016).

As an effort to reduce MMR, the government through the Ministry of Health since 1990 has launched the safe motherhood initiative, a program that ensures all women receive the care they need so that they are safe and healthy during pregnancy and childbirth. This effort was followed by the program of the Mother's Love Movement in 1996 by the President of the Republic of Indonesia. This program involves other sectors outside of health. One of the main programs aimed at overcoming the problem of maternal mortality is the large-scale placement of midwives at the village level which aims to bring access to maternal and newborn health services closer to the community. Another effort that has also been made is the Making Pregnancy Safer strategy which was launched in 2000 (Faiqoh, 2014).

Preeclampsia syndrome is a clinical syndrome experienced by pregnant women, giving birth, and in the puerperium in the form of high blood pressure or hypertension, at gestational age above 20 weeks. Preeclampsia can progress to severe preeclampsia if not treated early, severe preeclampsia is characterized by organ damage in the body such as liver disorders, visual disturbances that can worsen the condition of pregnant women. Preeclampsia can be managed properly and has a good prognosis if pregnant women carry out routine antenatal care and visits.

Preeclampsia is also influenced by several other predisposing factors, including extreme maternal age during pregnancy (< 20 or > 35 years), multiple pregnancies, previous history of preeclampsia, first pregnancy and kidney disease, hypertension and pre-pregnancy diabetes mellitus. Preeclampsia can occur in all phases of pregnancy and often does not show symptoms in the early stages of the problem so that without realizing it in a short time it can cause severe preeclampsia and even eclampsia (Harahap & Fitriani, 2021).

To avoid disturbances in pregnancy, pregnant women are required to carry out a good and regular Antenatal Care (ANC) examination. Antenatal care is a prenatal care that has several objectives, namely monitoring the progress of pregnancy, ensuring the welfare of the mother and fetal growth and development, improving and maintaining the physical, mental, and social health of the mother and baby. Development is a change towards improvement (Shah et al, 2020). According to the standard of pregnancy care, Antenatal Care (ANC) visits are carried out at least 4 times, namely once in the first trimester (0-13 weeks of gestation), once in the second trimester (14-27 weeks of gestation), and twice in the third trimester. (28–40 weeks gestation).

Antenatal care or antenatal care is a health service for pregnant women in the form of routine obstetric checks, and handling of pregnant women until the time of birth. Antenatal quantity meets good standards if pregnant women check their pregnancy according to the recommended time in each trimester of pregnancy. Meanwhile, the quality of antenatal care is seen by the criteria for the number of visits by pregnant women to check their pregnancy in health services such as general practitioners, obstetricians, midwives, health centers, trained nurses, or have received actions that are in accordance with the standards of the Ministry of Health of the Republic of Indonesia. Preeclampsia is also associated with the adherence of pregnant women to their health care. Most of the mothers in the case group who experienced severe preeclampsia were 42 (85.7%) mothers who were not obedient in carrying out the advice given in the ANC and only 7 (14.29%) mothers who had severe preeclampsia were obedient. On the other hand, in the control group, almost all 47 (95.9%) mothers who did not have severe preeclampsia adhered to the ANC and only 2 (4.08) mothers did not. Preeclampsia can lead to complications in the mother, while the most severe complications are maternal and fetal death (Jannah, 2014).

Prevention or early diagnosis of preeclampsia in pregnant women is very important to reduce morbidity and mortality. To be able to establish an early diagnosis, regular monitoring of pregnancy is needed. One way that has been recommended by the health department is by regular and thorough antenatal examinations, because it can find early signs of preeclampsia so that appropriate treatment can be given immediately.

Several previous studies that discussed the topic of the relationship between pregnant women's adherence to ANC and the incidence of preeclampsia have been carried out previously in Indonesia, including the relationship between knowledge and ANC compliance with the incidence of preeclampsia in third trimester pregnant women. then in 2016 the Tadulako Health Journal Vol.2 No.1 with the title Factors Relating to the Incidence of Preeclampsia in Pregnant Women at the MCH Poly Hospital Anutapura Palu, which also discussed the relationship between antenatal care compliance with the incidence of preeclampsia, the results of the study stated that there was no there is a relationship between ANC examination and the incidence of preeclampsia (Mariyana & Purnami, 2017).

So based on the description of the background above, the researcher is interested in knowing the relationship between pregnant women's adherence to antenatal care with the incidence of preeclampsia at the Tanjung Bingkung Health Center, Solok Regency, this area still has bad habits and behavior of young mothers who are ashamed to admit their pregnancy so that they have cases of compliance and concern for pregnant women who are very high and risk their health safety.

II. Research Method

This research covers the medical field of obstetrics and gynecology, then this research was carried out at the Tanjung Bingkung Health Center. The time of the study was carried out from October to November 2020. The type of research used in this study was observational with a correlation analytic design and the research design used was case control using secondary data taken from the diary of pregnancy complications in the MCH (Mother Child Health) section and cohort book for recording antenatal visits. Research subjects will be analyzed and presented in tabular form. The target population of this study were pregnant women at the Tanjung Bingkung Health Center. This population includes pregnant women diagnosed with preeclampsia with high adherence to internal services and pregnant women diagnosed with preeclampsia with low adherence to internal services at the Tanjung Bingkung Public Health Center. The sampling method was selected using a simple random sampling technique. Data processing with SPSS and data processing is done by fisher test as an alternative to chi square test. In connection with conducting research on the subject, it is necessary to apply the principles of research ethics (Ethical Clearance) obtained from the permanent committee for the assessment of research ethics at the Baiturrahmah University Faculty of Medicine. Researchers will also keep the identity of each research subject confidential. The research costs are fully borne by the researchers (Ningsih, 2020).

III. Results and Discussion

3.1 Pregnant Mothers Compliance with Antenatal Care

The results of the study obtained that pregnant women's compliance with antenatal care at Tanjung Bingkung Health Center, can be displayed as follows:

Table 1. Compliance of pregnant women with antenatal care at Tanjung Bingkung Health Center

ANC Compliance	Frequency	Percentage
Obey	36	67%
not obey	18	33%
Total	54	100%

Based on table 1, it can be concluded that from 54 samples of pregnant women who comply with antenatal care are 36 people (67%) and pregnant women who do not comply with antenatal care services are 18 people (33%).

3.2 Incidence of Preeclampsia

The results of the study obtained that the incidence of preeclampsia at the Tanjung Bingkung Health Center in 2018–2019 can be displayed as follows:

Table 2. Incidence of Preeclampsia

Incidence of Preeclampsia	Frequency	Percentage
Preeclampsia	7	13%
No Preeclampsia	47	87%
Total	54	100%

Based on table 2 above, it can be concluded that of the 54 pregnant women who experienced preeclampsia as many as 7 people (13%), and pregnant women who did not experience preeclampsia were 47 people (87%).

3.3 The Relationship of Obedience of Pregnant Women with the Incidence of Preeclampsia

The results obtained from 54 samples taken from the Tanjung Bingkung Health Center, the relationship between pregnant women's adherence to antenatal care and the incidence of preeclampsia can be shown as follows:

Table 3. Relationship between pregnant women's adherence to antenatal care and the incidence of preeclampsia at the Tanjung Bingkung Health Center

		Pregnancy Complications				P
		Preeclampsia		Not Preeclampsia		
		n	%	N	%	
Maternity	Obey	3	43%	33	70%	0,205
Obedience	Not obey	4	57%	14	30%	
Total		7	100%	47	100%	

Based on table 3, it can be concluded that from 54 samples of pregnant women taken from the Tanjung Binkung Health Center, there were 3 obedient pregnant women who did antenatal care who had preeclampsia (43%) and 33 obedient pregnant women who did not experience preeclampsia (70. %). This data also shows that there are 4 pregnant women who do not comply with antenatal care who have preeclampsia (57%) and 14 people who do not have preeclampsia (30%).

The results of this study indicate that what affects the compliance of pregnant women who make antenatal visits partly with the last education background of high school and undergraduate. easier to receive information and will be more compliant to conduct antenatal visits (Sari, 2021).

In addition, the results of this study also show that most of the factors that influence pregnant women to make antenatal visits are housewives, this is because mothers who work as housewives have more free time to make antenatal visits where usually pregnant women who work or women Careers tend to have a narrow time compared to pregnant women who work as housewives.

Another thing that affects the high antenatal compliance of pregnant women in this study is the age of pregnant women, in this study most of them were in the range of 20 to 35 years. Pregnant women who are in productive age can think rationally compared to younger or older ages, and usually mothers of productive age have more motivation to check their pregnancy so they are more obedient to do the examination. Another factor that affects the antenatal compliance of pregnant women is gravidity. In this study, the highest adherence was in pregnant women who were multigravida compared to primigravida pregnant women. The results of this study were different from the theory regarding adherence to pregnant women based on gravidity, this was due to the small number of samples of primigravida pregnant women (Sumardiani, 2020).

Based on information obtained from health workers at the Tanjung Binkung Health Center, things that affect the high compliance of pregnant women in antenatal care are strategic research locations that facilitate the mobilization of pregnant women and adequate facilities in every jorong working area of the Tanjung Binkung Health Center.

3.4 Incidence of Preeclampsia

The incidence of preeclampsia in this study was found as many as 89% of pregnant women who did not experience preeclampsia. This indicates that only a few pregnant women who provide services at the Tanjung Binkung Health Center suffer from preeclampsia. The results of this study indicate that pregnant women who experience preeclampsia at the Tanjung Binkung Health Center are mostly at the age of 20 to 35 years, the results of this study are different from the theory regarding risk factors that cause preeclampsia where in theory the age at risk for experiencing preeclampsia is under 20 years old. and above 35 years, this shows that there is no effect of age on the incidence of preeclampsia. The results of this study are different from the theory regarding the age at risk of experiencing preeclampsia according to the researchers this is due to the number of age groups in the sample which are dominated by pregnant women aged 20 to 35 years (Tamba, 2013).

This study shows that pregnant women who experience preeclampsia are pregnant women who are multigravida or pregnant women who have more than one parity. who are pregnant for the first time, the results of this study are different, it is believed by researchers because of the low number of samples experiencing preeclampsia, so that the results of this study are different.

3.5 Relationship between Pregnant Women's Adherence to Antenatal Care and the Incidence of Preeclampsia

The results of this study were obtained from statistical tests, namely Fisher's test, with the unpaired categorical comparative hypothesis as an alternative to the chi square test. The results of this study found p value > 0.05 , it can be concluded that there is no relationship between pregnant women's adherence to antenatal care with the incidence of Preeclampsia. The results of this study are in accordance with the results of a study conducted by Situmorang (2016) entitled Factors Associated with the Incidence of Preeclampsia in Pregnant Women at the MCH Polyclinic, Anutapura Hospital Palu, which explained that there was no relationship between antenatal examinations and the incidence of preeclampsia (Wijayanti & Marfuah, 2019).

The results of this study are not in accordance with the results of a study conducted by Fitria (2018) entitled "Antenatal Care Compliance with the Incidence of Preeclampsia in Pregnant Women at the Kayon Health Center, Palangkaraya City" which states that there is a significant relationship between antenatal compliance and preeclampsia, the difference in the results of this study according to the researcher because of the different risk factors in the study that underlie the differences in the results of this study.

IV. Conclusion

Based on the results of research on the relationship of pregnant women's adherence to Antenatal Care with the incidence of Preeclampsia at the Tanjung Bungkung Health Center which has been carried out on 54 samples, it can be concluded that there is no relationship between pregnant women's adherence to Antenatal Care with the incidence of Preeclampsia.

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