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# The Relationship Between Knowledge About Antenatal Care And The Regularity Of Anc Visits At Pmb Dutha Muara Kelingi Sub-District Year 2024

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#### **ABSTRACT**

Intoduction: Based on the Indonesian Ministry of Health (2020), it is stated that, 'Services that must be provided during pregnancy include ANC at least 6 visits, which are detailed twice in Trimester I, once in Trimester II, and 3 times in Trimester III. At least 2 examinations are carried out by a doctor during the 1st visit in Trimester I and during the 5th visit in Trimester 3. The purpose of this study was to determine the relationship between knowledge about antenatal care and regularity of pregnancy examination visits at PMB Dutha Muara Kelingi District. The method used is analytical research design with a Cross Sectional approach, data collected by distributing questionnaires to 105 respondents using total random sampling technique. The results of the univariate test analysis that almost half of the respondents who were less knowledgeable were (69.5%), and irregular visits were (69.5%). The results of bivariate analysis there is a significant relationship between maternal knowledge about antenatal care (ANC) with the regularity of antenatal care visits (ANC) for pregnant women at PMB Dutha Muara Kelingi, where the p-value is 0.030 <0.05. The results of this study will add to the reference, and prove whether or not there is a relationship between maternal knowledge about antenatal care (ANC) with the regularity of antenatal care visits (ANC) for pregnant women at PMB Dutha Muara Kelingi.

## INTRODUCTION

Antenatal Care (ANC) is any activity or series of activities carried out from the time of conception until before the start of the labor process which is given to all pregnant women. According to the World Health Organization (WHO), antenatal care (ANC) aims to detect early high-risk pregnancy and childbirth and can also reduce maternal mortality and monitor the condition of the fetus (Musfufatun & Cempaka, 2019). Based on the Indonesian Ministry of Health (2020), it is stated that, "Services that must be provided during pregnancy include ANC at least 6 visits, namely 2 times in Trimester I, once in Trimester II, and 3 times in Trimester III. At least 2 examinations are carried out by a doctor during visit 1 in Trimester I and during visit 5 in Trimester 3". In 2021 in Indonesia, the coverage of antenatal visits increased compared to 2020, which was 79.36% of the target of 80%, an increase of 88.13% from the target of 85%, which had been achieved at 87.1% (Ministry of Health 2022). In Indonesia in 2021, antenatal care (ANC) visits for pregnant women totaled 5,221,784. With K1 coverage of 4,873,441 (93.3%) and K4 coverage of 4,419,319 (84.6%). Since 2007 to 2021, the coverage of K4 pregnant women's health services has tended to increase. However, a decrease occurred in 2022 compared to 2021, namely from 88.54% to 84.6%. (Indonesian Health Profile, 2022). ANC coverage in South Sumatra in 2023, the target of 100% was achieved, namely 87.1%. In 2023, the coverage of visits by pregnant women K4 in Muara Kelingi District reached 90.2%. Several factors are the reasons for not achieving the target, such as encouraging pregnant women to monitor their pregnancies at existing health care facilities and encouraging support from medical personnel to improve ANC facilities and service quality. (Dinkes 2023) This indicator can reveal access to health services and the compliance of pregnant women to undergo pregnancy checks to health facilities. Based on the South Sumatra Health Profile (2023), the achievement of K1 coverage in South Sumatra Province in 2022 was 94.1% (7,107 people), a decrease of 4.4% compared to 2023 where K1 coverage reached 98.5% (7,413 people) and the achievement of K4 coverage in South Sumatra Province in 2023 was 83.1%, the achievement of K4 in 2022 also decreased by 0.8% compared to 2023 where the achievement was 83.9% (6,310 people).

The gap between K1 and K4 coverage shows the dropout rate from K1 to K4, thus illustrating that the regularity of Antenatal Care (ANC) visits is still not in accordance with standards (South Sumatra Health Office, 2023). The health services for pregnant women provided must meet the types of services, namely: 1) Weighing and measuring height. 2) Measuring blood pressure. 3) Measuring the Upper Arm Circumference (LILA). 4) Measurement of the height of the top of the uterus (fundus uteri). 5) Determination of tetanus immunization status and administration of tetanus immunization according to immunization status. 6) Provision of at least 90 iron tablets during pregnancy. 7)

Determination of fetal presentation and fetal heart rate (FHR). 8) Implementation of a talk show (provision of interpersonal communication and counseling, including postpartum family planning). 9) Simple laboratory test services, at least blood hemoglobin (Hb) tests, urine protein examinations and blood type examinations (if never done before). 10) Case management according to indications (Ministry of Health of the Republic of Indonesia, 2020). The impacts that occur if the mother does not undergo an ANC examination are: Early pregnancy hazards are not detected, Anemia during pregnancy which can cause bleeding is not detected., Pelvic deformities, spinal abnormalities or multiple pregnancies which can cause difficulty in normal delivery are not detected. Complications or comorbidities during pregnancy such as chronic diseases, namely heart disease, lung disease and genetic diseases such as diabetes, hypertension, or congenital defects, preeclampsia cannot be detected (Ministry of Health, 2022).

Factors that prevent mothers from not undergoing an ANC examination are: Predisposing factors which are manifested in knowledge, attitudes, beliefs, beliefs, values, and so on Supporting factors (enabling factors) which are manifested in the physical environment, such as health service facilities or facilities Encouraging factors (renforcing factors) which are manifested in supportive attitudes and behavior from the family, health workers. this is in line with research conducted by Aprilia, et al. (2020) stated that the lack of knowledge of pregnant women about antenatal care (ANC) makes the frequency of antenatal care (ANC) visits not in accordance with standards, even though the benefits of antenatal for pregnant women are very beneficial. ANC is important to monitor the growth and development of the fetus and the health condition of the mother. Pregnant women must comply with ANC examinations so that the pregnancy goes well. The main factor that influences pregnant women's ANC visits to carry out ANC is the knowledge factor Aprilia, et al. (2020)

### **RESEARCH METHODS**

### **Univariate Analysis**

The data analysis that can be done is univariate data analysis which is done to obtain a picture of the frequency distribution of each research variable, both independent variables and dependent variables using the percentage formula

$$P = \frac{F}{n}X \ 100$$

### **Bivariate Analysis**

Bivariate analysis is an analysis that connects two variables, namely the Independent Variable (Knowledge of pregnant women about antenatal care / ANC) and the Dependent Variable (Regularity of Antenatal Care (ANC) visits) using the Chi-Square statistical test  $(X^2)$  with a confidence level of 95% (p = 0.05).

# **RESULTS**

From 105 respondents studied at PMB Dutha Muara Kelingi, a frequency distribution of respondent characteristics was obtained based on population demographics consisting of:

Table 1 Frequency Distribution of Pregnant Women's Characteristics Based on Knowledge and Regularity of Visits

Variabel	N Free	N Frequency %			
knowledge					
good	38	36,2			
Not enough	67	63,8			
Jumlah	105	100			
regularity					
regular	32	30,5			
Irregular	73	69,5			
Jumlah	105	100			

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Table 1 shows that out of 105 respondents, the majority of respondents had insufficient knowledge, namely (63.8%) regarding antenatal care (ANC), and almost the majority of respondents whose visits were irregular, namely (69.5%) did not make antenatal care (ANC) visits regularly. Bivariate analysis was conducted to determine the relationship between age, education, occupation, knowledge, and regularity of antenatal care (ANC) visits of pregnant women at PMB Dutha Muara Kelingi using the chi-square statistical test that the sig. value <0.05.

Table 2 Relationship between Knowledge and Regularity of Antenatal Care (ANC) Visits of Pregnant Women

, and the second se	N	%	N	%	N	%			
knowledge									2,806
good	17	44,7	21	55,3	38		100	0,030	(1,188-
Not enough	15	22,4	52	77,6	67	100	6,629)		

Results Table 2 Based on the table above, it can be seen that of the 67 respondents with less knowledge, most of them were irregular in making antenatal care (ANC) visits, namely (77.6%). The results of the chi-square statistical test showed a p-value of 0.030 <0.05, meaning that there is a significant relationship between maternal knowledge about antenatal care (ANC) and the regularity of antenatal care (ANC) visits of pregnant women at PMB Dutha Muara Kelingi. This means that pregnant women who have less knowledge are 2.806 times more at risk of making irregular antenatal care (ANC) visits compared to mothers with good knowledge.

### DISCUSSION

# **Univariate Analysis**

1. Characteristics of Knowledge, Age, Education, Occupation, and Regularity of Antenatal Care (ANC) Visits of Pregnant Women at PMB Dutha Muara Kelingi

Based on univariate analysis, the results of 105 pregnant women showed that most of the respondents had poor knowledge, 67 (63.8%) with 52 respondents (77.6%) who did not make regular visits and 15 respondents (22.4%) regularly made antenatal care (ANC) visits. Meanwhile, almost half of the respondents had good knowledge about antenatal care (ANC), namely 38 (36.2%), with 21 (55.3%) respondents who were irregular and 17 (44.7%) respondents who regularly made antenatal care (ANC) visits.

This is in line with the results of observations from Maria, et al. (2019) which stated that the less knowledge pregnant women have about antenatal care, the fewer mothers carry out pregnancy visits and vice versa, the better the knowledge pregnant women have about antenatal care, the better the mothers carry out pregnancy visits. Based on research conducted by Ahmalia (2019) at the Lubuk Alung Health Center, which showed that only 43.1% or 22 respondents out of 51 respondents had good knowledge.

Mamalanggo's research (2019) at the Ranotana Weru Health Center, Manado City showed that mothers who had good knowledge were 59.3% and in. Toar's research (2020) found that 60.5% of pregnant women had good knowledge, so the results of this study showed that the percentage of pregnant women with good knowledge was lower than the percentage of the two studies. The researcher assumes that the difference in research results regarding the knowledge of pregnant women in the third trimester about ANC visits in this study with other studies is due to differences in respondent characteristics, research location and research time. Knowledge is the result of human sensing, or the result of someone knowing an object through their senses (eyes, nose, ears, and so on) (Notoadmodjo, 2018).

According to Soekanto (2018) knowledge is an impression in the human mind as a result of using their five senses, which is very different from beliefs, superstitions and incorrect explanations. The results of this study also found that most of the respondents were aged 20-35 years as many as 94 (89.5%), most of the respondents with high school-college education as many as 81 (77.1%), and most of the respondents who were unemployed as many as 66 (62.9%). This is in line with the research of Regina, et al. (2020) that the majority of ages are 20-35 years old, the dominant education is high school-college and the most jobs are unemployed.

The results of this study are also in line with the research of Aprilia, et al. (2020) who stated that there was no significant relationship between age and occupational characteristics with the regularity of antenatal care (ANC) visits. Meanwhile, occupational characteristics are in line with research by Darmiati, et al. (2019) that there is no relationship between occupation and the regularity of antenatal care (ANC) visits.

# **Bivariate Analysis**

1. Relationship between Knowledge about Antenatal Care (ANC) and the Regularity of Antenatal Care (ANC) Visits for Pregnant Women

Based on the results of the study, it was found that most mothers had poor knowledge and did not regularly visit antenatal care (ANC) by 77.6%. From these data, the researcher assumes that the lower the level of knowledge of the mother, the greater the chance that the mother would not regularly visit antenatal care (ANC).

The results of the bivariate analysis obtained a p value (0.030) <0.05, which means that there is a significant relationship between knowledge about antenatal care (ANC) and the regularity of antenatal care (ANC) visits for pregnant women at PMB Duta Muara Kelingi. This study is in line with Ni Ketut Citrawati & I Gusti (2021) who stated that the p value was obtained at 0.00, which means <0.01, so statistically there is a significant relationship between the level of knowledge about antenatal care and antenatal care visits.

This study is also in accordance with the study conducted by (Anggraini, 2019) The results of the study using the chi-square test were p  $<\alpha$ , p = 0.011  $\alpha$  = 0.05. Ha is accepted, there is a relationship between knowledge of antenatal care and the regularity of visits by pregnant women. Knowledge is one indicator in carrying out an action. The higher the knowledge of pregnant women about antenatal care, the higher the level of regularity of antenatal care visits.

The results of the study conducted by (Dwi 2020) which explained that there is an influence between maternal education and the standard of antenatal care visits. Pregnant women with a high level of education generally (Ramadhaniati 2019). Pregnant women with high education usually have a role in the quality of baby care. Mothers with mastered knowledge are closely related to the educational status they have taken. The results of the study showed that there was a significant relationship between education and ANC visits in pregnant women at the Citra Medika Health Center. This means that the higher the level of maternal education, the higher the individual's compliance with ANC visits.

The high level of education of pregnant women can trigger rational actions, thus facilitating the acceptance of information related to ANC. Thus, pregnant women who have a high level of education are facilitated in receiving information and are willing to carry out continuous ANC visits (Notoatmodjo 2018). Knowledge is a domain that is so essential in the formation of individual actions where in this regard, pregnant women can undergo routine pregnancy check-ups if the mother understands the benefits of ANC services during the pregnancy she is experiencing (Mahmud et al. 2021). The success of ANC can be influenced by the knowledge of pregnant women regarding ANC on the behavior of ANC visits. Knowledge is a behavioral change factor, namely predisposing factors (predisposing factors).

Good knowledge can be a determinant of good actions. Health workers have a role, especially midwives, namely carrying out independent tasks, collaboration and dependent tasks. As a manager, namely developing basic health services and being involved in the team. As an educator, namely educating and providing health education for patients and providing training and guidance to cadres and the role as a researcher or investigator. Midwives have an obligation to implement these regulations based on the competency standards and authority of midwives (Permenkes 2014). Midwives are highly expected to change the behavior of pregnant women when carrying out ANC visits, so that mothers can know the condition of their pregnancy and a healthy fetus in the womb (Marice 2021).

Research conducted by Galuh (2020) which states that there is no significant relationship between knowledge and the regularity of mothers carrying out ANC visits. The behavior shown is in line with expectations because good education does not always guarantee regularity in carrying out ANC checks based on applicable standards. Behavior based on knowledge is easier to remember than behavior without a knowledge base (Padila 2019). Researchers assume that the minimal knowledge of pregnant women regarding the benefits of ANC checks is due to their relatively young age and low level of education. This has an impact on the decline in mothers' interest in visiting health facilities for pregnancy checks.



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The cause is that mothers do not yet understand the benefits and positive impacts of ANC for mothers and their fetuses. The completeness of ANC visits is still low, such as the number of visits that does not comply with WHO recommendations, completeness of data in books, and completeness of the types of examinations carried out. This may be because there are still respondents who do not understand the standards for ANC visits based on Government policy, which has stipulated at least 6 checks, where the details are 2x in Trimester 1, 1x in Trimester 2, and 3x in Trimester 3 (Rizki 2019).

### CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study and discussion on the relationship between knowledge about antenatal care (ANC) and the regularity of antenatal care (ANC) visits at PMB Duta Muara Kelingi, the following conclusions can be drawn:

- 1. Almost all mothers have insufficient knowledge, most mothers are aged 20-35 years, most are highly educated, almost all mothers do not work and almost all mothers do not regularly visit antenatal care (ANC) at PMB Duta Muara Kelingi
- 2. The frequency of maternal knowledge about antenatal care (ANC) from 67 respondents with insufficient knowledge, most of whom are irregular in visiting antenatal care (ANC)
- 3. There is a Relationship between Knowledge About Antenatal Care and the Regularity of Pregnancy Check-up Visits at PMB Dutha, Muara Keling District. The results of the chi-square statistical test showed a p-value of 0.030 <0.05, meaning that there is a significant relationship between maternal knowledge about antenatal care (ANC) and the regularity of antenatal care (ANC) visits for Pregnant Women at PMB Dutha Muara Kelingi

### Recommendations

### 1. Theoretical

The results of this study will add references, and prove whether or not there is a relationship between maternal knowledge about antenatal care (ANC) and the regularity of antenatal care (ANC) visits for pregnant women at PMB Dutha Muara Kelingi. In addition, the results of this study can increase students' knowledge

### 2. Practical

- a. For Respondents, The results of this study can be used as additional knowledge for pregnant women about antenatal care (ANC) visits during the pandemic through intervention efforts for the results obtained. So that mothers can make antenatal care (ANC) visits regularly.
- b. For Educational Institutions, As input or reference for midwifery students fikes dehasen or as input material for data sources for further research and encourage interested parties to conduct further research on the Relationship between Antenatal Care (ANC) Knowledge and Antenatal Care (ANC) Regularity in Pregnant Women

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