Relationship Between Pregnant Women's Knowledge and Antenatal Care Visits For Pregnant Women in the Work Area of Popayato Barat Public Health Center, Pohuwato District, Gorontalo Province

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ABSTRACT

The Maternal Mortality Rate (MMR) in Indonesia is still one of the highest in Southeast Asia, indicating inequality in access to health services. Antenatal Care (ANC) visits are an important indicator in reducing MMR, but the coverage of ANC visits in several areas, including Pohuwato Regency, Gorontalo Province, is still far from the target. This study aims to identify and analyze factors related to Antenatal Care visits in the Working Area of the Popayato Barat Health Center UPTD, Pohuwato Regency, Gorontalo Province. This type of research is an analytical survey study using a cross-sectional design. This study involved the population of all pregnant women in the Popayato Barat Health Center working area, which was recorded as many as 66 people. Sampling used the Non-Probability Sampling method with the Purposive Sampling technique. This technique was chosen based on certain considerations according to the research criteria. The sample was determined using the Yamane formula and a sample size of 57 respondents was obtained. The variables analyzed included knowledge, family support, health worker support, distance to health facilities, and ANC visits. Data were collected through questionnaires and analyzed using the Chi-Square test. The results showed a significant relationship between knowledge of pregnant women ($p<0.05$), family support ($p<0.05$), and support from health workers ($p<0.05$) with ANC visits. In contrast, the distance to health facilities did not show a significant relationship. The low coverage of ANC visits was also influenced by transportation constraints, lack of support from health workers, and limited knowledge of pregnant women regarding the importance of ANC. This study concluded that increasing knowledge, family support, and the active role of health workers are very important to increase ANC visits so that they can contribute to reducing MMR in Pohuwato Regency.

1. INTRODUCTION

Maternal mortality remains a challenge in global health and is the main focus of the Sustainable Development Goals (SDGs) to reduce the global Maternal Mortality Rate (MMR) to less than 70 maternal deaths per 100,000 live births by 2030, with no country exceeding 140. However, progress has stalled in many countries, and currently the trend of maternal health targets in the Sustainable Development Goals (SDGs) has not been met (WHO, 2023 and Ward et al, 2023). Meanwhile, the Maternal Mortality Rate in Indonesia is the third highest in Southeast Asian countries (Ministry of Health of the Republic of Indonesia, 2023). One indicator of the success of a country's health sector development is the Maternal Mortality Rate (MMR). The high Maternal Mortality Rate (MMR) in several regions of the world shows inequality in access to quality health services, and differences can be seen in low- and lower-middle-income countries. Indonesia is one of the developing countries with the highest maternal mortality rate. As a result, this has become one of the main issues prioritized by the Indonesian government when making health policies (Senci et al., 2024).

Efforts to accelerate the reduction of the Maternal Mortality Rate (MMR) are carried out by ensuring that every mother accesses quality health services. One of the health services is health services for pregnant women or Antenatal Care (ANC) visits. Antenatal Care (ANC) is a pregnancy health service received by mothers during pregnancy and is provided by health workers, including doctors (general practitioners and/or obstetricians), midwives, and nurses. The purpose of Antenatal Care (ANC) is to monitor fetal development, detect health problems early on, and provide education to pregnant women about health and childbirth (Ministry of Health of the Republic of Indonesia, 2023).

The target of the National Medium-Term Development Plan (RPJMN) 2020-2024, is that the indicators related to the Directorate of Nutrition and Maternal and Child Health of the Ministry of Health of the Republic of Indonesia have a target of Pregnant Women getting pregnancy checks or Antenatal Care visits 6 times (ANC 6x) in 2022, namely 60%, in 2023 namely 80%, and in 2024 namely 100%.

Globally, the World Health Organization (WHO) stated that from 2007-2014, only 64% of pregnant women did what was recommended by WHO which is called Focused Antenatal Care (FANC). Each visit is designed to provide important interventions at the right time during pregnancy. Model. This shows that there is still much to be done to improve the utilization and quality of Antenatal Care (WHO, 2016). Nationally, based on the 2022 Indonesian Health Profile, the Coverage of Maternity Health Services K6 in Indonesia has reached the target of the 2020–2024 National Medium-Term Development Plan (RPJMN), which is 70.9%. However, based on the 2023 Indonesian Health Survey (SKI), the proportion of pregnancy checks or Antenatal Care K6 did not reach the target of the 2020–2024 National Medium-Term Development Plan (RPJMN), which is 17.6%.

Gorontalo Province in 2022 based on data from the Indonesian Health Profile, the coverage of Maternity Health Services K6 almost reached the target of the 2020–2024 National Medium-Term Development Plan (RPJMN), which is 57.5%. However, based on the 2023 Indonesian Health Survey (SKI), the proportion of pregnancy checks or Antenatal Care K6 did not reach the target of the 2020–2024 National Medium-Term Development Plan (RPJMN) or decreased by 20.6%. Pohuwato Regency in 2023 is the regency with the lowest Antenatal Care visit achievement among the regencies or cities in Gorontalo province with the number of pregnant women being 3,744 with K1 achievement of 77.4% (2,688 pregnant women) and K4 achievement of 46% (1,597 pregnant women). Pohuwato Regency (2024) has the lowest Antenatal Care achievement at the Popayato Barat Health Center with the number of pregnant women being 108 with K1 achievement of 37.4% (34 pregnant women) and K4 achievement of 13.7%. The second lowest is at the Wonggarasi I Health Center with 82 pregnant women with K1 achievement of 37.5% (18 pregnant women) and K4 achievement of 13.4%.

The increase in prevalence is the impact of the lack of pregnancy checks or Antenatal Care will be at risk of experiencing pregnancy complications (preeclampsia, gestational diabetes, bleeding or problems with the placenta), maternal and fetal death, undetected mental health problems of pregnant women that affect prenatal care, the occurrence of undetected urinary tract infections that can have serious impacts, suboptimal fetal growth resulting in the birth of babies with low birth weight. This is caused by the lack of monitoring of complications, nutrition, and health of the mother and fetus during pregnancy until delivery, which disrupts fetal growth and causes babies to be born with low birth weight (Ministry of Health of the Republic of Indonesia.

2. METHOD

This type of research is an analytical survey research using a cross-sectional design, which intends to see the strength of the relationship between knowledge, family support, health worker support, and the distance of health facilities with Antenatal Care (ANC) visits. This research method is carried out by observing without providing intervention or treatment to the research subjects and the measurement of independent variables and measurement of dependent variables are carried out simultaneously. The inclusion and exclusion criteria of pregnant women who are willing to be respondents, pregnant women who have a KIA book and there is clear documentation

of Antenatal Care visit data, and mothers who can read and write. The exclusion criteria include: Pregnant women who have mental disorders, and pregnant women who experience labor during the study.

3. RESULTS AND DISCUSSION

From all the respondents, a description of their characteristics is obtained in the following table:

Table 1. Distribution of Respondent Characteristics by Age

Age	n	%
< 21 Years	14	24.6
21-34 Years	34	59.6
> 34 Years	9	15.8
Total	**57**	**100**

Source: Primary Data 2024

Based on table 1, it is found that the majority of respondents are between 21-34 years old (early adulthood) totaling 34 respondents (59.6%). The age classification above is categorized according to the Indonesian Ministry of Health (2008).

Table 2. Distribution of Respondent Characteristics Based on Education

Education	n	%
Elementary School	21	36.8
Junior High School	13	22.8
Senior High School	21	36.8
S1	2	3.6
Total	**57**	**100**

Source: Primary Data 2024

Based on table 2, it is found that the last education of the respondents was mostly at the elementary and high school levels with a total of 21 respondents (36.8%).

Table 3. Distribution of Respondent Characteristics Based on Occupation

Occupation	n	%
Teacher	1	1.8
Housewife	54	94.6
PNS	1	1.8
Self-employed	1	1.8
Total	57	100

Source: Primary Data 2024

Based on table 3, it was found that the majority of respondents' jobs were as housewives, with a total of 54 people (94.7%).

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Based on the research results, the following univariate analysis results were obtained:

Table 4. Distribution of Respondents Based on Knowledge

Knowledge	n	%
Good	12	21.0
Enough	23	40.4

Less	22	38.6
Total	**57**	**100**

Source: Primary Data 2024

Based on table 4, it is known that 22 respondents or 38.6% of pregnant women have insufficient knowledge about ANC services, 23 respondents or 40.4% have sufficient knowledge, and 12 respondents or 21% have good knowledge.

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Relationship between Knowledge and Antenatal Care (ANC) Visits in Pregnant Women in the Working Area of UPTD Popayato Barat Health Center, Pohuwato Regency, Gorontalo Province.

Table 5. Relationship between Knowledge and Antenatal Care (ANC) Visits in Pregnant Women in the Working Area of UPTD Popayato Barat Health Center, Pohuwato Regency, Gorontalo Province

Knowledge	Antenatal Care (ANC) Visits				Total		*p-value*
	Less		Enough				
	n	%	n	%	n	%	
Good	0	0.0	12	100	12	100	
Enough	22	95.7	1	4.3	23	100	0.000
Less	20	90.9	2	9.1	22	100	
Jumlah	**42**	**73.7**	**15**	**26.3**	**57**	**100**	

Source: Primary Data 2024

Based on Table 5, it shows that out of 22 respondents who have insufficient knowledge, those who do not make ANC visits are 20 respondents (90.0%) and those who are sufficient are 7 respondents (9.1%). Meanwhile, out of 23 respondents who have sufficient knowledge, those who do not make ANC visits are 22 respondents (95.7%) and those who are sufficient are 1 respondent (4.3%). Meanwhile, out of 12 respondents who have good knowledge overall (100%) it is sufficient to make ANC visits. Based on the analysis using the Fisher Exact Test, it shows that the P-Value = 0.000 (P-Value <0.05), then H0 is rejected, meaning that there is a relationship between knowledge and ANC visits in the working area of the UPTD Popayato Barat Health Center.

4. DISCUSSION

Relationship of Knowledge with Antenatal Care (ANC) Visits in Pregnant Women in the Working Area of the Popayato Barat Health Center Technical Implementation Unit, Pohuwato Regency, Gorontalo Province. Based on the results of a study conducted in the Popayato Barat Health Center working area, showed that out of 22 respondents who had insufficient knowledge, 20 respondents (90.0%) did not make ANC visits and 2 respondents (9.1%) were sufficient.

Of the 22 respondents who had insufficient knowledge, they were housewives. According to the explanation of the 20 respondents who did not make ANC visits, their status as housewives made it very difficult to schedule ANC visits because they were busy taking care of household chores such as washing, cooking, sweeping, etc. This explains that out of 20 respondents who had jobs as housewives, there was a relationship with the lack of ANC visits. According to Palancoi, et al. 2018, mothers who have jobs are usually more obedient in doing ANC compared to mothers who do not work. This is because, for mothers who have jobs, these mothers will have the funds to reach and carry out ANC examinations. Meanwhile, mothers who do not work tend not to have the funds to access health facilities. In addition, by working, a pregnant woman will get more advice and information related to pregnancy health so that she can be more motivated to do ANC checks.

Based on Table 9, there are 2 respondents who have less knowledge but make enough ANC visits. According to the explanation of the 2 respondents, they are pregnant with their fourth child

(Multigravida) and are the same age, namely 35 years. This makes the 2 respondents have experience in making ANC visits. Sugiyati, et al. 2023 concluded that most multigravida are obedient in carrying out pregnancy checks. Meanwhile, of the 23 respondents who have sufficient knowledge, 22 respondents (95.7%) have less ANC visits. Of the 22 respondents, they have the same job characteristics, namely as housewives. According to the explanation of the 22 respondents who have fewer ANC visits, their status as housewives makes it very difficult to schedule ANC visits because they are busy taking care of housework such as washing, cooking, sweeping, etc. This explains that out of 20 respondents who work as housewives, there is a relationship between the lack of ANC visits. According to Maryam 2023, it shows that mothers who do not work are 1.71 times more likely to be irregular in making ANC visits than mothers who work.

Of the 23 respondents who have sufficient knowledge, 1(4.3%) respondents have sufficient ANC visits. This is because the respondent has a Bachelor's degree (S1) and has a job as an entrepreneur. Due to their qualified education and work, the respondent said the importance of ANC visits for pregnant women and has sufficient funds to make ANC visits. Mothers who have jobs are usually more obedient in doing ANC compared to mothers who do not work. This is because in mothers who have jobs, the mother will have the funds to reach and carry out ANC examinations. According to Palancoi, et al. 2018, mothers who have jobs are usually more obedient in doing ANC compared to mothers who do not work. This is because in mothers who have jobs, the mother will have the funds to reach and carry out ANC examinations. Meanwhile, of the 12 respondents who had good knowledge overall (100%) it was sufficient to make ANC visits. Of the 12 respondents, 8 respondents had a high school education, 1 respondent had a junior high school education and 3 respondents had an elementary school education.

According to the researcher's assumption, respondents who had good knowledge and were sufficient to make ANC visits because most of them had a high school education. According to Inayah 2018, it was concluded that there was a relationship between education and the regularity of ANC visits in pregnant women in the third trimester at the Gamping I Sleman Health Center. In this study, it was found that pregnant women who had a high school education, namely 70.6%, were regular in making ANC visits. According to Green and Kreuter's theory in the Health Belief Model and PRECEDE-PROCEED Framework, knowledge is one of the predisposing factors that influences health behavior. Good knowledge allows individuals to understand the importance of certain health behaviors, including ANC visits, so they tend to be more consistent in carrying them out. From the results of the study, the majority of respondents who had less knowledge also made fewer ANC visits. This can be explained because pregnant women are suspected of not realizing the important benefits of ANC, such as early detection of pregnancy risks.

Research Limitations
The results of this study have several important implications in the field of public health, especially in efforts to improve health services for pregnant women:
a. For Health Workers: Good knowledge of pregnant women has been shown to influence the level of antenatal care (ANC) visits. Therefore, health workers at the West Popayato Health Center need to increase routine education and counseling activities for pregnant women, especially regarding the importance of ANC visits according to the recommended schedule.
b. For Health Centers and Local Governments: Health centers can develop community-based intervention programs such as pregnancy classes, home visits, and the use of health cadres to reach pregnant women in remote areas. Local governments can also use these results as a basis for planning programs to increase ANC coverage by increasing access to information and services.
c. For Pregnant Women and Families: This study emphasizes the importance of knowledge as a key in making decisions related to health. Therefore, it is hoped that pregnant women and their families will be more active in seeking information and being involved in health programs offered by healthcare facilities.
d. For Further Research: This study opens up opportunities for further research with a wider scope, for example adding other variables such as the role of the husband, socio-economic

level, or access to health facilities, in order to gain a more comprehensive understanding of the factors that influence ANC visits.

5. CONCLUSION

There is a relationship between knowledge and ANC visits in the working area of UPTD West Popayato Health Center. There is a relationship between family support and ANC visits in the working area of UPTD West Popayato Health Center. There is a relationship between health workers and ANC visits in the working area of UPTD West Popayato Health Center. There is no relationship between the distance of health facilities and ANC visits in the working area of UPTD West Popayato Health Center.

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