

# RELATIONSHIP OF KNOWLEDGE AND ATTITUDE OF PREGNANT MOTHERS WITH PREGNANCY EXAMINATION (ANC K4) IN ENVIRONMENT III KELURAHAN Baru LADANG BAMBU, TUNTUNAN DISTRICT

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## ABSTRACT

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The coverage of K4 pregnant women's visits in Indonesia in 2013 was 86.52%, it means that the Strategic Plan target in 2013 was 93%. Antenatal care is care given to pregnant women from confirmation of conception to early delivery. This study aims to determine the relationship between knowledge and attitudes of pregnant women with antenatal care (ANC K4). The research method used is cross sectional, where the population is all pregnant women who perform antenatal care (ANC K4) in Environment III Kel. Baru Ladang Bambu Kec. Medan Tuntungan in 2020 a total of 61 respondents. The sample size is 30 respondents with purposive sampling technique. The results of the analysis showed that 5 respondents who had good knowledge and the majority of positive attitudes were in accordance with the standards in conducting pregnancy tests (ANC K4) 16.7%, 14 respondents who had sufficient knowledge and the majority of positive attitudes were in accordance with the standards in conducting pregnancy tests (ANC K4) 43.3%, and of the 11 respondents who had less knowledge and the majority of negative attitudes were not in accordance with the standards in carrying out pregnancy tests (ANC K4) 40%. The results of the Chi-square statistical test obtained  $p = 0,000$ , which means that there is a relationship between knowledge and attitude with pregnancy examination (ANC K4). It is hoped that pregnant women will continue to carry out antenatal visits (ANC K4) during pregnancy.

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## 1. Introduction

Pregnancy is an important period for a woman in her life cycle, this period requires special attention because this period will determine the quality of subsequent life, especially for the child or baby in the womb (Bartini's wife, 2012).

Pregnancy if not managed properly will give complications to the mother and fetus. The World Health Organization (WHO) estimates that around 15% of all pregnant women will develop complications related to their pregnancy and can result in maternal and fetal death (Marmi, 2011).

According to WHO in 2011 the maternal mortality rate (MMR) in Southeast Asian countries such as Malaysia (29/100,000 KH), Thailand (48/100,000 KH), Vietnam (59/100,000 KH) and Singapore (3/100,000 KH). In developing countries the maternal mortality rate ranges from 50-800/100,000 KH, compared to developed countries, the figures are very much different such as Australia (7/100,000 KH) and Japan (5/100,000 KH), so it is estimated that in developed countries

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the maternal mortality rate ranges from 3 -5/100,000 KH ([www.academia/9825392/minikti\\_trenpersalinan](http://www.academia/9825392/minikti_trenpersalinan)).

One of the Millennium Development Goals (MDGs) targets that must be achieved in 2015 is to reduce the maternal mortality rate to or around 102/100,000 KH, while the maternal mortality rate (MMR) in Indonesia itself is still high compared to other ASEAN countries ([www.academia/9825392/minikti\\_trenpersalinan](http://www.academia/9825392/minikti_trenpersalinan)).

Indonesia is now one of the 13 countries with the highest maternal mortality rate in the world, according to WHO (2010) around 287,000 mothers died from complications of pregnancy and childbirth, such as bleeding 28%, preeclampsia 24%, infection 11%, indirect causes (obstetric trauma) 5%, and most cases of maternal mortality in the world occur in developing countries including Indonesia ([www.academia/9825392/minikti\\_trenpersalinan](http://www.academia/9825392/minikti_trenpersalinan)).

The results of the 2012 Indonesian Demographic and Health Survey (IDHS) recorded a maternal mortality rate (MMR) of 359/100,000 KH, this number jumped significantly compared to the 2007 IDHS which was only 228/100,000 KH (BKKBN, 2013).

The 2012 North Sumatra Health Profile reported MMR, only 106,432/100,000 KH, but this cannot describe the actual MMR, based on the results of the 2010 population census, the MMR in North Sumatra was 328/100,000 KH, this figure is still quite high when compared to the figure The 2010 national population census results are around 259/100,000 KH, meanwhile the maternal mortality rate is according to the age group of 20-34 years.

To reduce the risk of complications in pregnancy that can lead to an increase in maternal mortality, it is recommended that every pregnant woman visit during pregnancy or ante natal care (ANC) at least 4 times, with the provisions of 1 visit in the first trimester (K1), 1 visit in the first trimester (K1). Second trimester, and 2 visits in third trimester (k4), (WalyaniE.S, 2015).

One of the programs to reduce MMR in Indonesia is to improve the quality of health services, especially services for examining pregnant women by professionals in accordance with ANC service standards with the 7T principle, namely weighing weight, measuring blood pressure, measuring height of uterine fundus, complete TT immunization, giving Fe tablets, tests for infectious diseases, and ending with a talk meeting in preparation for referrals, have now been recommended to be 14T, namely 7T plus fitness therapy, VDRL test, urine reduction test, urine protein test, Hb test, iodine therapy, malaria therapy (Marmi ,2011).

According to North Sumatra Province Health Data and Information, the coverage of K4 pregnant women in Indonesia in 2013 was 86.52%. This means that the Strategic Plan target in 2013 has not reached 93%, out of 33 provinces in Indonesia, only 10 provinces (30.3%) have achieved the target. The coverage of K4 pregnant women in North Sumatra province in 2013 was 76.34%.

Based on the results of a preliminary study conducted in Environment III Kel. Baru Ladang Bambu Kec. Medan Tuntungan In 2020 there were 8 pregnant women, the researcher asked the mother through a prenatal check with the question, what is the reason for the mother to have her pregnancy checked, 6 mothers answered, people said "if you are pregnant you have to check", and 2 mothers answered "pregnancy examination is very important to know the progress of the pregnancy". mother and fetus".

Based on the description above, the author is interested in conducting research with the title "Relationship of Knowledge and Attitude of Pregnant Women with Pregnancy Examination (ANC K4) in Environment III Kel. Baru Ladang Bambu Kec. Profit Field in 2020".

## 2. Methods

The type of research used is analytic observational with a cross sectional approach. The population in this study were all pregnant women who underwent antenatal care (ANC K4) in Environment III Kel. Baru Ladang Bambu, Kec. Medan Tuntungan in 2020, and based on the initial survey that has been carried out, there were 61 pregnant women in Trimester II - III who made antenatal visits in Environment III Kel. Baru Ladang Bambu Kec. Medan Tuntungan 2020. The sampling technique was purposive sampling which was carried out by making their own considerations. The sample in this study were 30 pregnant women who did a pregnancy check (ANC K4) who checked their pregnancy. This research was carried out from April to August 2020.

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## 3. Results

**TABLE 1**  
**DISTRIBUTION OF CHARACTERISTICS OF PREGNANT WOMEN WHO PERFORM EXAMINATION OF PREGNANT WOMEN (ANC K4)**

Characteristics	Category	f	%
age	< 20 Years	1	3
	20-30	28	94
	31-35	1	3
<b>Total</b>		<b>30</b>	<b>100</b>
Education	Basic (SD-SMP)	12	40
	Intermediate (high school)	17	57
Top (PT)		1	3
<b>Total</b>		<b>30</b>	<b>100</b>
parity	Primiparaa	8	27
	Scundipara	16	53
	Grandepara	6	20
<b>Total</b>		<b>30</b>	<b>100</b>
Profession	Work	18	60
	Does not work	12	40
<b>Total</b>		<b>30</b>	<b>100</b>

Based on the table above, the characteristics of the majority of respondents are at the age of 20-30 years, 28 respondents (94%), secondary education (SMA) 17 respondents (57%), Scundipara parity 16 respondents (53%), and judging from the work of the majority of respondents working 18 respondents (60%).

**TABLE 2**  
**DISTRIBUTION OF KNOWLEDGE OF PREGNANT WOMEN ABOUT PREGNANCY EXAMINATION (ANC K4)**

Knowledge	f	%
Well	5	17
Enough	14	46
Not enough	11	37
<b>Total</b>	<b>30</b>	<b>100</b>

Based on the table above it can be seen that of the 30 respondents the majority have sufficient knowledge of 14 respondents (46%) about antenatal care (ANC K4).

**TABLE 3**  
**DISTRIBUTION OF PREGNANT WOMEN'S ATTITUDES ABOUT PREGNANCY EXAMINATION (ANC K4)**

Attitude	f	%
Positive	18	60
Negative	12	40
<b>Total</b>	<b>30</b>	<b>100</b>

Based on the table above, it can be seen that of the 30 respondents the majority had a positive attitude, 18 respondents 60%.

**TABLE 4**  
**DISTRIBUTION OF PREGNANCY CHECKUP (ANC K4) AT THE CLINIC**

Visit	f	(%)
According to standard	18	60
Not up to standard	12	40
<b>Total</b>	<b>30</b>	<b>100</b>

Based on the table above, it can be seen that of the 30 respondents the majority were categorized according to the standard in carrying out pregnancy tests (ANC K4) 18 respondents (60%).

**TABLE 5**

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## CROSS TUBULATION RELATIONSHIP BETWEEN KNOWLEDGE OF PREGNANT WOMEN AND PREGNANCY EXAMINATION (ANC K4)

Peng-know	Pregnancy test						chi-square test	
	According to Standard		Not up to standard		Total			
	N	%	N	%	N	%		
Well	5	26	0	0	5	17		
Enough	14	74	0	0	14	47		
Not enough	0	0	11	100	11	36	0.000	
Total	19	100	11	100	30	100		

Based on the table above, of the 5 respondents who have good knowledge, the majority are in accordance with the standard in carrying out pregnancy checks (ANC K4) 26%, of the 14 respondents who have sufficient knowledge, the majority are according to standards in carrying out pregnancy tests (ANC K4) 74% and of 11 respondents who have adequate knowledge. having less knowledge the majority do not meet the standard in conducting pregnancy tests (ANC K4) 100.0%.

The results of the Chi-Square statistical test obtained p value = 0.000. This means that the p value is smaller than  $\alpha$  (0,05) and thus  $H_0$  is rejected and  $H_a$  is accepted, that is, there is a relationship between knowledge of pregnant women and antenatal care (ANC K4).

**TABLE 6**  
**CROSS TUBULATION RELATIONSHIP BETWEEN ATTITUDE OF PREGNANT WOMEN AND PREGNANCY EXAMINATION (ANC K4)**

Peng-know	Pregnancy test						chi-square test	
	According to standard		Not up to standard		Total			
	N	%	N	%	N	%		
Positive	18	100	0	0	18	60		
Negative	0	0	12	100	12	40		
Total	18	100	12	100	30	100	0.000	

Based on the table above, it can be seen that of the 18 respondents who had a positive attitude the majority were in accordance with the standard in conducting a pregnancy examination (ANC K4) 100%, of the 12 respondents who had a negative attitude the majority did not meet the standard in conducting a pregnancy examination (ANC K4) 100%.

The results of the Chi-Square statistical test obtained p value = 0.000. This means that the p value is smaller than  $\alpha$  (0,05) and thus  $H_0$  is rejected and  $H_a$  is accepted, that is, there is a relationship between the attitudes of pregnant women and antenatal care (ANC K4).

## 4. Discussion

### Knowledge of Pregnant Women About Pregnancy Examination (ANC K4)

The results of the analysis showed that of the 30 respondents the majority had sufficient knowledge about antenatal care (ANC K4) 46%, respondents who had good knowledge of antenatal care (ANC K4) 17% and respondents who had less knowledge of 37%. Respondents have sufficient knowledge because the education level of the majority of respondents is secondary education (SMA) 57%, where the level of education greatly affects a person's level of knowledge and knowledge also greatly influences a person to act. This shows that the higher the level of a person's knowledge, the higher the level of knowledge. From the data, it can be seen that 40% of respondents who have a basic education level (SD-SMP) while those with higher education (college) are 3%.

The majority of respondents also had 53% scundiparous parity so that they had sufficient experience from regular pregnancy check-ups in previous pregnancies, respondents who had primiparous parity 27% and respondents who had 20% grandepara parity. This shows that the

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experience during pregnancy in carrying out antenatal care (ANC K4) on a regular basis greatly affects the respondent's knowledge of the next pregnancy.

The majority of respondents also have a job of 60% so that they get sufficient information from the surrounding environment and only 40% of respondents who do not work. This shows that the delivery of information about pregnancy check-ups is good enough so that respondents understand enough about the benefits of having a pregnancy check-up (ANC K4) and what the impact is if they don't do a pregnancy check-up (ANC K4) on a regular basis.

Knowledge is the impression in the human mind as a result of the user on his senses. Knowledge is very different from belief, superstition, and false explanations. Knowledge is everything that is known based on the experience gained by every human being. Basically, knowledge will continue to increase and vary according to the process of experience experienced (Mubarak, 2012).

This is in accordance with Mubarak's theory that every pregnant woman has different knowledge according to the experiences experienced and obtained in everyday life. This makes pregnant women understand that pregnancy is an important period for a woman in her life cycle, and every pregnancy can have potential and carry risks for the mother. WHO estimates that about 15% of all pregnant women will develop complications related to their pregnancy and can be life-threatening. Midwives as midwifery service providers will find pregnant women with complications which may be life-threatening. Therefore, midwives must be able to detect as early as possible the signs of danger to pregnant women that may occur, because every pregnant woman is at risk of experiencing complications.

This research is in line with Tamaka's research (2013) which shows that the research conducted on 30 respondents already has good knowledge of antenatal care. Almost all respondents know the purpose of the benefits of having a prenatal care (ANC) for themselves and the baby they are carrying. In addition, all respondents know when the first pregnancy examination should be done.

## Attitudes of Pregnant Women About Pregnancy Examination (ANC K4)

The results of the analysis show that of the 30 respondents the majority have a positive attitude about pregnancy check-ups (ANC K4) 60%, respondents who have a negative attitude

about antenatal care (ANC K4) 40%. Respondents have a positive attitude because the education level of the majority of respondents is secondary education (SMA) 57%, where the level of education greatly influences a person's attitude. This shows that the higher a person's level of education, the higher his attitude. From the data, it can be seen that 40% of respondents who have a basic education level (SD-SMA) while those with higher education (college) have 3%.

The majority of respondents also had 53% scundiparous parity so that they had sufficient experience of attitude from regular antenatal care in previous pregnancies, respondents who had primiparous parity 27% and respondents who had 20% grandpara parity. This shows that the experience of antenatal care in carrying out antenatal care (ANC K4) on a regular basis greatly influences the attitude of respondents to the next pregnancy examination.

The majority of respondents also have a job of 60% so that they get sufficient information from the surrounding environment and only 40% of respondents who do not work. This shows that the delivery of information about antenatal care is good enough so that respondents have a positive attitude to carry out regular antenatal care (ANC K4) in their next pregnancy.

Attitude is a reaction or response of someone who is still closed to a stimulus or object. Attitudes can change because of that attitudes can be learned and attitudes can change in people if there are certain conditions and conditions that facilitate the person's attitude. Attitudes do not stand alone, but always have a certain relationship to an object (Wawan, et al 2014).

This study is in line with research by Lingga (2013) which says that low education and negative attitudes lead to low knowledge and negative attitudes that affect the compliance of pregnant women in performing ANC, meaning that the better knowledge of pregnant women about antenatal care, the better and positive she will also do a pregnancy test.

## Pregnancy Checkup (ANC K4)

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The results of the analysis showed that of the 30 respondents the majority were in accordance with the standards in conducting pregnancy tests (ANC K4) 60%. The results of this study indicate that the knowledge and attitudes of respondents in carrying out pregnancy checks (ANC K4) are quite good, and respondents know the benefits of conducting pregnancy tests so that respondents feel that carrying out pregnancy tests is very necessary during pregnancy until the beginning of delivery. Pregnancy check-ups are also influenced by the education level of the respondents, the majority of whom have secondary education, and work so that it is easy for respondents to receive information about antenatal care (ANC K4). In addition, the majority of respondents are scundiparous parity so that respondents have had a fairly good experience in previous pregnancies. This experience greatly affects subsequent pregnancies. Meanwhile, 40% of respondents who did not meet the standards in conducting pregnancy tests were found.

Pregnancy check-up (ANC K4) is a repeat visit carried out by pregnant women as a continuation of the initial visit during pregnancy until entering the delivery period, K4 visits are carried out at least according to the standards set by WHO, namely 1st Trimester II visits and 2X Trimester III visits.

The results of this study are in line with the research of Sudarti (2013) which says that low education and negative attitudes cause low knowledge and negative attitudes so that it affects the frequency of pregnant women in carrying out antenatal care (ANC K4), meaning that the better knowledge of pregnant women about examinations. pregnancy, the better and positive he will do a pregnancy test.

## Analysis of the Relationship of Knowledge, Attitude and Pregnancy Examination (ANC K4)

Judging from the results of research conducted on 30 respondents who did a pregnancy check (ANC K4) in Environment III Kel. Baru Ladang Bambu, Kec. Medan Tuntungan of 5 respondents who had good knowledge and the majority of positive attitudes were in accordance with the standard in carrying out pregnancy tests (ANC K4) 16.7%, of 13 respondents who had sufficient knowledge and the majority of positive attitudes were in accordance with the standards in conducting pregnancy tests (ANC K4) 43.3%, and of the 12 respondents who have less knowledge and the majority of negative attitudes are not in accordance with the standards in carrying out pregnancy tests (ANC K4) 40%.

From the characteristics of the respondents, the majority of respondents were aged 25-30 years 94%, aged <20 years 3%, and aged 31-35 years 3%. The majority of respondents have secondary education (SMA) 57%, basic education (SD-SMP) 40%, tertiary education (college) 3%, and the majority of respondents are scundipara 53%, primipara 27%, grandepara 20%. It was also found that the majority of respondents worked 60% and those who did not work 40%.

Knowledge and attitudes of pregnant women about antenatal care (ANC K4) greatly affect pregnancy tests (ANC K4), where the higher the level of knowledge and attitudes of pregnant women, the more regular (according to standards) pregnant women are in carrying out antenatal care (ANC K4). The results of the Chi-Square statistical test obtained a knowledge value of  $p = 0.000$  and an attitude value of  $p = 0.000$ . This means that the value of  $p$  is smaller than  $\alpha (0,05)$  and thus  $H_0$  is rejected and  $H_a$  is accepted.

The results of this study were also confirmed and strengthened by the research of Yunita, et al (2013) entitled The Relationship of Knowledge and Attitudes of Pregnant Women to the Behavior of Pregnancy Checkup Visits at All Mider Health Centers, Tanjung Karang Barat District, Bandar Lampung City with K4 coverage results 83% with a target of 86% with test results *chi-square* value = 0.000 which means that there is a relationship between knowledge and attitudes of pregnant women on the behavior of pregnancy check-ups.

Thus, it can be concluded that in this study there is a relationship between knowledge and attitudes of pregnant women with antenatal care (ANC K4), which means that the better knowledge and attitudes of pregnant women with antenatal care (ANC K4), pregnant women will be more willing to have their pregnancy checked regularly. So from the results of this study, no gaps were found between the results of the study and the theory stated above.

## 5. Conclusion

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Based on the results of research regarding the relationship between knowledge and attitudes of pregnant women with antenatal care (ANC K4) in Environment III Kel. Baru Ladang Bambu, Kec. Medan Tuntungan in 2020 can be concluded as follows:

1. Knowledge of pregnant women about antenatal care (ANC K4) in Environment III Kel. Baru Ladang Bambu Kec. Medan Tuntungan in 2020 had sufficient knowledge of 43.3%, 40% less knowledgeable, and 16.7% well-informed.
2. Attitudes of pregnant women about antenatal care (ANC K4) in Environment III Kel. Baru Ladang Bambu Kec. Medan Tuntungan in 2020 has a positive attitude of 60% and a negative attitude of 40%.
3. There is a significant relationship between the knowledge and attitudes of pregnant women with antenatal care (ANC K4) where the better the knowledge and positive attitudes of pregnant women about antenatal care (ANC K4), then the pregnancy examination (ANC K4) will be in accordance with WHO standards, with a value of  $p = 0.000$ .

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