

**ASSOCIATED FACTORS WITH THE UTILISATION OF
ANTENATAL CARE SERVICES IN THE SERVICE AREA OF THE
DONOK CITY PHC, LEBONG DISTRICT**

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ABSTRACT

Background: By the year 2022, the percentage of ANC (antenatal care) visits at Donok City PHC in the Lebong District was K1 70.18% and K4 56.14%. In the year 2023, K1 had a percentage of 51.06%, while K4 had a percentage of 57.45%. It appears from the data that the ANC visit to the Donok City Primary Health Care Center in the Lebong District did not meet the target of 95%.

Purpose: This study aimed to identify the parameters associated with the utilization of antenatal care services in the jurisdiction of Donok City PHC, Lebong Regency.

Method: The employed research strategy was descriptive quantitative research utilizing a cross-sectional methodology. The research utilized a complete sampling method, involving 53 mothers with infants aged 1-3 months from Donok City PHC, Lebong District, as participants. This research utilized univariate and bivariate data analysis methods.

Result: The findings from the univariate test analysis indicate that a minor proportion of respondents (18.9%) possessed insufficient knowledge. Approximately 45.3% of respondents reported issues related to residential distance, nearly 47.2% indicated a lack of support from their husbands, and about 35.8% experienced incomplete usage of antenatal care. The bivariate analysis results indicated a significant correlation between knowledge (0.000), residential distance (0.005), and spousal support (0.000) with the utilization of antenatal care services in the Donok City PHC, Lebong District.

Conclusion: The researcher proposes that the findings of this study may underpin the establishment of guidance, coaching, and counseling programs for the utilization of antenatal care services.

Keywords: *Knowledge, husbands support, residential distance, utilization of ANC*

INTRODUCTION

Compared to the previous year, when there were 151 deaths per 100,000 live births, the global maternal mortality ratio increased to 152 deaths per 100,000 live births in 2019. This trend forecasts 133 deaths for every 100,000 live births by the year 2030, which is nearly twice as high as the aim set by the Sustainable Development Goals (SDGs, 2021). As of 2019, the World Health Organization (WHO) reports that the rate of maternal death is quite high. According to estimates for the year 2017, over 810 women around the world pass away every single day as a result of issues that are associated with pregnancy or childbirth. (WHO, 2019) In 2017, there were 295,000 deaths that occurred among women during and after pregnancy and delivery.

It is an indicator of access to and utilization of health care during pregnancy that antenatal care coverage, also known as ANC coverage, is present. During the prenatal period, pregnant women have the opportunity to undergo interventions relevant to their health and the baby. In order to increase the likelihood of obtaining appropriate maternal health interventions during the antenatal period, it is strongly recommended that

antenatal care be received at least four times. In addition to being one of the health services tracker indicators for universal health coverage, this is also one of the indicators that are included in the Monitoring Framework of the Global Strategy for Women's, Children's, and Adolescents' Health (2016-2030) (World Health Organization, 2024).

Assuring that every mother has access to high-quality maternal health services, such as assistance during delivery from trained medical professionals at health service facilities, postnatal care for mothers and babies, special care and referral in the event of complications, and family planning services, including postnatal family planning, is an essential step in accelerating the reduction of maternal mortality ratio (MMR). The minimal frequency of health services for pregnant women must be met in each trimester. This means that they must be provided at least once during the first trimester (from 0 to 12 weeks of gestation), at least once during the second trimester (12 to 24 weeks of gestation), and at least twice during the third trimester (from 24 weeks of gestation until birth). These service time criteria

are recommended by Kemenkes RI, 2020 in order to protect pregnant women and fetuses through the early detection of risk factors, the prevention of pregnancy difficulties, and the early treatment of symptoms of pregnancy complications.

Despite the fact that 88% of pregnant women around the world receive prenatal care from a trained health professional at least once, barely two out of three (69%) of them receive four visits to the antenatal care provider. Eighty-five percent of K1 visits were covered in Southeast Asia, but only fifty-five percent of K4 visits were covered (Unicef, 2024).

In 2022, the national maternal health service (K4) had a rate of 86.2%, which was very close to meeting the target of 90% that was set in the National Medium-Term Development Plan. The target of ninety percent that was set for the National Medium-Term Development Plan has been achieved by nine different provinces. The province of West Java has the highest provincial picture, with 95.6%, followed by Lampung, which has 94.8%, and Banten, which has 91.5% overall. Papua is the name of the province that has a rating of less than fifty percent for its level of achievement. While this was going on, Bengkulu Province

reached 86.1%, although it has not yet attained the target that was set for the National Medium-Term Development Plan.

In the year 2022, the percentage of Indonesians who have access to maternal health care (K6) is 70.9%. The province of Papua has the lowest K6 coverage, with 18.1%, followed by West Papua with 25.4%, and Maluku with 33.9%. The K6 coverage in Bengkulu Province is the sixth lowest in the country, coming in at 49%. This does not meet the target of 60% that was established in the National Medium-Term Development Plan (Kemenkes RI, 2022).

The goal of antenatal care, also known as ANC, is to offer a pregnancy and delivery experience that is both safe and positive. It is possible for what started out as a normal pregnancy to turn out to be a pathological pregnancy, which is why it is necessary to strengthen health services in accordance with standards. An incomplete antenatal care assessment might result in difficulties during pregnancy that are not noticed in the mother, which can significantly increase the risk of mortality for the mother at birth. It is estimated that bleeding is the leading cause of death among mothers each year. The subsequent events include

hypertension, infection, cancer, heart disease, TB, and other ailments that are experienced by mothers. Antenatal care (ANC) examinations should be performed on a regular basis in order to prevent complications during pregnancy and childbirth, which are the leading cause of maternal mortality (Prasetyaningsih 2020). There are three categories of factors that influence pregnant women to visit ANC. These categories are predisposing factors, enabling factors, and reinforcing factors. There are a number of characteristics that can put pregnant women at risk, including their age, level of education, occupation, number of children, level of knowledge, and attitude. There are a number of elements that are considered to be enabling factors. These include the living distance, the income of the family, and the accessibility of information and media facilities. In the meantime, variables that are considered to be reinforcing include the support of the husband, the support of the family, and the attitudes and support of health staff (Rahmawati, Puspitasari, and Tania 2017).

Women who are pregnant will have less of a desire

to visit health facilities if they are located further away from their homes and are more difficult to reach. According to Rahmawati, Puspitasari, and Tania (2017), on average, pregnant women who do not have access to transportation and are required to walk to the health service make less than four visits to the facility during their pregnancy. The findings of the research conducted by Elfrida Dana (2020) indicate that there is a connection between the presence of health workers, the distance of pregnancy checks, and the support of families with regard to antenatal care visits for pregnant teenagers at the Kupang City Health Centre.

An indication that someone is taking action is the possession of knowledge. When an individual is in possession of substantial health information, they are able to appreciate the value of maintaining their health and are motivated to incorporate this knowledge into their day-to-day situations. There is a significant relationship between the level of knowledge that pregnant women possess and their level of motivation to have antenatal checkups. According to Prasetyaningsih's research

from 2020, mothers who have sufficient knowledge about the health of their unborn child consider pregnancy checkups to be more than just a requirement for their pregnancy; they believe them to be an absolute essential. The findings of the research conducted by Joyce Angela Yunica in 2021 demonstrated a substantial association between the mother's level of knowledge and the husband's level of support for antenatal care visits (K6).

When it comes to pregnant women, the support of their husbands can be the most essential motivator because it can lead to a change in behavior for the better through compliance. By providing assistance, pregnant women will be encouraged to seek out high-quality medical care, which will ultimately protect the health of both the mother and the fetus that is still inside her womb. According to Sulistyowati (2021), in order to bring about a change in behavior in the form of compliance, a stimulus is required. The findings of the research conducted by Sulistyowati (2021) indicate that there is a connection between husband support and ANC compliance in pregnant women.

According to information provided by the Bengkulu Provincial Health

Office, the percentage of pregnant women who received K1 visits in 2019 was 96.4%, while the percentage of K4 visits was 87.5%. On the other hand, in 2022, K1 was 88% and K4 was 86%, but in 2021, K1 was 94% and K4 was 89%. Coverage of K1 visits for pregnant women in the Lebong District in 2019 was 91.8%, while K4 visits were 84%; in 2021, K1 visits were 91%, and K4 visits were 89%; in 2022, K1 visits were 88%, and K4 visits were 90%.

In 2022, the percentage of ANC (antenatal care) visits at Donok City PHC in the Lebong District was K1 70.18%, while K4 56.14%. In the year 2023, K1 had a percentage of 51.06%, while K4 had a percentage of 57.45%. According to these findings, the ANC visit at the primary health care center in Donok City, which is located in the Lebong District, did not meet the 95% objective that was set for the PHC. The purpose of this study was to evaluate the comprehensiveness of maternal ANC visits during pregnancy. The sample consisted of 53 mothers who had kids ranging in age from one to three months and were located at Donok City PHC in the Lebong District.

When it comes to the utilization of antenatal care services, the researcher is interested in doing an investigation into the relationship between

knowledge, the distance of residency, and the support of the husband. This is due to the fact that the majority of pregnant women in the service area of the Donok City Primary Health Care Center, which is located in the Lebong District, have completed their elementary and junior high school education, which has a substantial impact on the amount of patient knowledge that they possess. It is more than two kilometers away from one of the villages that are part of the Donok City Primary Health Care Center. The majority of the people in the village opt to live in the garden in order to fulfill their requirements, which makes it difficult and far away to access the PHC. There are several instances in which pregnant women verify their pregnancy without their husbands present. The researcher is eager to carry out the investigation; this is the basis for their enthusiasm.

The goal of this research is to identify the factors that are connected with the utilization of antenatal care services in the Lebong District that is located inside the Donok City Primary Health Care Center.

METHOD

For the purpose of this investigation, a quantitative descriptive

method and a cross-sectional methodology were utilized. For the purpose of this study, 53 respondents were recruited via a method of sample collecting known as total sampling methods. Beginning on the 29st of Juny and continuing until the 02th of August 2024, we carried out the research at the Donok City PHC.

For the purpose of this investigation, a questionnaire instrument was applied, which had inquiries concerning the participants' ages, gestational ages, occupations, distances to health facilities, levels of knowledge, spouse support, and engagement with antenatal care services. Twenty-five questions with multiple-choice answers were included in the knowledge questionnaire. There were fifteen different question questions that were included in the spouse support questionnaire. These question items were assessed on a Likert scale, with a score of four, a score of three, a score of two, and a score of one never happening. There were no negative statements in any of the question items. There were six different statement items included in the ANC service usage study questionnaire.

Both the univariate test and the chi-square test

were utilized in this investigation. The univariate test was utilized to ascertain the frequency distribution of each variable, while the chi-square test was utilized to ascertain the association between the independent variables and the dependent variables. In order to evaluate the nature

of the association, the data analysis was carried out by the SPSS 24 application, which utilized an alpha value of 0.05.

This research has been approved by the ethical committee of Faculty of Health Sciences at Dehasen University Bengkulu, which assigned it the number 0089/D-KEPK/FD/V1/2024.

RESULT

Table 1. Frequency distribution of respondents (n:53)

Variables	Frequency (n)	Percentage (%)
Knowledge		
Not Good	10	18.9
Enough	29	54.7
Good	14	26.4
Residential distance		
Far	24	45.3
Not far	29	54.7
Husbands support		
Not support	25	47.2
Support	28	52.8
Utilisation of antenatal care service		
Not complete	19	35.8
Complete	34	64.2
Total	53	100

Among the 53 individuals who participated in the survey, Table 1 demonstrates that a small percentage of them had inadequate knowledge, nearly half of them lived a

considerable distance away, nearly half of them had husbands who did not support them, and nearly half of them had not utilized antenatal care to its full potential.

Table 2. Cross tabulation of knowledge relationship with antenatal care utilisation at Donok City PHC

Knowledge	Utilisation of antenatal care service				Total		P Value
	Not complete		Complete				
	n	%	n	%	n	%	
Not good	9	90	1	10	10	100	0.000
Enough	8	27.6	21	72.4	29	100	
Good	2	14.3	12	85.7	14	100	
Total	19	35.8	34	64.2	53	100	

Based on the data shown in Table 2, it can be observed that out of the ten respondents who have inadequate understanding, nine of them have some utilization of prenatal care, while only one of them has total utilization of antenatal care. Among the 29 respondents who had sufficient information, there were eight respondents who had only partially utilized antenatal care, while there were twenty-one respondents who had utilized antenatal care in its whole. There were two respondents who had only partially utilized antenatal care, while twelve respondents had utilized all of their antenatal care. The total number of respondents who had good knowledge was 14.

For the purpose of determining the nature of the connection that exists between maternal knowledge and the utilization of antenatal care (ANC) services at the Donok City Primary Health Care Center, Lebong District, we employed the chi-square test. With an asymptotic significance level (ρ) equal to 0.000. The null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_a) since a value of less than 0.05 suggests a meaningful association. This indicates that there is a connection between maternal awareness and the utilization of antenatal care (ANC) services in the service area of the Donok City Primary Health Care Center, which is located in the Lebong District.

Table 3. Cross tabulation of residential distance relationship with antenatal care utilisation at Donok City PHC

Residential distance	Utilisation of antenatal care service				Total		P Value
	Not complete		Complete				
	N	%	n	%	n	%	
Far	14	58.3	10	41.7	24	100	0.005
Not far	5	17.2	24	82.8	29	100	
Total	19	35.8	34	64.2	53	100	

According to the data presented in Table 3, out of the 25 respondents who had husbands who were not supportive, there were 16 respondents who had only partially utilized prenatal care, while there were 9 respondents who had utilized antenatal care in its whole. There were three respondents who had partial utilization of prenatal care, whereas there were twenty-five respondents who had complete utilization of antenatal care. The total number of respondents who had supportive husbands was twenty-eight.

The Chi-Square test was utilized in order to ascertain the nature of the connection that exists between husband support and

the utilization of antenatal care (ANC) services within the Service Area of the Donok City Primary Health Care Center, which is located in the Lebong District. With an asymptotic significance level (ρ) equal to 0.000. The null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_a) since a value of less than 0.05 suggests a meaningful association. Consequently, this indicates that there is a connection between the support of a husband and the utilization of prenatal care (ANC) services in the service area of the Donok City Primary Health Care Center, which is located in the Lebong District.

Table 4. Cross tabulation of husband support relationship with antenatal care utilisation at Donok City PHC

Husband support	Utilisation of antenatal care service				Total	P Value	
	Not complete		Complete				
	N	%	n	%	n	%	
Not support	16	64	9	36	25	100	0.000
support	3	10.7	25	89.3	28	100	
Total	19	35.8	34	64.2	53	100	

According to the data presented in Table 4, out of the 14 respondents who have a distant domicile, there are 14 respondents who have utilized antenatal care in an incomplete manner, while there are 10 respondents who have utilized antenatal care throughout its entirety. Of the 29 respondents who had a near residential distance, there were five respondents who had not utilized antenatal care at all, while there were twenty-four respondents who had utilized antenatal care in its whole.

For the purpose of determining whether or whether there is a correlation between the mother's home distance and her utilization of antenatal care (ANC) services, we utilized the Chi-Square correlation test. With an asymptotic significance (ρ) value of 0.005. In light of the fact that there is a significant association, we choose to

accept H_a rather than H_o . This suggests that there is a connection between the distance between the mother's place of residence and the utilization of prenatal care (ANC) services within the service area of the Donok City Primary Health Care Center, which is located in the Lebong District.

DISCUSSION

The Associated Maternal Knowledge and Utilisation of ANC (Antenatal Care) Services in the Service Area of the Donok City PHC, Lebong District.

According to the findings of the study, out of ten respondents who had inadequate knowledge, nine of them had only partially utilized antenatal care, while only one of them had fully utilized it. This was found in the Service Area of the Donok City PHC, which is at the Lebong District. Among the 29 respondents who had sufficient information,

there were eight respondents who had only partially utilized antenatal care, while there were twenty-one respondents who had utilized antenatal care in its whole. Two of the fourteen respondents who have a good level of knowledge indicate that they have only partially utilized prenatal care, while twelve of them have utilized antenatal care in its whole.

Just one of the respondents in this study, who had a limited amount of information, made full use of antenatal care. This decision may be influenced by factors such as the presence of a supportive husband and the closeness to medical services. Even though they had a high level of awareness, two of the respondents did not make full use of the antenatal care that was available to them. There is a possibility that this behavior is influenced by the absence of assistance from a husband as well as the distance to the health institution.

It was determined through the use of the Chi-Square test that there is a correlation between maternal knowledge and the consumption of antenatal care (ANC) services in the Service Area of the Donok City Primary Health Care Center, which is located in the Lebong District. With an

asymptotic significance level (ρ) equal to 0.000. The null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_a) since a value of less than 0.05 suggests a meaningful association. This indicates that there is a connection between maternal awareness and the utilization of antenatal care (ANC) services in the service area of the Donok City Primary Health Care Center, which is located in the Lebong District.

One of the markers that someone is ready to take action is their level of knowledge. If an individual possesses sufficient health information, then that individual will comprehend the significance of preserving their health and will be motivated to put this knowledge into practice in their daily life. Knowledge is a significant aspect that plays a role in determining whether or not pregnant women are motivated to see ANC. According to Prasetyaningsih's research from 2020, mothers who are aware of the importance of maintaining their health throughout pregnancy believe that in addition to fulfilling their commitments, ANC visits are also an absolute must during pregnancy.

With a value of ($p=0.007$), Mangosa (2022)

discovered that there is a strong association between knowledge and compliance with ANC visits at the Rijali Public Health Centre. This was discovered in the context of this study.

According to the researcher's hypothesis, one of the elements that can influence the use of ANC is knowledge. This is due to the fact that moms who have a considerable amount of information are surely aware of the goal, benefits, and impact that they will experience if they do not engage in ANC. It is expected that respondents will make efficient use of ANC services in order to mitigate any adverse effects that may occur during pregnancy.

Associated distance of residence and utilisation of antenatal care (ANC) services in the service area of Donok City PHC, Lebong District

Within the service area of Donok City PHC, which is located in the Lebong District, a study that involved 24 respondents who lived in a remote location indicated that 14 of the respondents had utilized prenatal care in an incomplete manner, while 10 of the respondents had utilized antenatal care in a complete manner. Among the 29 respondents who had a

near residential distance, there were five respondents who had not utilized antenatal care at all, while there were twenty-four respondents who had utilized antenatal care in its whole.

Within the scope of this investigation, there were ten participants who lived in outlying areas yet made full use of antenatal care. These factors can be positively influenced by having supportive partners and having good maternal knowledge. Five of the respondents, all of whom lived in close proximity to one another, did not make full use of antenatal care because they lacked information about pregnant women and their husbands did not provide assistance. a.s.

ANC (antenatal care) services were utilized in the working area of the Donok City Primary Health Care Center, which is located in the Lebong District. The Chi-Square test was utilized to assess the association between the distance of the mother's dwelling and the utilization of ANC services. With an asymptotic significance (ρ) value of 0.005. The null hypothesis (H_0) is rejected in favor of the alternative hypothesis (H_a) since a value of less than 0.05 suggests a meaningful

association. This suggests that there is a connection between the mother's living distance and the utilization of prenatal care (ANC) services in the Lebong District of the Donok City Primary Health Center.

Because of variables such as road tiredness and the expense of transportation, the mother's motivation to visit the health center may decline as a result of the distance which separates her residence from the facility. Women who are pregnant are keen to attend routine ANC visits because they are aware of the benefits that come with having regular pregnancy checkups (Nurfitriyani, 2021). This is the case even when they live in areas that are more remote from health facilities.

At the Suai Vilacovalima Public Health Centre in Timor Leste, Anita Joana Ferreira's earlier research from 2021 revealed that the chi-square test analysis produced a p-value of $0.007 < 0.05$, which led to the rejection of the null hypothesis (H_0) and the acceptance of the alternative hypothesis (H_1). This indicates that there is a connection between the distance visited and the number of K4 visits.

In accordance with the hypothesis of the research,

the distance of residency is another factor that can have a role in determining how mothers make use of antenatal care facilities. Traveling across long distances can be a time-consuming process, which may deter moms from going to the health institution to check on their pregnancy.

Associated husbands support and utilisation of antenatal care (ANC) services in the service area of Donok City PHC, Lebong District

Our study was carried out in the Lebong District service area of Donok City Primary Health Care Center, with a total of 25 participants who were married to men who did not provide financial support. When it came to antenatal care utilization, there were 16 respondents who had only partially utilized it, while there were 9 respondents who had utilized it completely. There were three respondents who had not utilized all of their antenatal care, while there were twenty-five respondents who had utilized all of their antenatal care despite having supportive husbands.

Nine of the women who participated in this study continued to make full use of antenatal care despite having spouses who were not

supportive of their pregnancy. This is something that can be affected by factors such as the proximity of the household and the level of mother understanding on antenatal care. Despite the fact that three of the respondents had husbands that were supportive, they did not make use of antenatal care opportunities. This could be influenced by the mother's lack of awareness about antenatal care as well as the distance between the mother's residence and the hospital.

In the service area of Donok City PHC, which is located in the Lebong District, the Chi-Square test was utilized in order to ascertain the connection between husband support and the utilization of antenatal care (ANC) services. With a sigmoid function (ρ) equal to 0.000. Because a value of less than 0.05 implies that there is a substantial link, we choose to reject the hypothesis of H_0 and accept the hypothesis of H_a . This indicates that there is a connection between the support of a husband and the utilization of prenatal care (ANC) services in the locality that is served by the Donok City Primary Health Care Center in the Lebong District.

For pregnant women, the

support of their husbands is the most important motivator since it makes it possible for them to change their behavior through compliance. When pregnant women have the support of their husbands, they are more likely to seek out high-quality medical care in order to protect not just their own health but also the health of the fetus that is still inside of them. The presence of a stimulus is required in order for a change in behavior to actually manifest as compliance. The support that is provided by the husband acts as a stimulant that kickstarts the process of engaging in behavior modification. Women who are pregnant are not only encouraged to respond by this stimulus, but it also fuels their excitement and motivates them to continue carrying their pregnancy. Women who are pregnant will first build a response, and then they will be given a stimulus to promote their compliance with ANC visits throughout their pregnancy. According to Sulistyowati (2021), pregnant women who become aware of the significance of ANC checks are more likely to take action.

Vitri Dyah (2022) did a study in the past that demonstrated that the level of knowledge and support that pregnant women and

their husbands had regarding antenatal care visits had a significant impact on the intensity of these visits (p-value greater than 0.05).

It is suggested by the researcher that the support of the husband can have an effect on the utilization of prenatal care facilities. Women who are pregnant might rely on their husbands as a support system. For mothers to successfully navigate the stages of pregnancy, particularly during the required ANC checks, they require guidance and encouragement during the entire process.

Research Issues

The researcher asserts that there are no problems or disagreements to be found.

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Author Contribution

TAPD was responsible for the preparation and gathering of data. Analyses of the data were carried out by JS. The writing was done by DARS.

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