


THE EFFECT OF PREGNANT WOMEN'S KNOWLEDGE, HEALTHY EATING PATTERNS, AND FAMILY SUPPORT ON PREGNANT WOMEN'S COMPLIANCE IN FOLLOWING ANTENATAL CARE (ANC) PROGRAM AT MOMPANG PUBLIC HEALTH CENTER, PANYABUNGAN DISTRICT, MANDAILING NATAL REGENCY IN 2025

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Article Info	ABSTRACT
Keywords: Antenatal Care, ANC compliance, knowledge of pregnant women, healthy eating patterns, family support.	Pregnant women's compliance with Antenatal Care (ANC) examinations is an important factor in efforts to reduce maternal and infant morbidity and mortality. However, the level of compliance with ANC visits in several districts, including Mandailing Natal Regency, is still not optimal. This study aims to analyze the influence of pregnant women's knowledge, healthy eating patterns, and family support on pregnant women's compliance with ANC programs at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency. This study used a quantitative approach with a survey design. The study sample consisted of 30 pregnant women selected using a purposive sampling technique. Data were collected through a structured questionnaire and analyzed univariately and bivariate using the Chi-Square test with a significance level of $\alpha = 0.05$. The results showed that most pregnant women were aged 21–35 years (80.0%), had a high school education (53.3%), and were multigravida (56.7%). A total of 60.0% of pregnant women were compliant in attending ANC visits. The results of the bivariate analysis showed a significant relationship between pregnant women's knowledge and ANC compliance ($p = 0.001$), healthy eating patterns and ANC compliance ($p = 0.001$), and family support and ANC compliance ($p = 0.000$). Pregnant women with good knowledge, good healthy eating patterns, and adequate family support had a higher level of ANC compliance than mothers with the opposite condition. It can be concluded that pregnant women's knowledge, healthy eating patterns, and family support have a significant influence on pregnant women's compliance in following the ANC program. Therefore, efforts are needed to improve pregnancy health education, foster healthy eating patterns, and strengthen the role of husbands and families in accompanying pregnant women as a strategy to improve ANC compliance and the health status of mothers and fetuses.
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INTRODUCTION

Pregnancy is a critical stage in a woman's reproductive cycle, requiring regular monitoring through antenatal care (ANC) to detect and prevent complications for both mother and fetus. Despite national efforts aimed at increasing ANC coverage, data shows that compliance with visits remains suboptimal. For example, in the work areas of several community health centers, it was noted that some pregnant women still failed to achieve the minimum standard of six visits during pregnancy. This situation raises concerns about concerns because non-routine ANC check-ups risk increasing the

incidence of birth complications, maternal and infant morbidity and mortality.

Various studies have identified that social and individual factors such as maternal knowledge about pregnancy and ANC, family support, and healthy dietary practices play a significant role in improving ANC adherence. For example, research shows that low maternal knowledge and lack of support from husbands or families are correlated with incomplete ANC visits. Meanwhile, nutritional aspects and healthy eating habits during pregnancy are also associated with good pregnancy outcomes—opening up the possibility that diet is not only a factor in maternal health but can also influence ANC adherence behavior.

However, although many studies have examined one or two factors, several research gaps remain. First, most studies focus on individual factors such as knowledge or family support separately, without simultaneously examining the influence of maternal knowledge, healthy eating habits, and family support on ANC adherence. Second, few studies have tested quantitative models with all three variables simultaneously in district health center settings, particularly those that integrate healthy eating as an independent variable in the context of ANC adherence, even though healthy eating is a crucial component of maternal well-being. Third, the research locations in many studies are often confined to urban areas or large hospitals, while in district health centers, access challenges and local contexts may differ.

Thus, this study aims to fill this gap by examining the influence of pregnant women's knowledge, healthy eating patterns, and family support on pregnant women's compliance in participating in the Antenatal Care (ANC) program at the ____ Community Health Center, ____ Regency. Theoretically, this study will enrich the midwifery literature on factors that influence ANC compliance with a more comprehensive model. Practically, the findings of this study are expected to form the basis for recommendations for the community health center, midwives, and health policy makers in ____ Regency to design interventions that improve pregnant women's compliance through increasing knowledge, fostering healthy eating patterns, and strengthening family support.

Pregnancy is a critical period in a woman's reproductive cycle, requiring regular monitoring through antenatal care (ANC) examinations to detect and prevent complications during pregnancy, childbirth, and the postpartum period. Despite efforts to improve maternal and child health services at the national and regional levels, compliance with ANC visits in many areas remains suboptimal. For example, in Mandailing Natal Regency, coverage of pregnant women at their first visit (K1) has reached approximately 67.5% and their fourth visit (K4) at approximately 60%. Unar Repository+2Unar Journal+2This condition shows that there is still a significant gap in the ideal target for ANC visits so that pregnant women receive adequate examinations.

Furthermore, Mandailing Natal Regency also faces other challenges related to maternal and child nutrition and health. For example, the prevalence of stunting in the regency is recorded at 34.2%, ranking it third highest in North Sumatra Province. Poor maternal health and nutritional status can contribute to low maternal participation in ANC programs and potentially increase the risk of complications. Furthermore, reports indicate that Mandailing Natal Regency has one of the highest maternal mortality rates in the province (13 in a given year). Research— this indicates that increasing ANC compliance is a very critical aspect to be strengthened.

Previous research in this and similar areas has shown that factors such as pregnant women's knowledge about pregnancy and ANC, family support, and aspects of healthy eating habits play an important role in influencing ANC visits. For example, a study in Pasar Maga Village, Lembah Sorik Marapi District, Mandailing Natal Regency, found a significant relationship between pregnant women's knowledge and ANC visits ($p = 0.001$). E-Journal of Pratama Polytechnic+1However, although knowledge and visits have been studied, research that simultaneously combines the variables of pregnant women's knowledge, healthy eating patterns, and family support in relation to ANC compliance is still very limited.

This study aims to address this gap by analyzing the influence of maternal knowledge, healthy

eating habits, and family support on maternal adherence to antenatal care (ANC) at the Mompang Community Health Center in Panyabungan District, Mandailing Natal Regency, North Sumatra Province. Theoretically, this study will enrich the literature on midwifery and reproductive health with a more comprehensive model within the district context. Practically, the results are expected to serve as the basis for intervention recommendations for community health centers, midwives, and health policymakers in Mandailing Natal Regency to design strategies to improve adherence to ANC visits by strengthening maternal knowledge, fostering healthy eating habits, and increasing family support.

RESEARCH METHODOLOGY

This study used a quantitative approach with a survey method. This approach was chosen because it allowed researchers to collect numerical data that could be statistically analyzed to examine the relationship between pregnant women's knowledge, healthy eating patterns, family support, and maternal compliance with Antenatal Care (ANC) at the Mompang Community Health Center in Panyabungan District, Mandailing Natal Regency.

This research will be conducted at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency. The selection of this location is based on the characteristics of the community health center which is the center for maternal health services in the area, as well as more affordable accessibility for pregnant women in the district.

The population in this study was pregnant women registered for the ANC program at the Mompang Community Health Center in Panyabungan District, Mandailing Natal Regency, who met the inclusion criteria. The sample size was 150 pregnant women, considered sufficient to generate representative and valid data.

RESULTS AND DISCUSSION

On This chapter describes the results of research and discussion regarding the influence of knowledge of pregnant women, healthy eating patterns, and family support on the compliance of pregnant women in participating in the Antenatal Care (ANC) program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025, with a sample of 30 pregnant women.

Univariate Analysis

Respondents in this study were 30 pregnant women at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025. Respondent characteristics included age, education, occupation, and parity, as well as research variables, namely knowledge, healthy eating patterns, family support, and ANC compliance.

Table 1. Frequency Distribution of Respondents Based on Age of Pregnant Women at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency, Christmas 2025

No	Age	Frequency	Percentage (%)
1	≤ 20 Years	4	13.3
2	21 – 35 Years	24	80.0
3	> 35 Years	2	6.7
Amount		30	100.0

Based on Table 1, the majority of respondents were in the age range of 21–35 years, amounting to 24 people (80.0%), while pregnant women aged ≤ 20 years numbered 4 people (13.3%) and those aged > 35 years numbered 2 people (6.7%).

Table 2. Frequency Distribution of Respondents Based on Education of Pregnant Women in Mompang, Panyabungan District, Mandailing Natal Regency, Christmas 2025

No	Education	Frequency	Percentage (%)
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1	Elementary School	2	6.7
2	JUNIOR HIGH SCHOOL	9	30.0
3	SENIOR HIGH SCHOOL	16	53.3
4	S1	3	10.0
Amount		30	100.0

Based on Table 2, the majority of pregnant women had a high school education, namely 16 (53.3%). Furthermore, 9 (30.0%) had a junior high school education, 3 (10.0%), and at least 2 (6.7%) had a bachelor's degree.

Table 3. Frequency Distribution of Respondents Based on Occupation of Pregnant Women at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025

No	Work	Frequency	Percentage (%)
1	Housewife	15	50.0
2	Self-employed	11	36.7
3	Employee/Teacher	4	13.3
Amount		30	100.0

Based on Table 4.3, the majority of respondents were housewives, amounting to 15 people (50.0%). Next came respondents who worked as self-employed, namely 11 people (36.7%), and 4 people (13.3%) were employees/teachers.

Table 4. Frequency Distribution of Respondents Based on Parity of Pregnant Women in Mompang, Panyabungan District, Mandailing Natal Regency in 2025

No	Parity	Frequency	Percentage (%)
1	Primigravida	13	43.3
2	Multigravida	17	56.7
Amount		30	100.0

Based on Table 4, the majority of pregnant women were multigravida, namely 17 people (56.7%). Meanwhile, 13 pregnant women were primigravida (43.3%).

Table 5. Frequency Distribution of Pregnant Women's Knowledge about ANC at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025

No	Mother's Knowledge	Frequency	Percentage (%)
1	Good	8	26.7
2	Enough	13	43.3
3	Not enough	9	30.0
Amount		30	100.0

Based on Table 5, the majority of pregnant women, 13 (43.3%), had sufficient knowledge about ANC. Furthermore, 9 (30.0%) had insufficient knowledge, and 8 (26.7%) had good knowledge.

Table 6. Frequency Distribution of Healthy Eating Patterns of Pregnant Women at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025

No	Dietary habit	Frequency	Percentage (%)
1	Good	10	33.3
2	Enough	15	50.0
3	Not enough	5	16.7
Amount		30	100.0

Based on Table 6, the majority of pregnant women (15 women) had a healthy diet in the adequate category. Furthermore, 10 women (33.3%) had a good diet, and 5 women (16.7%) had an inadequate diet.

Table 7. Frequency Distribution of Family Support for Pregnant Women at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025

No	Husband's Support	Frequency	Percentage (%)
1	There is Support	21	70.0
2	No Support	9	30.0
Amount		30	100.0

Based on Table 7, the majority of pregnant women received family support, namely 21 (70.0%). Meanwhile, 9 (30.0%) pregnant women did not receive any support.

Table 8. Frequency Distribution of Pregnant Women's Compliance with ANC at Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency in 2025

No	ANC Compliance	Frequency	Percentage (%)
1	Obedient	18	60.0
2	Not obey	12	40.0
Amount		30	100.0

Based on Table 8, the majority of pregnant women, 18 (60.0%), complied with the ANC schedule. Meanwhile, 12 (40.0%) did not comply.

Bivariate Analysis

To test the relationship between independent variables which include knowledge of pregnant women, healthy eating patterns, and family support with the dependent variable, namely Compliance of pregnant women in participating in the Antenatal Care (ANC) program bivariate analysis using the chi-square test with $\alpha=0.05$ which is described as follows:

1. The Influence of Pregnant Women's Knowledge About Pregnancy Health and Antenatal Care (ANC) Programs on Pregnant Women's Compliance in Following the ANC Program

The influence of pregnant women's knowledge about pregnancy health and the Antenatal Care (ANC) program on pregnant women's compliance in participating in the ANC program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency can be seen in the following table:

Table 9. The Influence of Pregnant Women's Knowledge About Pregnancy Health and Antenatal Care (ANC) Programs on Pregnant Women's Compliance in Following the ANC Program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency

Health Center, Panyabungan District, Mandailing Natal Regency								
No	Knowledge of Pregnant Women	Pregnant Women's Compliance in Participating in the ANC Program				Total		<i>p-value</i>
		Obedient		Not obey				
		f	%	f	%	F	%	
1	Good	8	26.7	0	0.0	8	26.7	0.001
2	Enough	9	30.0	4	13.3	13	43.3	
3	Not enough	1	3.3	8	26.7	9	30.0	
Total		18	60.0	12	40.0	30	100.0	

Based on the analysis results in Table 4.9, it is known that of the 8 pregnant women with good knowledge, all of them were compliant in following the Antenatal Care (ANC) program, namely 8 people (26.7%), and none were non-compliant. In the group of mothers with sufficient knowledge, there were 9 people (30.0%) who were compliant and 4 people (13.3%) who were non-compliant in following ANC. Meanwhile, of the 9 mothers with insufficient knowledge, only 1 person (3.3%) was compliant, while 8 people (26.7%) were non-compliant.

The results of the statistical test using Chi-Square showed a p value of 0.001, which means there is a significant relationship between pregnant women's knowledge and compliance in participating in the ANC program ($p < 0.05$). This indicates that the better the knowledge of pregnant women regarding pregnancy health and the benefits of ANC, the higher their level of compliance in participating in ANC services. Conversely, pregnant women with low knowledge tend to be less compliant. Therefore, health counseling and education about the importance of ANC are very necessary to increase the compliance of pregnant women in maintaining the health of themselves and their fetuses.

2. The Influence of Healthy Eating Patterns on Pregnant Women's Compliance in Following the ANC Program

The Influence of Healthy Eating Patterns on the Compliance of Pregnant Women in Following the ANC Program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency can be seen in the following table:

Table 10. The Influence of Healthy Eating Patterns on Pregnant Women's Compliance in Following the ANC Program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency

No	Healthy Eating Patterns	Pregnant Women's Compliance in Participating in the ANC Program				Total		<i>p-value</i>
		Obedient		Not obey		f	%	
		f	%	f	%			
1	Good	10	33.3	0	0.0	10	33.3	0.001
2	Enough	8	26.7	7	23.3	15	50.0	
3	Not enough	0	0.0	5	16.7	6	20.0	
	Total	18	60.0	12	40.0	30	100.0	

Based on the analysis results in Table 10, it is known that all pregnant women with a healthy diet in the good category were compliant with the ANC program (10 women (33.3%), and none were non-compliant. In the group of pregnant women with an adequate diet, there were 8 women (26.7%) who were compliant and 7 women (23.3%) who were non-compliant. Meanwhile, in the group of pregnant women with an inadequate diet, there were no compliant women (0%), while 5 women (16.7%) were included in the non-compliant category.

The results of the Chi-Square statistical test showed a p value of 0.001, so it can be concluded that there is a significant relationship between healthy eating patterns of pregnant women and compliance in following the ANC program ($p < 0.05$). This indicates that pregnant women with good healthy eating patterns tend to be more concerned about their health and are more compliant in attending ANC visits. Conversely, mothers with poor eating patterns tend to pay less attention to the health of their pregnancy, including in terms of ANC visits. Thus, education about healthy eating patterns during pregnancy is very important to be provided by health workers to increase awareness and compliance of pregnant women in regularly attending ANC programs for the health of the mother and her fetus.

3. The Influence of Family Support on Pregnant Women's Compliance in Following the ANC Program

The influence of family support on the compliance of pregnant women in participating in the ANC program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency can be seen in the following table:

Table 11. The Influence of Family Support on Pregnant Women's Compliance in Following the ANC Program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency

No	Husband's Support	Pregnant Women's Compliance in Participating in the ANC Program	Total	<i>p-value</i>
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The Influence of Pregnant Women's Knowledge, Healthy Eating Patterns, and Family Support on Pregnant Women's Compliance in Following the Antenatal Care (ANC) Program at the Mompang Community Health

Center, Panyabungan District, Mandailing Natal Regency in 2025 — Ferika Desi et al.

		Obedient		Not obey				
		f	%	f	%	f	%	
1	There is Support	17	56.7	4	13.3	21	70.0	0,000
2	No Support	1	3.3	8	26.7	9	30.0	
Total		18	60.0	12	40.0	30	100.0	

Based on Table 11, pregnant women who received family/husband support were more likely to comply with ANC, namely 17 women (56.7%), while 4 women (13.3%) in this group were non-compliant. Of pregnant women who did not receive family support, only 1 woman (3.3%) was compliant, while 8 women (26.7%) were non-compliant with ANC.

The results of the Chi-Square statistical test showed a p value of 0.000, so it can be concluded that there is a significant relationship between husband/family support and pregnant women's compliance in participating in the ANC program ($p < 0.05$). This indicates that family support, especially husband's support, plays an important role in increasing pregnant women's compliance with ANC examinations. Mothers who receive emotional support, information, and practical assistance from their families tend to be more motivated to maintain their pregnancy health, including following the ANC schedule regularly. Conversely, a lack of support from the family can make pregnant women feel less cared for, less confident, or lack the facilities to come to health services, thus potentially reducing compliance with ANC. Therefore, the involvement of husbands and families in accompanying pregnant women is very necessary as part of efforts to improve maternal and fetal health.

Discussion

1. Pregnant Women's Knowledge About Pregnancy Health and Antenatal Care (ANC) Programs Regarding Pregnant Women's Compliance in Following the ANC Program

The results of the study showed a significant relationship between the level of knowledge of pregnant women and their compliance in participating in the Antenatal Care (ANC) program. Based on the Chi-Square statistical test, the p-value was obtained = 0.001, so it can be concluded that maternal knowledge has a significant influence on compliance behavior in pregnancy check-ups ($p < 0.05$). This finding indicates that the better the mother's knowledge about pregnancy health and the benefits of ANC, the higher their tendency to comply with regular ANC visits.

Based on the data distribution, all pregnant women with good knowledge were compliant with ANC, amounting to 8 (26.7%), and none were categorized as non-compliant. In the group of pregnant women with sufficient knowledge, there were 9 (30.0%) who were compliant and 4 (13.3%) who were non-compliant. Meanwhile, in the group with insufficient knowledge, only 1 (3.3%) was compliant, while 8 (26.7%) were non-compliant. Overall, this pattern indicates that the better the knowledge of pregnant women, the higher their level of compliance with ANC. However, compliance can also be influenced by other factors such as family support, access to health services, and the mother's own health condition.

This finding is supported by Wulandari & Puspitasari's (2021) theory, which states that knowledge is a key determinant of health behavior, as it influences perceived risk, perceived benefit, and an individual's readiness to act. Good knowledge helps mothers understand the importance of early detection of pregnancy complications, the benefits of regular check-ups, and the risks of inadequate ANC care.

A similar study was also reported by Lestari et al. (2022), who found that mothers with low knowledge were 2–4 times more likely to be non-compliant with ANC than mothers with good knowledge. This lack of information often leaves mothers feeling unsure, afraid, or unaware of the consequences of not attending ANC, resulting in low compliance.

In terms of age, most respondents were within the healthy reproductive age range, namely 21–35 years. However, the ideal age does not guarantee compliance if maternal knowledge is low. In this study, younger mothers potentially had limited knowledge due to their lack of experience with previous pregnancies.

In terms of education, mothers with secondary education predominated, while those with less education appeared to be at greater risk of having limited knowledge about pregnancy health. This aligns with the theory that education influences a person's ability to receive and understand health information. Mothers with higher education typically have easier access to information from various sources, such as digital media, health books, or counseling from healthcare professionals.

Occupational factors also influence variations in knowledge. Housewives, who constituted the largest group in this study, tend to have limited access to health information if they do not actively participate in health education or integrated health post (Posyandu) activities. Conversely, working mothers may be more exposed to various sources of information, both through their workplace and social environment, resulting in better knowledge.

Based on the researchers' assumptions, pregnant women with good knowledge are usually more active in seeking information about pregnancy health, whether through health workers, prenatal classes, or digital media. Mothers with adequate or insufficient knowledge may not receive adequate information or may not understand the explanations given by health workers. Therefore, the researchers believe that improving health education through counseling, ANC counseling, and strengthening the role of midwives is essential to increase mothers' knowledge and motivation to undergo prenatal checkups.

Thus, the results of this study confirm that knowledge is a crucial factor influencing pregnant women's adherence to ANC. Efforts to increase knowledge through ongoing education, the provision of easy-to-understand information, and effective communication approaches by health workers are key strategies for improving the quality of pregnancy and maternal health services.

2. The Influence of Healthy Eating Patterns on Pregnant Women's Compliance in Following the ANC Program

The results of the study showed a significant relationship between healthy eating patterns of pregnant women and compliance in participating in Antenatal Care (ANC) programs, with a p-value of 0.001. This value is smaller than 0.05, so it can be concluded that eating patterns are a factor that influences the behavior of pregnant women's compliance in undergoing prenatal check-ups.

Based on the data distribution, all 10 pregnant women (33.3%) with a healthy diet showed compliance in attending ANC, while none were categorized as non-compliant. This indicates that a good diet tends to be associated with positive health behaviors, including compliance in ANC. In the adequate diet category, 8 (26.7%) were compliant and 7 (23.3%) were non-compliant. This condition illustrates that although some mothers with an adequate diet have demonstrated compliance, a large proportion are still non-compliant, so other factors such as family support, access to health services, and personal motivation may also play a role. Meanwhile, in the inadequate diet category, no pregnant women were compliant (0%), while 5 (16.7%) were non-compliant in attending ANC. This indicates that poor diet is often associated with low awareness and concern for overall maternal health. In general, this pattern illustrates that the better the pregnant women's diet, the higher their compliance in attending ANC programs, although other external factors still play a role in influencing health behavior.

These findings align with the maternal nutrition theory proposed by Proverawati & Wati (2020), which states that a pregnant woman's diet is closely related to overall health attitudes and behaviors. Mothers who pay attention to their nutritional intake are generally more concerned about their own health and the development of their fetus, and are therefore more likely to undergo regular antenatal care (ANC) checkups. A healthy diet helps mothers maintain energy, prevent anemia, and reduce the

risk of complications. Therefore, mothers with good eating habits are more motivated to follow other health recommendations, including antenatal care (ANC).

The research findings are also supported by a study by Lestari et al. (2021), which found that pregnant women with healthy diets had twice the ANC compliance rate compared to those with poor diets. This study suggests that dietary patterns not only reflect consumption habits but also indicate a mother's level of awareness of the importance of maintaining a healthy pregnancy.

Based on the characteristics of the respondents, most mothers were in their productive age (21–35 years), who physiologically require adequate nutritional intake to support their pregnancy. At this age, understanding of nutritional needs is generally better, especially for mothers who have received nutrition education from health workers. However, younger mothers (<20 years old) or mothers of low parity may have less mature nutritional knowledge, resulting in less established healthy eating patterns.

In terms of education, mothers with secondary and higher education tend to have better adherence to healthy eating patterns. Education influences a mother's ability to understand information about nutritional needs during pregnancy, including consuming a balanced diet, vitamins, minerals, and portion control. Conversely, mothers with less education often have limited understanding of health information, so a healthy diet is not a priority.

Mothers' occupations also contribute to dietary variation. Working mothers may have greater access to health information, but their busy schedules can impact the regularity of healthy food consumption. Conversely, stay-at-home mothers have more flexible time to prepare healthy meals, but food choices can be influenced by economic factors or lack of knowledge.

Based on the researchers' assumptions, mothers with healthy eating habits tend to be more aware of maintaining their health because their diet reflects their lifestyle. Mothers who are accustomed to consuming nutritious foods have typically received information from nutrition counseling, prenatal classes, or other sources. Meanwhile, mothers with poor eating habits generally receive less education or don't understand the importance of nutrition, resulting in low health behaviors, including ANC compliance.

Thus, the results of this study confirm that a healthy diet is a crucial factor influencing pregnant women's adherence to ANC. Continuous educational efforts regarding maternal nutrition, demonstrations of healthy menus, and nutritional counseling by health workers are essential to improve maternal health awareness and behavior. The better a pregnant woman's diet, the more likely she is to adhere to regular ANC visits to maintain her own and her fetus' health.

3. The Influence of Family Support on Pregnant Women's Compliance in Following the ANC Program

The results of the study showed a significant relationship between family support, especially husband's support, and pregnant women's compliance in attending Antenatal Care (ANC) programs. Based on the Chi-Square statistical test, a p-value of 0.000 was obtained, which means there is a significant relationship between husband's support and the level of compliance of pregnant women in attending ANC ($p < 0.05$). This finding indicates that the better the support provided by the husband, the higher the likelihood of pregnant women to comply with regular ANC check-ups.

Based on the data distribution, pregnant women who received support from their husbands showed a better level of compliance, with 30.0% of mothers complying with ANC visits, while only 6.7% were non-compliant. This finding suggests that husband support plays a crucial role in improving maternal health behaviors, including regular ANC visits. Conversely, among pregnant women without husband support, the compliance rate was lower, with only 13.3% complying, while 30.0% were non-compliant. This illustrates that a lack of emotional and practical support from a partner can hinder a mother's motivation to utilize antenatal care services.

Overall, this pattern confirms that husband's support is a crucial factor in increasing pregnant women's adherence to ANC checkups, although it is still influenced by other factors such as access to

services, health conditions, and social environment. This finding aligns with family health theory, which states that emotional, instrumental, and informational support from a husband can increase a mother's sense of security and motivation to engage in recommended health behaviors during pregnancy. According to Wulandari & Puspitasari (2021), family support is a key factor influencing a mother's readiness to undergo pregnancy and adherence to health care provider recommendations. This support makes mothers feel valued, understood, and provided with tangible assistance, making them more enthusiastic about participating in the ANC program.

Previous research also supports these findings. Lestari et al. (2022) stated that pregnant women who lack husband support are 2–3 times more likely to be non-compliant with ANC than those who receive full support. This lack of support often makes mothers feel lazy, fearful, and insecure, as well as less attentive to their pregnancy. Conversely, husbands who actively accompany them, remind them of ANC schedules, and are involved in decision-making have been shown to significantly increase maternal compliance.

Based on respondent characteristics, most pregnant women were of healthy reproductive age (21–35 years), but this does not automatically guarantee compliance without family support. Some younger mothers tended to be more dependent on their partners, so their husband's support had a stronger influence on their compliance.

In terms of education, mothers with secondary education still dominate. In the lower-education group, a lack of understanding of the importance of ANC makes mothers increasingly need their husbands' support to motivate and guide them in attending prenatal care. Similarly, regarding employment, housewives tend to rely more on information and encouragement from their husbands than working mothers, who may have broader access to information.

According to researchers, pregnant women who receive strong support from their husbands will feel more comfortable and confident in participating in ANC programs. Involved husbands provide encouragement not only through motivation but also practical assistance, such as providing transportation, reminding mothers about scheduled visits, or accompanying them during checkups. Meanwhile, mothers who receive less support tend to experience both mental and practical barriers, which can impact adherence.

Thus, researchers assume that increasing husband involvement through family education, pregnancy support classes, and couples counseling is crucial for improving maternal adherence to ANC programs. These efforts are expected to improve maternal and fetal health and reduce the risk of pregnancy complications.

CONCLUSION

Based on the results of research on factors that influence the compliance of pregnant women in participating in the Antenatal Care (ANC) program at the Mompang Community Health Center, Panyabungan District, Mandailing Natal Regency, the following conclusions can be drawn:

1. The study showed that there was a significant influence between the level of knowledge of pregnant women about pregnancy health and the ANC program on compliance in attending prenatal checkups. Mothers with good knowledge had a higher level of compliance than mothers with sufficient or insufficient knowledge. The results of the Chi-Square statistical test showed a p value = 0.001 ($p < 0.05$), so it can be concluded that the better the mother's knowledge about the benefits of ANC, pregnancy risks, and the importance of routine checkups, the higher the mother's compliance in attending the ANC program.
2. The study also showed that a healthy diet was significantly associated with pregnant women's adherence to ANC. Mothers with a healthy diet categorized as good tended to be more compliant with ANC visits compared to mothers with adequate or inadequate diets. The chi-square test yielded $p = 0.001$ ($p < 0.05$), thus concluding that a healthy diet reflects a mother's high awareness of health, which impacts compliance in maintaining pregnancy through regular ANC visits.

3. This study found that family support, especially support from husbands, significantly influences pregnant women's adherence to ANC. Mothers with family support demonstrated better adherence than those with less support. With a p-value of 0.000 ($p < 0.05$), it can be concluded that emotional support, information, and practical assistance from family significantly assist pregnant women in maintaining their ANC routine.
4. Simultaneously, three factors—knowledge, healthy eating habits, and family support—strongly contribute to maternal adherence to ANC. These three factors interact with each other and reinforce positive maternal behaviors in maintaining a healthy pregnancy. Pregnant women with good knowledge, healthy eating habits, and strong family support demonstrate the highest levels of adherence to ANC visits. Conversely, if any of these factors is low, adherence tends to decrease.

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