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Factors Related to Anemia In Pregnant Women at Hj. Dermawati Nasution Clinic in 2021

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ABSTRACT

Background: Anemia is a global health problem that is often found in the community. The World Health Organization (WHO) states that globally the prevalence of pregnant women suffering from anemia is 83.2% and in Southeast Asian countries the prevalence of anemia is 97.8%. Objective: This study aims to determine the relationship between ANC visits, pregnancy spacing and diet with anemia in pregnant women at the Hj Dermawati Nasution clinic in Medan Tembung in 2021. Methods: This type of research used an analytical survey with a cross sectional approach. The study population was 32 respondents and sampling used primary data from interviews and questionnaires as well as secondary data from the MCH book at the Hj Dermawati Nasution clinic in Medan Tembung in 2021. The sample used the Total Population technique, namely the entire population. Chi-square statistical test. Results: The data obtained from the results of statistical tests with Chi-square concluded that there is a relationship between ANC visits and anemia in pregnant women (p = 0.004 < = 0.05), there is a relationship between distance between pregnancy and anemia in pregnant women (p = 0.004 < = 0.05). p = 0.003 < = 0.05), and there is a relationship between food consumption patterns and anemia in pregnant women (p = 0.000 < = 0.05) at the Hj Dermawati Nasution clinic, Medan Tembung 2021. Conclusion: This study has a relationship between visits ANC interval of pregnancy and food consumption patterns with anemia in pregnant women.

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1. INTRODUCTION

Pregnancy is something that is beautiful and certainly most expected by married couples, to continue their offspring. However, sometimes in pregnancy something unexpected happens, such as pregnant women who have problems during pregnancy or have a high risk during childbirth

such as anemia, this is very dangerous for pregnant women and their fetuses because of the decrease in hemoglobin levels in the body, so the body have few red blood cells or cannot carry oxygen to various organs of the body, if pregnant women suffer from anemia or iron deficiency are more at risk of bleeding during childbirth

Anemia occurs because the level of hemoglobin in red blood cells is low. Normally, the hemoglobin level in the blood is about 12g/100 ml. Hemoglobin level 9-11 g/100 ml moderate anemia, hemoglobin level 6-8 g/100 ml, is moderate anemia, while levels less than 6 g/100 ml is severe anemia. The amount of hemoglobin in each red blood cell will determine the blood transporting oxygen from the lungs throughout the body, including the blood vessels that supply food and oxygen to the fetus.(1)

Antenatal care is a visit for pregnant women with health workers to get ANC services in accordance with established standards. (2) Pregnancy spacing that is too close between previous pregnancies and subsequent pregnancies poses a good risk to the development of the pregnancy. After the birth of a previous pregnancy, the uterine wall has not returned to its fertility so it is not ready to accept pregnancy. The risk that may arise is the occurrence of abortion, pregnancy does not develop, and fetal development is not optimal. (3)

The pattern of food consumption is the arrangement of the type and amount of food consumed by a person or group of people at a certain time. People's consumption patterns can show the level of community food diversity and consumption patterns of various information descriptions regarding the type and amount of food that is eaten every day.(1)

According to WHO (World Health Organization, 2015) anemia is one of the most common global health problems found in the community, especially during pregnancy. The World Health Organization (WHO) states that globally, the prevalence of pregnant women suffering from anemia is 83.2%, while in countries in Southeast Asia it has a prevalence of 97.8%. This shows that the prevalence of anemia in pregnant women in Southeast Asia exceeds the global prevalence. (4)

Reducing the Maternal Mortality Rate (MMR) is still a major problem, namely the 2015-2030 Sustalnable Development Goals (SDGs). Anemia is one of the non-obstetric factors of AKI. The prevalence of anemia found in various countries. The World Health Organization (WHO) predicts that around 27% of adolescent girls in developing countries suffer from anemia.(5)
Based on the results of the Basic Health Research (RISKESDAS, 2018) the proportion of anemia in pregnant women in 2013 was (37.1%) while in 2018 it increased to (48.9%). Anemia of pregnant women according to age 15-24 years (33.7%), age 25-34 (33.6%), age 35-44 (24%), and age 45-54 years (84.6%). (6)

Based on the North Sumatra Health Office (North Sumatra Health Office, 2017) one of the efforts to reduce the prevalence of anemia is by giving 90 tablets of iron (Fe) during pregnancy. The percentage of pregnant women who received 90 iron tablets in Karo Regency in 2017 was (51.03%), this decreased compared to 2016 which was (77.7%) or there was a decrease of (26.67%). With this coverage presentation, the coverage of giving iron tablets during pregnancy has not been able to reach the national target set at (80%).(7)

Based on the 2016 Medan City Health Profile which was carried out in 4 regencies/cities in North Sumatra, namely the city of Medan, Binjai, Deli Serdang and Langkat districts, it is known that (40.50%) female workers suffer from anemia. One of the efforts made to reduce the prevalence of anemia is by giving 90 tablets of iron (Fe) during pregnancy. The coverage of pregnant women who received 90 iron (Fe) tablets in the city of Medan in 2016 was (84.2%) from 47,259 pregnant women.(8)

The initial survey was conducted by researchers with direct interviews with pregnant women at the Hj Dermawati Nasution Tembung clinic from 6 pregnant women. There is 1 pregnant woman who is anemic with hb (10.0 g%) because the mother does not regularly (regularly) make ANC visits and the mother does not know how important ANC visits are during pregnancy, there is 1 pregnant woman who is mildly anemic with hb (9.7 gr%) because the distance between the mother's pregnancies is too close and there are 2 pregnant women with poor food consumption patterns such as mothers eating less than 3 times a day and not consuming vegetables, fruit, foods containing animal such as meat, fish , eggs, and vegetables such as tempeh and tofu who are affected by anemia and there are 2 pregnant women with good food consumption patterns such as pregnant women eating 3 times a day, consuming vegetables, and containing animals such as meat, eggs, chicken and vegetables such as tofu and tempeh. who are not anemic. This condition is very concerning and affects the development and growth of the fetus.

This study aims to determine the "Relationship between ANC Visits, Pregnancy Distance and Food Consumption Patterns with Anemia in Pregnant Women at Hj. Dermawati Nasution Medan in 2021".

2. RESEARCH METHODE

The research design is part of the research that contains a description of the description of the research flow that describes the mindset of researchers in research which is commonly called the research paradigm. (22) The design in this study is an Analytical survey method with a cross-sectional approach that aims to determine the relationship between ANC visits Pregnancy Distance and Food Consumption Patterns with Anemia in Pregnant Women at Hj Dermawati Nasution Tembung Clinic.

The location of this research was carried out at the Hj Dermawati Nasution clinic Tembung Pasar IX Gg. Friends, because there are cases of anemia in pregnant women. The time of the research was carried out in January-March 2021.

3. RESULT AND ANALYSIS

RESULT

Univariate Analysis

Univariate analysis is used to describe the data that is carried out on each variable from the research results. The data are presented in the frequency distribution table.

Table 1 Distribution of ANC Visits Frequency, Pregnancy Distance, Food Consumption Patterns in Pregnant Women with Anemia at Hj Dermawati Nasution Clinic, Medan Tembung in 2021

Variable	F	%
ANC Kunjungan visit		
Incomplete	18	56,3
Complete	14	43,8
Pregnancy Distance		
<2 years	26	81,3
>2 years	6	18,8
Food consumption pattern		
Well	5	15,6

Enough	20	62,5
	7	21,9
Not enough		
Anemia	23	71,9
Anemia	19	28,1

Based on table 1, the distribution of the frequency of ANC visits to pregnant women who experience anemia at the Hj Dermawati Nasution clinic in Medan in 2021 from 32 pregnant women who experience anemia based on complete ANC visits as many as 18 people (56.3%) and complete as many as 14 people (43.8 people). %). There were 26 people (81.3%) with anemia based on gestational distance 2 years and 6 people (18.8%) with pregnancy >2 years apart. There were 5 people (15.6%) who had anemia based on good food consumption patterns, 20 people (62.5%) were enough and 7 people (21.9%). There were 23 people with anemia (71.9%) and 19 people without anemia (28.1%).

Bivariate Analysis

After knowing the characteristics of each variable in this study, the analysis was carried out at the bivariate level. To determine the relationship (correlation) between the independent variable (independent variable) with the dependent variable (dependent variable).

To prove the existence of a significant relationship between the independent variable and the dependent variable, chi-square analysis was used at the statistical significance limit of the p-value (0.05). If the calculation results show the p value <p-value (0.05) then it is said (Ho) is rejected (Ha) is accepted, meaning that the two variables have a statistically significant relationship. Then to explain the association (relationship) between the dependent variable and the independent variable used cross tabulation analysis.(22)

Table 2 Distribution of frequency of ANC visits, pregnancy distance and food consumption patterns with anemia in pregnant women at Hj Dermawati Nasution clinic, Medan Tembung in 2021

Variable	ANEMIA				Total		*P (sig)*
	Anemia		No Anemia				
	f	%	f	%	F	%	
ANC Kunjungan visit							
Incomplete	17	53,1	1	3,1	18	56,3	
Complete	6	18,8	8	25,0	14	43,8	0,004
Pregnancy Distance							
<2 years	22	68,8	4	12,5	26	81,3	0.003
>2 years	1	3,1	5	15,6	6	18,8	
Food Consumption Pattern							
Well	0	0	5	15,6	5	15,6	
Enough	16	50,0	4	12,5	20	62,5	0,000
Not enough	7	21,9	0	0	7	21,9	
ANC Kunjungan visit							

Based on table 2, the distribution of the frequency of ANC visits with anemia in pregnant women at the Hj Dermawati Nasution clinic in Medan in 2021 from 32 people (100%). There were 18 incomplete ANC visits (56.3%) and 17 people (53.1%) anemia and 1 person (3.1%) who did not have anemia, while 14 people did complete ANC visits (43.8%) and 6 people with anemia

(18.8%) and 8 people without anemia (25.0%). Experiencing Anemia based on gestational distance 2 years from 26 people (81.3%) who experienced Anemia as many as 22 people (68.8%) and 4 people (12.5%) who did not experience anemia, while pregnancy distance >2 years from 6 1 person (18.8%) had anemia (3.1%) and 5 people (15.6%) did not experience anemia. Experiencing Anemia based on good food consumption patterns from 5 people (15.6%) consisting of 0 people experiencing anemia (0%) and not experiencing anemia as many as 5 people (15.6%), based on enough food consumption patterns from 20 people (62.5%) experienced anemia as many as 16 people (50.0%) and did not experience anemia as many as 4 people (12.5%) while based on food consumption patterns less than 7 people (21.9%) experienced anemia as many as 7 people and 0 people who do not have anemia (0%).

DISCUSSION

Relationship between ANC Visits and Anemia in Pregnant Women at Hj Dermawati Nasution Clinic, Medan Tembung in 2021

Based on the chi-square test with a 95% confidence level and a value of = 0.05, it can be seen that the p value = 0.004 < = 0.05, which means that there is a relationship between ANC visits and anemia in pregnant women at the Hj Dermawati Nasution clinic, Medan Tembung in 2021.

Midwives provide at least 4 times Antenatal services during pregnancy. Services include history taking and careful monitoring of the mother and fetus to assess whether development is normal. Midwives should also be aware of high-risk pregnancies or the presence of abnormalities, especially anemia. The midwife should also record proper data at each visit. If abnormalities are found, the midwife must be able to take the necessary actions and make referrals.(23)

Based on research conducted by Suyani in 2017, that statistical tests using the chi-square test obtained p-value = 0.035 (p = <0.05), it can be concluded that there is a significant relationship between ANC visits and anemia in pregnant women. Third Trimester at BPM in Tri Rahayu Sleman 2017.(24)

According to the research assumptions, pregnant women who did incomplete ANC visits≤4 times experienced anemia because some mothers were busy working as traders so that mothers did not have time to check their pregnancy at midwifery, and many mothers did not get information about anemia and did not know how to prevent it. and there are many pregnant women who are afraid to do Hb checks, then pregnant women who do complete ANC visits >4 times but still experience anemia because mothers often forget and don't regularly take Fe tablets that are given during ANC visits, because mothers feel I feel nauseous when I take Fe tablets, so my mother doesn't take it regularly. My mother said that if she doesn't feel sick again, she will take it again.

Relationship between Pregnancy Distance and Anemia in Pregnant Women at Hj Dermawati Nasution Clinic, Medan Tembung in 2021

Based on the chi-square test with a 95% confidence level and a value of = 0.05, it can be seen that the value of p = 0.003 < = 0.05, which means that there is a relationship between pregnancy distance and anemia in pregnant women at the Hj Dermawati Nasution clinic, Medan Tembung in 2021.

The distance between pregnancies is too close is the distance between one pregnancy and the next is less than 3 years, a distance that is too close can cause, among others, miscarriage, anemia, heart failure, premature birth, low birth weight and others. Pregnancy spacing of less than 2 years

is one of the risk factors for preterm labor. Because a pregnant woman takes 2-3 years to recover her body and prepare herself for the next pregnancy.(25)

Based on research conducted by Suyani in 2017, that statistical tests using the chi-square test obtained p-value = 0.001 (p = <0.05), it can be concluded that there is a significant relationship between the distance between pregnancy and anemia in pregnant women. Third Trimester at BPM Tri Rahayu Sleman 2017.(24)

According to the researcher's assumption, pregnancy distance is related to anemia where there is harmony between theory, data results, research and previous research, where a pregnancy distance that is too close will be very dangerous because the reproductive organs have not returned to their original condition and the mother's energy condition has not allowed it. to accept the next pregnancy because a pregnant woman takes 2-3 years to be able to recover her body again.

Relationship between food consumption patterns and anemia in pregnant women at Hj Dermawati Nasution Clinic Medan in 2021

Based on the chi-square test with a 95% confidence level and the value of = 0.05, it can be seen that the p value = 0.000 < = 0.05, which means that there is a relationship between food consumption patterns and anemia in pregnant women at the Hj Dermawati Nasution clinic, Medan Tembung in 2021

Food consumption patterns that need to be formed in an effort to meet nutritional needs. Inappropriate eating patterns will lead to excess nutrient intake or vice versa. Excess intake causes excess weight and less food intake can cause the body to become thin and susceptible to disease. Fulfillment of food needs that are adjusted to the mother's condition. Mothers with anemia should pay attention to the consumption of food sources of iron.(21)

Based on research conducted by Dameria Magdalena Tambunan in 2018, the statistical test results obtained p value = 0.005 < 0.05, which means that there is a significant relationship between food consumption patterns and anemia in pregnant women in the working area of the Puskesmas.(26)

According to the research assumptions, pregnant women with adequate diets experience anemia because many pregnant women who answered the questionnaire that their mothers did not eat 3 times a day did not consume fruits, vegetables, fish, meat, milk and even many pregnant women said they often consume food. fast food such as meatballs, fried foods and others. Then there are many pregnant women who do not take Fe tablets and additional vitamins and do not consume milk with the excuse that there is no cost to buy it. Then pregnant women with poor eating patterns with anemia where these pregnant women experience excessive nausea and vomiting and mothers have no appetite to eat and cannot drink milk because they feel nauseous and do not consume Fe tablets regularly while pregnant women really need macronutrients (carbohydrates). , fat, and protein) or micro (vitamins and minerals).

4. CONCLUSION

Based on the chi-square test with 95% confidence level and the value of =0.05, it can be seen that the value of p=0.004 > =0.05, which means that there is a relationship between ANC visits and anemia in pregnant women. Chi-square test has a 95% confidence level. and the value of = 0.05, it can be seen that the value of p = 0.003 < = 0.05 which means that there is a relationship between pregnancy distance and anemia in pregnant women. it is known that the p value = 0.000 < = 0.05, which means that there is a relationship between food consumption patterns and anemia in pregnant women at the Hj Dermawati Nasution clinic, Medan Tembung in 2021.

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