

**Factors Associated with Pregnant Women's Compliance
Consuming Fe Tablets at Aek Kanopan Hospital
North Labuhanbatu in 2023**

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Abstract.

Pregnant women are the result of fertilization from sperm which results in the mother carrying a fetus in her womb, namely in her womb. According to 2014 WHO and UN International Children's Emergency Fund (UNICEF) estimates in Azinar's discussion, 529,000 women still die every year due to complications from their pregnancies, and almost 90% of these deaths occur in sub-Saharan Africa. and Asia. The number of mothers who experienced death according to the Indonesian Ministry of Health, namely due to pregnancy and childbirth, reached 5019 people. Based on an initial survey conducted from 13 to 15 March 2023 at Aek Kanopan Regional Hospital, North Labuhanbatu District, there were 7 pregnant women.

Method: This research uses a quantitative analytical research type with the research design used being a cross sectional approach design, where this cross sectional design is the collection of research data carried out once or simultaneously. The aim of this research was to determine the relationship between knowledge, the role of health workers and ANC on compliance with consuming Fe tablets in pregnant women. The population of this study were pregnant women at Aek Kanopan Regional Hospital, North Labuhanbatu District. In this study, the number of samples was based on this formula with a total population and sample of 37 samples.

Results: The results of the study show that there is a relationship between knowledge and compliance with consuming Fe tablets in pregnant women with a p-value of $0.001 < 0.05$, the role of health workers with a p-value of $0.009 < 0.05$, family support with a p-value of $0.006 < 0.05$ and ANC with a p-value of $0.002 < 0.05$ are associated with adherence to consuming Fe tablets in pregnant women.

Conclusion: There is a relationship between knowledge and compliance with consuming Fe tablets in pregnant women with a p-value of $0.001 < 0.05$. There is a relationship between the role of health workers and compliance with consuming Fe tablets in pregnant women with a p-value of $0.009 < 0.05$. There is a relationship between family support and compliance with consuming Fe tablets in pregnant women with a p-value of $0.006 < 0.05$. There is a relationship between ANC and compliance with consuming Fe tablets in pregnant women with a p-value of $0.002 < 0.05$.

Keywords: Knowledge, Health Workers, Family Support, ANC, Compliance

I. Introduction

The causes of maternal mortality are pregnancy, childbirth, postpartum, and does not include accidents or falls and so on in 100,000 live births (Ministry of Health of the Republic of Indonesia, 2015). In Indonesia, in 2012, according to the SDKI, the number of MMR reached 359/100,000 live births, and according to SUPAS data in 2015, the number of MMR also reached 305 per 100,000 live births. However, Indonesia is still categorized as having failed or not succeeded in achieving the target set in number 5 of the MDGs in 2015 because the MDGs set a target to reduce by $\frac{3}{4}$ the risk of maternal death for each country to 102 per 100,000 live births in 2015. (Indonesian Ministry of Health in Santoso, Kurniati, ST, & Keb, 2018).

It can be classified into 2 factors that cause maternal mortality, namely direct causes and indirect causes. The direct causes include bleeding during pregnancy and childbirth, infection during the postpartum period, eclampsia during labor and postpartum pregnancy, obstructed labor in mothers giving birth, amniotic fluid embolism and so on. Meanwhile, indirect causal factors can include disorders during pregnancy such as lack of protein energy in the body, chronic lack of energy in the body and lack of iron in the body or what is called anemia (Kenang, Maramis, & Wowor, 2019).

The number of mothers who experienced death according to the Indonesian Ministry of Health, namely due to pregnancy and childbirth, reached 5019 people. Meanwhile in Indonesia, the cause of AKI is around (34%) caused by bleeding (27%) caused by hypertension during pregnancy, (5%) caused by infection and around (34%) caused by others such as tuberculosis, malaria and lack of nutrients. iron in the blood, cardiographic diseases and so on. However, after reviewing it, the biggest cause of Maternal Mortality Rate (MMR) is bleeding experienced by the mother, while the cause of bleeding is caused by a lack of iron in the body or what is usually called anemia, which is also called an indirect cause of maternal death. (Sumarmi, 2017).

In Indonesia, the prevalence of pregnant women complaining of a lack of iron in the body or anemia has increased compared to 2013, where in 2013 there were around 37.1% of pregnant women experiencing anemia. In 2018, there was an increase of around 48.9% (Ministry of Health, 2018). Anemia

is a body condition where the number of erythrocytes or red blood cells is below normal or too small. The benefits of red blood cells are to bind oxygen and carry it throughout the body (Pemiliana, Oktafirmanda, & Santi, 2019).

There are 2 factors that cause anemia, namely direct and indirect. The mother's compliance in taking blood supplement tablets, the mother's parity, the mother's pregnancy interval, the infections experienced by the mother and the mother's nutritional status are direct factors that cause anemia in the mother during pregnancy. The most dominant cause of mothers experiencing anemia is the lack of iron content in pregnant women's bodies due to the mother's non-compliance in taking blood supplement tablets or fe tablets. This is what makes the incidence of anemia still high due to a lack of iron intake in the body (Suhartati, Hestiana, & Rahmawati, 2017).

II. LITERATURE REVIEW

The International Federation of Obstetrics and Gynecology states that pregnancy is a meeting of egg cells and sperm cells and they unite and ferment or implant in the uterine wall. Pregnancy is also called the intermediate or transitional period from before the mother has a child to having a child after struggling for approximately 9 months to conceive and fighting for the birthing process so that a baby is born as a result of her fertilization (Ekasari. Tutik et al. Early Detection of Preeclampsia with Antenatal Care, 2019).

Anemia can also be defined as a hemoglobin (Hb) content that is below normal in the blood. (WHO, 2015). The American National Institute of Health (NIH) states that this anemia can occur when the iron content in the body is insufficient or low (Fikawati, Syafiq, & Veretamala, 2017). Anemia is a condition where the number of erythrocytes in the body is small or less than normal. Red blood cells themselves function in carrying oxygen throughout the body. (Susiloningtyas, 2020). The anemia that every pregnant woman usually complains about is caused by an increase in iron requirements during pregnancy, which is around 90% experienced two to three times more than before pregnancy. The greatest need for iron during pregnancy is

around the last four weeks of pregnancy. Pregnant women's need for iron can be sufficiently helped because women during pregnancy do not menstruate so they do not experience bleeding like women in general during menstruation and apart from that, during pregnancy there is an increased process of iron absorption from the food consumed by the mother by the intestinal mucosa, or depending on Does your mother's nutritional intake during pregnancy contain a lot of iron or not? Based on the results of several opinions expressed above, anemia in pregnancy is a condition where the hemoglobin content decreases or the content is below normal than required by the body due to a lack of nutritional intake containing iron consumed by the mother during the mother's pregnancy from the third trimester of pregnancy. one to the third trimester as much as <10.5gr%. (Tarwoto and Wasnidar in Retnorini, Widatiningsih, & Masini, 2017)

One of the factors supporting whether pregnant women comply or not is maternal awareness. According to Rahmawati and Subagio (2012), when pregnant women consume blood supplement tablets, there are several factors that influence this, namely the role of health workers in providing services, the mother's knowledge or insight about blood supplement tablets, motivation and family participation.

1. Knowledge

Mother's knowledge and insight are very necessary to shape a person's attitudes and actions. A person's actions will be better if a person's knowledge is high or good too. This knowledge is also closely related to a person's education. If a person's education is low, it will have a big influence on receiving information to respond to instructions given by health workers. For this reason, counseling is carried out for pregnant women in order to help increase the mother's knowledge and insight about fe tablets, their benefits, how to consume them, when is the best time to consume them and what risks can occur if they do not comply with the consumption, assisted by providing a brochure to the mothers. mothers, leaflets and directing

mothers to discuss among themselves to exchange ideas about additional blood tablets, pregnancy, etc. Not only that, patients are also asked to remain active in providing information about their pregnancy either via the internet, magazines, newspapers or television so that mothers with low knowledge can be helped.

If a mother whose knowledge is categorized as low is also ignorant in seeking information, this can have a negative impact on the mother and fetus. And patients whose knowledge or insight is good will still be reminded to maintain that knowledge. (Mulyani, 2017).

Knowledge is influenced by several factors including: (Santoso et al., 2018).

a. Mother's educational status

Education is a person's ability to develop abilities and personality. (either formal or informal), and lasts throughout life. Education is a process that functions to change a person's behavior and progress towards maturity for the better. This process can be obtained from teaching and training. Education also influences a person's way of learning because a person's higher education will make it easier for that person to accept the information or knowledge conveyed. If a person's educational status is high, that person will be more likely to obtain information, from anywhere, such as from colleagues, parents, husband and even from social media.

b. Social media/Information

Information is something that can be known and understood, but some people also say that information is also called a delivery of knowledge or teaching that is useful or not. Not only that, this information can also be defined as a technique for concluding, analyzing, manipulating, preparing, conveying and disseminating for certain purposes.

c. Economic and socio-cultural

Traditions or habits that people believe are carried out without thinking about the effects, benefits and risks first. In this case, one's knowledge is really needed to analyze the good and bad of the actions taken. A person's ability to facilitate themselves and their health depends on a person's economic status. This is because whatever is needed must be bought and redeemed

with money. So it can be concluded that the level of a person's knowledge is also greatly influenced by a person's economic level.

d. Surrounding environment

The location around us or our environment can be defined as everything in our environment, whether physical, social or biological. Our daily environment also influences a person's grasp of knowledge and teaching. This happens because there is a response between each individual.

e. Someone's experience

A person's experience or insight is the source of knowledge, which is a technique for obtaining information that is considered good in knowledge to replay the knowledge gained to solve problems experienced in the past.

f. A person's age or age

Age also influences a person's receptiveness to the desired information. If a person's age is higher, they tend to be more receptive to teaching. This makes it easy for the person giving the information to explain and provide information. And the information received will be easily understood.

III. RESEARCH METHODS

3.1 Research Types and Designs

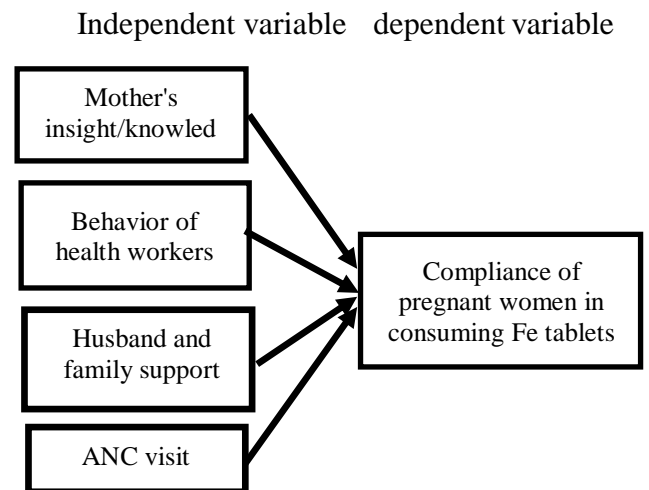
This research uses a quantitative analytical research type with the research design used being a cross sectional approach design, where this cross sectional design is the collection of research data carried out once or simultaneously at a certain time (point time) and with a quantitative approach (Machfoedz, 2016). The analysis used in this research is univariate and bivariate analysis. Bivariate analysis in this research uses the chy squert test, namely to find out how big the relationship is between one variable and another. Therefore, a temporary hypothesis or conjecture is needed in this research.

3.2 Time and Place for Research

This research was conducted from April to June 2023 at Aek Kanopan Regional Hospital, North Labuhanbatu Regency

3.3 Conceptual Framework

What was studied were factors related to pregnant women's compliance in consuming Fe tablets



Scheme 3.2 conceptual framework

IV. RESEARCH RESULTS AND DISCUSSION

4.1 Research Results

4.1.1 Univariate Analysis

a) Knowledge

Table 4.1 Frequency Distribution of Pregnant Women According to Knowledge

Knowledge	Frequency	Percentage
Good	27	73%
Not good	10	27%
Total	37	100%

Based on Table 4.1 above, it shows that of the 37 people, more than 27 (73%) people indicated that their mother's knowledge was in the good category and the others. 10 (27%) mothers' understanding was lacking.

b) Role of Health Workers

Table 4.2 Frequency Distribution of Health Worker Roles

Role of Health Workers	Frequency	Percentage
Positive	21	57%
Negative	16	43%
Total	37	100%

Based on Table 4.2 above, it shows that out of 37 people, according to the role of health workers, they are in the positive category, namely 21 people (57%) and 16 others (43%) have a negative role.

c) Family support

Table 4.3 Frequency Distribution of Family Support

Family support	Frequency	Percentage
Positive	22	60%
Negative	15	40%
Total	37	100%

Based on Table 4.3 above, it shows that of the 37 people, more than 22 people (60%) indicated that family support was in the positive category and 15 other people (40%) had little or negative family support.

d) ANC

Table 4.4 ANC Frequency Distribution

ANC	Frequency	Percentage
In accordance	13	35%
It is not in accordance with	24	65%
Total	37	100%

Based on table 4.4 above, it shows that 13 (35%) pregnancy checks were appropriate and 24 (65%) were not appropriate.

4.2 Discussion

4.2.1 Relationship between knowledge and compliance with taking Fe tablets in pregnant women

The results of the chi-square statistical test show that the p-value is $0.001 < 0.05$, which means there is a relationship between knowledge and compliance with consuming Fe tablets in pregnant women.

Knowledge is part of a person's behavior, the beginning of someone doing an action is usually caused by someone's knowledge about what they are going to do. This shows that someone who is equipped with good knowledge will influence his actions and these changes will last longer. The broader a person's knowledge, the easier it is for people to make changes in their actions (Putri, 2021).

According to researchers, a person's knowledge is closely related to a person's mindset in receiving or analyzing the information they get from print/non-print media and even social media. In this process there are several factors that influence a person's level of knowledge, namely awareness which is closely related to the concept of understanding (Hardipratiwi, 2022).

According to researchers' assumptions, pregnant women's lack of knowledge about foods that are good for pregnant women, apart from that, low intake of foods containing iron, lack of mother's curiosity about the importance of consuming Fe tablets during pregnancy can cause iron deficiency anemia in pregnancy.

4.2.2 Relationship between the role of health workers and compliance with taking Fe tablets in pregnant women

The results of the chi-square statistical test show that the p-value is $0.009 < 0.05$, which means there is a relationship between the role of health workers and compliance with consuming Fe tablets in pregnant women.

Health workers play an important role in the level of compliance of pregnant women in consuming Fe tablets. Health workers include:

As communicators, officers provide clear information to patients. Providing information is very necessary to condition the lack of public knowledge regarding health and disease. As a motivator, the officers asked about the compliance of pregnant women with taking Fe tablets according to the provisions and whether there was sufficient availability. Listen to the mother's complaints with full moral support

during her pregnancy. As a facilitator for clients to achieve optimal health (Handayani L, 2013).

4.2.3 Relationship between family support and compliance with taking Fe tablets in pregnant women

The results of the chi-square statistical test show that the p-value is $0.006 < 0.05$, which means there is a relationship between family support and compliance with consuming Fe tablets in pregnant women.

According to research conducted by (Thena, Evodia, 2017) in his research on the relationship between family support and nutritional status with the incidence of anemia in pregnant women in the working area of the Ladja health center, Ngada district, NTT, it was stated that there was no significant relationship between husband's support and the incidence of anemia in pregnant women. . Because based on a field survey conducted there were 31 respondents from pregnant women who received less support from their husbands and did not experience anemia, but this result is contradictory to research conducted (Indra & FATIMAH, 2016) regarding husband support for pregnant women with anemia status at the Sedayu I Health Center and Sedayu II and also research conducted by (Aisyah & Fitriyani, 2016) regarding the relationship between ANC frequency, husband's support, work and the incidence of anemia in pregnant women, which states that there is a significant relationship between the relationship between husband's support and the incidence of anemia in pregnant women. The form of support provided can be informative, emotional attention, instrumental assistance, and assessment.

Meanwhile, sources of social support can be obtained from family, husband, people who have emotional ties, and basically everyone needs support in carrying out or creating an action of behavior, including pregnant women.

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

1. There is a relationship between knowledge and compliance with consuming Fe tablets in pregnant women with a p-value of $0.001 < 0.05$.
2. There is a relationship between the role of health workers and compliance with consuming Fe tablets in pregnant women with a p-value of $0.009 < 0.05$.
3. There is a relationship between family support and compliance with consuming Fe tablets in pregnant women with a p-value of $0.006 < 0.05$.
4. There is a relationship between ANC and compliance with consuming Fe tablets in pregnant women with a p-value of $0.002 < 0.05$.

5.2 Suggestions

1. For the Health Institute to improve health education, especially for pregnant women, to comply with the consumption of Fe tablets.
2. For the public to increase insight into the importance of consuming Fe tablets, especially for pregnant women.
3. For future researchers, especially STIKes Mitra Husada Medan students, to develop this research variable.

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