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Description Of The Compliance Of Pregnant Women In Consuming Fe Tablets At Puskesmas Kumbe City Of Bima, 2023

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ABSTRACT

Programs to prevent anemia in pregnant women by providing iron (Fe) supplements but the results have not been very satisfactory, as seen from the prevalence rate which is still high. According to WHO (2019) the prevalence of anemia in pregnant women in Indonesia is 41.8%. The results of the 2018 Indonesian Basic Health Research showed that 48.9% of pregnant women in Indonesia experienced anemia and this percentage had increased compared to the 2013 Riskesdas data, which was 37.1%. Data from the NTB Health Office shows the number of pregnant women suffering from anemia has increased between 2019 and 2020. In 2019 there were 9% of pregnant women in NTB who had anemia, increasing to 10.88% (The purpose of this study is to find out the description of pregnant women's compliance in consuming Fe tablets at the Kumbe Health Center in 2023. This type of research is research *quantitative descriptive*by design *Cross Sectional.* The population is pregnant women at the Kumbe Health Center in 2023 504 people with a sample of 50 people used the technique *accidental sampling.* Data analysis used univariate analysis by calculating the frequency distribution. The results of this study indicate that the adherence of mothers in consuming Fe tablets at the Kumbe Health Center in 2023 is mostly in the obedient category, namely 30 people (60%). And those who did not comply were 20 people (40%), Compliance of Pregnant Women consuming Fe Tablets based on the level of knowledge at the Kumbe Health Center, Disobeying consuming Fe tablets with sufficient knowledge, namely 20 people (40%), Compliance of Pregnant Women consuming Fe Tablets based on motivation at Most of the compliant pregnant women consuming Fe tablets with high motivation were 20 people (40%), the adherence of pregnant women consuming Fe tablets was based on family support at the Kumbe Health Center that most of the obedient pregnant women consumed Fe tablets with family support 25 respondents (50%) Compliance with pregnant women consuming Fe tablets based on the frequency of ANC visits at the Kumbe Health Center with good ANC visits frequency of 20 pregnant women (40%), Compliance with pregnant women consuming Fe tablets based on slight side effects of 20 respondents (40 %),

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1. INTRODUCTION

According to the World Health Organization (WHO), anemia in pregnant women is a threat of "potential danger to mother and child", therefore all parties involved in health services must be aware of anemia in pregnant women (Kassa et al., 2018). According to Riskesdas RI (2018), Between the ages of 15 to 24 years, 84.6% of pregnant women experience anemia, based on the findings of the 2018 Riskesdas, 48.9% of pregnant women in Indonesia experience anemia with 84.6% anemia occurring in pregnant women aged 15 -24 years old (Indonesia Health Profile, 2020). Data from the NTB Health Office shows that the number of pregnant women suffering from anemia increased between 2019 and 2020. In 2019 there were 9% of pregnant women in NTB who experienced anemia increased to 10.88% (NTB Provincial Health Office, 2020).

Based on data from the Bima City Health Office in 2020 the Kumbe Health Center was in first place out of seven health centers in the city of Bima for cases of anemia in pregnant women of 32.5% (Profile of the Bima City Health Office, 2020).

Risk factors for anemia are low iron intake, low iron absorption which can be caused by consuming foods that contain phytates and phenols. In addition, the occurrence of anemia is also caused by chronic energy deficiency (CED), age, parity, nutritional status and consumption patterns (Aditianti, Permanasari & Julianti, 2015).

The impact of anemia on pregnancy can occur abortion, premature delivery, inhibition of fetal growth and development, antepartum bleeding. At the time of delivery it can cause premature rupture of membranes (PROM), hissing disorders, and during the puerperium it can cause postpartum hemorrhage, puerperal infections and inhibit milk production (Setiawati et al. 2014).

The Indonesian government has taken a number of steps to address the problem of anemia. The strategy that has been implemented by the government in the form of promoting iron-rich foods, preventing worms, and providing Fe tablets has shown a reduction in the problem of anemia, but the prevalence of anemia is still quite high (Marry, 2015).

2. METHOD

The type of research used in this research is quantitative research. The design of this study uses a descriptive method, namely the researcher only provides an overview of the state of the object. This research was conducted by providing an overview of the state of the object. This research was conducted by providing an overview of pregnant women's compliance in consuming iron (Fe) tablets. The instrument used in this study was a questionnaire in the form of written questions used to obtain data or information about the adherence of pregnant women to consuming Fe tablets.

Then these results were interpreted by interpreting the data obtained and asked to follow the guidelines for prescribing compliance with iron (Fe) tablets by pregnant women at the Kumbe Health Center. The study population was 504 pregnant women at the Kumbe Health Center based on data from 1 January 2023 -30 May 2023.

The number of samples in this study were 50 people. The instrument used in this study was a questionnaire in the form of written questions used to obtain data or information about maternal adherence to taking Fe tablets.

The data sources used to analyze the problems in this study were primary data, which were used derived from the results of distributing questionnaires to 50 respondents to get the results the researchers needed and secondary data, data taken from maternal and child health manuals and from the cohort of pregnant women, namely data pregnant women who are anemic or not anemic.

3. RESULTS AND DISCUSSION

The results of this study were 50 respondents, the results obtained were the category of pregnant women who were obedient in consuming Fe tablets, namely

Frequency distribution of adherence of pregnant women in consuming Fe tablets

Table 1 Frequency Distribution of Adherence of Pregnant Women Consuming Fe Tablets at the Kumbe Health Center in 2023

No.	Compliance Category	f	(%)
1	***Comply***	20	40
2.	***Disobedient***	30	60
	Total	**50**	**100**

Frequency distribution of adherence of pregnant women in consuming Fe tablets based on level of knowledge

Table 2 Distribution of the Frequency of Compliance of Pregnant Women Consuming Fe Tablets based on the level of knowledge at the Kumbe Health Center in 2023

Obedience	Good	Enough	Less	Amount

	f	%	f	%	f	%	f	%
Comply	10	20	5	10	5	10	20	40
Disobedient	9	18	20	40	1	2	30	60

Based on table 2 above, it shows that the majority of pregnant women who comply with good knowledge are 10 respondents (20%), only 5 respondents (10%) adhere to consuming Fe tablets, obediently consume Fe tablets with less knowledge, namely 5 respondents (10%), while pregnant women who did not adhere to consuming Fe tablets with good knowledge were 9 people (18%), did not adhere to consuming Fe tablets with sufficient knowledge, namely 20 people (40%) and did not adhere to consuming Fe tablets with less knowledge as much as 1 respondents (2%).

Distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on the level of motivation

Table 3 Distribution of the Frequency of Compliance of Pregnant Women Consuming Fe Tablets based on motivation at the Kumbe Health Center in 2023

Obedience	Height		Low		Amount	
	f	%	f	%	f	%
Comply	20	40	10	20	30	60
Disobedient	10	20	10	20	20	40

Based on table 3 above, it shows that the majority of pregnant women who adhere to consuming Fe tablets with high motivation are as many as 20 people (40%), obediently consuming Fe tablets with low motivation are as many as 10 respondents (20%), while those who are disobedient with high motivation are as many as 10 people (20%) and disobedient with low motivation as many as 10 people (20%).

Frequency distribution of adherence of pregnant women in consuming Fe tablets based on family support

Table 4 Frequency Distribution of Adherence of Pregnant Women Consuming Fe Tablets based on family support at the Kumbe Health Center in 2023.

Obedience	There is		There isn't any		Amount	
	f	%	f	%	f	%
Comply	25	50	5	10	30	60
Disobedient	10	20	10	20	20	40

Based on table 4, it was found that the frequency distribution data showed that the majority of pregnant women who adhered to consuming Fe tablets with family support were 25 respondents (50%), obediently consuming Fe tablets with no family support, namely as many as 5 people (10%), while those who 10 respondents (20%) did not comply with family support and 10 respondents (20%) did not comply because there was no family support.

Distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on the frequency of ANC visits

Table 5 Distribution of the Frequency of Adherence of Pregnant Women Consuming Fe Tablets based on the frequency of ANC visits at the Kumbe Health Center in 2023

Obedience	Good		Less		Amount	
	f	%	f	%	f	%
Comply	20	40	10	20	30	60
Disobedient	10	20	10	20	20	40

Based on table 5, it was obtained the frequency data that the majority of pregnant women who adhered to taking Fe tablets with good frequency of ANC visits were as many as 20 pregnant women (40%), adherent to consuming Fe tablets with less frequency of ANC visits as many as 10 pregnant women (20%), while 10 pregnant women (20%) did not adhere to consuming Fe tablets with good ANC visit frequency and 10 pregnant women (20%) did not adhere to taking Fe tablets with less ANC visit frequency.

Frequency distribution of adherence of pregnant women in consuming Fe tablets based on side effects

Table 6 Frequency Distribution of Adherence of Pregnant Women Consuming Fe Tablets based on side effects

Obedience	Lots		A little		Amount	
	f	%	f	%	f	%
Comply	10	20	20	40	30	60
Disobedient	10	20	10	20	20	40

Based on table 6, it was found that the majority of pregnant women who adhered to consuming Fe tablets with many side effects were as many as 10 people (20%), obediently consuming Fe tablets with few side effects were 20 respondents (40%), while pregnant women who were not compliant consuming Fe tablets with many side effects, namely as many as 10 respondents (20%) and not adhering to taking Fe tablets with few side effects, namely 10 respondents (20%).

DISCUSSION

Based on the results of the research that has been done, the discussion will be described as follows:

Compliance of pregnant women in consuming Fe tablets

Based on Table 1. regarding adherence of pregnant women, the majority of pregnant women who were compliant in consuming Fe tablets were 20 respondents (40%) while pregnant women who were not compliant in consuming Fe tablets were 30 respondents (60%). For this reason, an appropriate strategy is needed for counseling about Fe tablets so that pregnant women are more obedient in consuming Fe tablets. Then the author will describe the factors that influence pregnant women's compliance in consuming Fe tablets, namely the level of knowledge, motivation, family support, frequency of ANC visits, and side effects. After review, it turned out that there were other factors that influenced the adherence of pregnant women in consuming Fe tablets, namely the lack of supporting facilities when carrying out IEC (Turn Sheets or Leaflets), health workers who did not explain the benefits of Fe tablets, the impact if the mother did not consume Fe tablets, and the curiosity of pregnant women about the benefits of Fe tablets. In addition, it is hoped that mothers will play an active role in seeking information about Fe tablets in order to increase the knowledge of pregnant women in consuming Fe tablets. If it's only passive, it will have a negative impact on the level of maternal adherence in consuming Fe tablets. For pregnant women who are compliant in taking Fe tablets, they must always be maintained and remembered to always take Fe tablets.

Based on the results of research conducted by Tsara Mufidah (2018), according to the author's assumptions that compliance in consuming Fe tablets was mostly due to the correct way of taking Fe tablets and the frequency of consuming them per day, while the non-compliance of respondents was obtained from the accuracy of the number of tablets consumed. (Tsara Mufidah, et al., 2018).

It is also supported by the theory that adherence to taking iron tablets is measured by the accuracy of the number of tablets consumed, the accuracy of how to take iron tablets, the frequency of consumption per day. Iron supplementation or administration of Fe tablets is an important effort in preventing and treating anemia, especially iron deficiency anemia. Iron supplementation is an effective way because the iron content is complemented by folic acid which can prevent anemia due to folic acid deficiency. (Rahmawati, 2012).

Knowledge

Based on Table 2. distribution data obtained that most of the compliant pregnant women with good knowledge were 10 respondents (20%), obediently consuming Fe tablets with sufficient knowledge of only 5 respondents (10%), obediently consuming Fe tablets with less knowledge only 1 respondent (2 %), while 9 respondents (18%) did not adhere to consuming Fe tablets with good knowledge, 20 respondents (40%) did not adhere to consuming Fe tablets and 1 respondent did not adhere to consuming Fe tablets with less knowledge (2%). For this, an appropriate strategy is needed for counseling about Fe tablets so that people understand more about the benefits of Fe tablets, after reviewing those that affect pregnant women's knowledge about the benefits of Fe tablets, namely the lack of supporting facilities when carrying out IEC (turnsheets or leaflets), health workers who explaining too much using medical language and the feeling of ignorance of these pregnant women about the benefits of Fe tablets.

In addition, pregnant women are expected to play an active role in seeking information about iron tablets in order to increase the knowledge of pregnant women who are not good. If only passive, it will have a negative impact on their level of knowledge. For pregnant women who already have good knowledge, it must always be maintained and remembered the material that was previously given.

Based on the results of research conducted by Rena Regina (2013), according to the author's assumption that non-adherence of pregnant women in taking iron tablets as recommended by health workers is an impact of their ignorance about the importance of adequate iron intake during pregnancy. The knowledge possessed by pregnant women will influence their behavior. Pregnant women with good nutrition knowledge will also try to provide adequate nutrition for themselves and their fetus. Knowledge of pregnant women about iron will have an impact on attitudes towards food by applying the information obtained in providing foods that contain iron sources to meet the needs during pregnancy. (Rena Regina, et al., 2013)

It is also supported by the theory which states that knowledge is a domain of behavior that is influenced by several factors both from internal factors such as physical and spiritual as well as external factors such as gender, age, occupation, parity, education, experience, economy, social relations, and information. So that the differences in the characteristics of the respondents which include the age of work and education of the respondents (Notoatmoddjo, 2010)

Motivation

Based on Table 3. It was found that the distribution data showed that the majority of pregnant women who adhered to consuming Fe tablets with high motivation were 20 respondents (40%), obediently consuming Fe tablets with low motivation were 10 respondents (20%), while disobedient with high motivation were 10 respondents (20%) and disobedient with low motivation as many as 10 respondents (20%). The better the motivation, the more obedient pregnant women are in consuming Fe tablets because motivation is an internal human condition such as desires and expectations that encourage individuals to behave in order to achieve the goals they want.

Based on the results of research conducted by Rizqi Nur Alifah (2016), according to the author's assumption that someone who has good motivation means that he will encourage someone to do something good, for example having motivation in taking Fe tablets because of the desire to maintain the health of himself and his womb (Rizqi, 2016)

Also supported by theory, motivation is a desire within a person that encourages him to behave. Good motivation in consuming Fe tablets arises from the desire to prevent anemia and maintain the health of pregnant women and their fetuses. The better the motivation, the more obedient pregnant women are in consuming Fe tablets because motivation is an internal human condition such as desires and expectations that encourage individuals to behave in order to achieve the goals they want (Budiarni, 2012).

Family support

Based on Table 4, distribution data obtained that the majority of pregnant women who adhered to consuming Fe tablets with family support were 25 respondents (50%), obediently consuming Fe tablets in the absence of family support were 5 respondents (10%), while pregnant women who were

disobedient consuming 10 respondents (20%) took Fe tablets with family support and 10 respondents (20%) disobeyed taking Fe tablets without family support. based on family support that the family has a significant role in supporting the mother to consume Fe tablets regularly. Mothers often forget to take Fe tablets regularly and even stop taking them if there is no support from their family.

Based on the results of research conducted by Vicky Agit Permana (2019), according to the author's assumption, family support is supportive attitudes and actions, always ready to provide assistance if needed. This proves that there is a relationship between family support and obedience. (Vicky, 2019)

This is also supported by theory, family support is an effort made by including family participation as an important basic factor that is around pregnant women by empowering family members, especially husbands to help pregnant women in increasing adherence to taking iron tablets. This effort is very important, because a pregnant woman is an individual who does not stand alone, but she joins a marriage bond and lives in a household where the husband's factor will influence her mindset and behavior, including treating her pregnancy (Amperaningsih, 2011).

Frequency of ANC Visits

Based on Table 5. distribution data obtained that the majority of pregnant women who adhere to consuming Fe tablets with good frequency of ANC visits are as many as 20 respondents (40%), adherent to consuming Fe tablets with less frequency of ANC visits as many as 10 respondents (20%), while pregnant women who are not compliant consuming Fe tablets with good frequency of ANC visits as many as 10 respondents (20%) and non-compliant taking Fe tablets with less frequency of ANC visits as many as 10 respondents 20%).

According to Fitri's research (2015), states that the majority of mothers consume Fe tablets, pregnant women get Fe tablets or iron supplements during ANC visits. The higher the gestational age of the mother, the more likely the mother has had contact with health care facilities and received iron supplements and explanations from health workers, so that if the mother makes frequent ANC visits it is expected that the mother will be more obedient in taking iron supplements. Providing iron supplements is one type of integrated antenatal service in ANC activities, as well as communication, information, and education (IEC) regarding Fe tablet supplementation. (Fitri, 2015)

Based on the results of research conducted by Rizqi Nur Alifah (2016), according to the author's assumption, the role of health workers is to provide health services to the community, such as during ANC visits and providing health education to the community. Health services for pregnant women, in addition to prenatal check-ups, are also accompanied by administration of Fe tablets to prevent iron anemia in pregnant women. The purpose of giving Fe tablets is to prevent iron anemia in pregnant women. There are several factors that affect the compliance of pregnant women in consuming Fe tablets, including the behavior of health workers where adherence can be further improved if health workers are able to provide nutritional counseling, especially regarding Fe tablets and maternal health and its contents (Rizqi, 2016)

Also supported by the theory According to the Indonesian Midwives Association (IBI), to detect anemia in pregnancy a pregnant woman's hemoglobin level is checked. The first examination is carried out before the 12th week of pregnancy and the 28th week. It is recommended to check hemoglobin levels in the first and third trimesters of pregnancy, often only being carried out in the third trimester because most pregnant women only have their pregnancies checked in the second trimester of pregnancy so that hemoglobin checks in pregnancy does not work as it should (Asyirah, 2012).

Side Effects

Based on Table 6. distribution data obtained that the majority of pregnant women who adhere to consuming Fe tablets with many side effects are as many as 10 respondents (20%), adherent to consume Fe tablets with few side effects as many as 20 respondents (40%), while pregnant women who do not adhere to taking tablets There were 10 respondents (20%) with many side effects of Fe, and 10 respondents (20%) who did not adhere to taking Fe tablets with few side effects.

This is supported by research from Budiarni that preventing anemia by consuming Fe tablets does have unpleasant side effects. Pregnant women feel nauseous due to the taste and smell of the Fe

tablet itself. In addition, Fe tablets consumed every day cause boredom, so pregnant women often forget and feel lazy to consume them. (Budiarni, 2012)

It is also mentioned in the theory that side effects are the effects after consuming Fe tablets experienced by some pregnant women. It has long been believed to be one of the main factors causing low maternal adherence. Some pregnant women reported that they experienced nausea and vomiting after taking Fe tablets, which made them not want to continue taking Fe tablets. (Achadi, 2013)

The results of this study indicate that the majority of pregnant women are not compliant in consuming iron (Fe) tablets at the Kumbe Health Center, Bima City, namely 30 people (60%). Compliance with consuming Fe tablets was measured by adherence to how to consume, when to consume and how often to consume. The results of this research are in accordance with the results of a study conducted by Adila Novelani (2021) which states that pregnant women who do not adhere to consuming Fe tablets include compliance with the number of tablets consumed more than adherents.

Compliance with taking Fe tablets in pregnant women can be measured by the accuracy of the number of tablets taken, the accuracy of the intake regimen and the frequency of consumption per day, especially in the prevention and treatment of anemia, iron deficiency.

Based on some of these theories, this research is in line with the previous theory that the accuracy of the number of Fe tablets and the expected frequency of intake per day determines the dose that must be consumed every day.

The survey results showed that many respondents were caused by irregular doses. This problem should be overcome by providing counseling during ANC visits. In addition, implementing management techniques that prevent pregnant women from forgetting to take their pills (such as placing Fe tablets where they can be seen every day) can help overcome this problem.

Given the importance of Fe during pregnancy in preventing iron deficiency anemia and the side effects of anemia during pregnancy, these findings suggest educating pregnant women to supplement Fe during pregnancy, motivation and follow-up need to be strengthened. Fe tablets are not indicated for the treatment of disease but as a food supplement needed by pregnant women to meet the needs of iron during pregnancy, possible side effects and tensions that must be overcome. The side effects are harmless and mild. Therefore, Fe must be taken properly and regularly, without worrying or fear of a cold, drink it with water, not milk, coffee or tea, and drink it at night. In addition, Fe tablets can be oxidized, so the problem of Fe preservation must also be properly solved.

Compliance with iron tablet dosage is defined as the behavior of pregnant women who follow all recommendations recommended by experts when consuming Fe tablets. The inability of pregnant women is affected by the role of midwives who do not provide counseling about the importance of taking Fe tablets during pregnancy.

4. CONCLUSION

the distribution of adherence of pregnant women in consuming Fe tablets at the Kumbe Health Center in 2023 was 14 respondents (70%). The distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on knowledge at the 2023 Kumbe Health Center was the highest, namely pregnant women who obeyed with good knowledge of 10 respondents (20%). The distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on motivation at the Kumbe Health Center in 2023 was the highest, namely pregnant women who adhered to taking Fe tablets with high motivation as many as 20 respondents (40%). The distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on family support at the Kumbe Health Center in 2023 was the highest, namely 25 respondents (50%). The distribution of the frequency of adherence of pregnant women in consuming Fe tablets based on the frequency of ANC visits at the Kumbe Health Center was the highest, namely pregnant women who obediently took Fe tablets with good ANC visit frequency as many as 20 respondents (40%). The frequency distribution of adherence of pregnant women in consuming Fe tablets based on side effects at the Kumbe Health Center in 2023 was the highest, namely pregnant women who adhered to consuming Fe tablets with few side effects, namely as many as 20 respondents (40%)

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