

## THE CORRELATION BETWEEN KNOWLEDGE AND ATTITUDE WITH COMPLIANCE WITH FE TABLET CONSUMPTION IN ANEMIA OF PREGNANT WOMEN IN THE THIRD TRIMESTER

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### ABSTRACT

*Anemia in pregnancy increases the risk of miscarriage, premature birth, low birth weight, bleeding after delivery. Anemia can be prevented by consuming a balanced nutritious diet and giving 90 tablets of Fe during pregnancy. The purpose of this study was to determine whether there was a correlation between knowledge and attitude with adherence to Fe tablet consumption in pregnant women with anemia in the third trimester in the working area of Merakurak Health Center. The research design used an observational analytic design with a cross-sectional approach. The sampling technique was simple random sampling. The population was 21 pregnant women with Third Trimester anemia in the working area of the Merakurak Health Center and a sample of 20 people. The contingency coefficient test using SPSS 21 obtained a value of 0.036 ( $p < 0.05$ ) meaning there was a correlation between knowledge and compliance and the contingency coefficient test is 0.264 ( $p > 0.05$ ) meaning there was no correlation between attitude and compliance. So it was suggested for more intensive socialization and supervision by families with a control card for Fe tablet consumption in pregnant women with anemia in the third trimester.*

**Keywords:** Knowledge, Attitude, Compliance, Consumption of Fe tablets

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### INTRODUCTION

Maternal and child health gets great attention from countries in the world because pregnant women are a group that is vulnerable to nutritional problems. Pregnant women are said to be anemic if the hemoglobin (Hb) level is less than 11 g%.<sup>1</sup> Anemia in pregnant women is the

biggest and most difficult macronutrient problem in the world. Pregnant women with anemia have a 3,82 times higher risk of death than pregnant women who are not anemic. To prevent anemia, every pregnant woman is expected to get a blood-supplementing tablet of at least 90 tablets during pregnancy

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In Indonesia, the prevalence of anemia in pregnant women is still very high, namely 48,9%, and those who consume Fe tablets <90 tablets are 61.9% and > 90 tablets are 38,1%.<sup>4</sup> In East Java the prevalence of anemia in pregnant women was 56,1 % and those who consumed Fe tablets < 90 tablets were 63,66% and > 90 tablets 36,34%.<sup>4</sup> Data for pregnant women in Tuban Regency in 2020 as many as 16,853 pregnant women, there are 2,199 (13,84%) pregnant women who are anemic. While in the working area of the Merakurak Health Center, Tuban Regency in 2020 as many as 465 pregnant women, data were obtained from 13 people (2,79%) of pregnant women who were anemic in TM I and increased in TRIMESTER KE TIGA as many as 45 people (9,67%).<sup>5</sup> The need for iron in pregnant women is different at each gestational age, in the first trimester it increases from 0.8 mg/day to 6.3 mg/day in the third trimester. The need for iron in the second and third trimesters cannot be met from food alone, although the food is eaten is of good quality and the bioavailability of iron is high, iron must also be supplied from other sources. Anemia in pregnancy can increase the risk of childbirth complications, such as premature birth, low birth weight (LBW),

fetal abnormalities, abortion, low intelligence, easy bleeding, and shock due to weak uterine contractions.

The distribution of Fe tablets at the Merakurak Health Center to pregnant women is only carried out when pregnant women check their pregnancy. The provision of iron tablets and their distribution is one of the factors that are considered the most influential in the success of the iron supplementation program. The main reasons for pregnant women not taking/consuming Fe tablets during pregnancy are dislike, nausea/vomiting due to pregnancy, boredom, forgetfulness, side effects, the time has not run out.<sup>4</sup> If iron supplements are not consumed by pregnant women, the effects of taking iron supplements are which is expected will not be achieved. So that the increase in general health status which is expected to increase will not be achieved.

Human behavior is an activity or human activity, both directly observed, and which cannot be observed by outsiders.<sup>7</sup> Factors for the formation of behavior are from predisposing factors which include knowledge, attitudes, beliefs, values, enabling factors, namely facilities/facilities. health and reinforcing factors are decision-makers.<sup>8</sup>

From the results of observations made on 8 pregnant women with TRIMESTER KE TIGA anemia in the working area of the Merakurak Health Center, 4 pregnant women who regularly take Fe tablets (50%) know the benefits of Fe tablets for pregnancy. Meanwhile, 4 people (50%) pregnant women said they did not take Fe tablets regularly because 3 people forgot, 1 person was bored and 1 person didn't taste good. Knowledge is a factor that can make it easier for someone to do what they do. Education, occupation, age, environment, and socio-culture affect a person's knowledge.<sup>9</sup>

Pregnant women will consume Fe tablets if they know the content, benefits, needs, and side effects and the right time to take it. When an anemic pregnant woman accepts and is responsible for her belief in Fe tablets, it will determine her attitude in assessing Fe tablets as beneficial or harmful.<sup>7</sup> Positive attitudes tend to approach, like, and expect certain objects. A negative attitude tends to stay away, to avoid Compliance is an individual attitude that can be seen in trusting, accepting, and doing things at the request or orders of others. The compliance of pregnant women in consuming iron tablets is calculated from the number of tablets consumed compared

to the amount that should be consumed. A pregnant woman is said to be obedient to taking iron tablets when the number of iron tablets consumed is 90% of the number of iron tablets that should be consumed.<sup>1</sup>

The distribution of Fe tablets to female students in each junior high and high school in the working area of the Merakurak Health Center is expected to minimize the incidence of anemia before pregnancy. In addition, to prevent anemia in pregnancy, pregnant women are expected to be obedient in consuming Fe tablets during pregnancy. The explanation of the friendly staff can help accept the knowledge and attitudes of pregnant women towards the Fe tablets they receive. The need for supervision from the family to remind pregnant women not to forget to take Fe tablets.

## MATERIAL AND METHOD

The design of this study used an observational analytic design with a cross-sectional approach. The population in the study were all pregnant women with anemia in the third trimester in the working area of the Merakurak Health Center totaling 21 people in June - July 2021. The sample in the study was some

pregnant women with the third trimester anemia in the working area of the Merakurak Health Center totaling 20 people in June - July 2021. The independent research variables are knowledge and attitudes, the dependent

variable is adherence to Fe tablet consumption in pregnant women with anemia in the third trimester. To analyze with SPSS 21 (Statistical Package for the Social Sciences) using the contingency coefficient test.

## RESULT

**Table 1. The Correlation between Knowledge and Compliance with Fe Tablet Consumption in Pregnant Women with Anemia in the Third Trimester in the Merakurak Health Center Work Area, Tuban Regency, June-July 2021**

Knowledge	Compliance				Total	
	Non-compliance		Compliance		n	%
	n	%	n	%		
Less	7	100	0	0	7	35
Enough	8	100	0	0	8	40
Good	3	60	2	40	5	25
Total	18	90	2	10	20	100

p=0,036

**Table 2. The Correlation between Attitude and Compliance with Fe Tablet Consumption in Pregnant Women with Anemia in the third trimester in the Merakurak Health Center Work Area, Tuban Regency June-July 2021**

		Compliance				Total	
		Non-Compliance		Compliance		n	%
			%	n	%		
Attitude	Negatif	15	93.75	1	6.25	16	100
	Positif	3	75	1	25	4	100
Total		18	90	2	10	20	100

p=0,234

From table 1, a total of 8 (100%) pregnant women with anemia in the third trimester are not obedient and have sufficient knowledge in consuming Fe tablets and almost half of 2 (40%) pregnant women with anemia in the third trimester are obedient and knowledgeable in consuming Fe tablets. The test results using a contingency table obtained a contingency coefficient value of 0.5 with a p-value of 0.036 ( $p < 0.05$ ), that with a 95% confidence level, there is a relationship between knowledge and adherence to Fe tablet consumption in pregnant women with anemia in the third trimester in the working area of Merakurak Health Center.

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From table 2 almost entirely 15 people (93.75%) pregnant women with anemia in the third trimester who are not obedient and have a negative attitude and a small percentage of 1 (25%) pregnant women with anemia in the third trimester are obedient and have a positive attitude. The results of the test using a contingency table obtained a contingency coefficient value of 0.243 which means there is no relationship between Attitude and Compliance with Fe Tablet Consumption in third-trimester anemic pregnant women in the working area of Merakurak Health Center.

## DISCUSSION

Attitude is a person's closed response to a certain stimulus or object, which already involves the relevant opinion and emotional factors (happy-not happy, agree-disagree, good-bad). , mass media, emotions, and teachings from educational institutions and religious institutions greatly determine the belief system, it is not surprising if, in turn, these concepts influence attitudes.

Attitude is not yet an action or activity but is a predisposition to action or behavior.<sup>10</sup> Positive attitudes towards health values do not always manifest in real action.<sup>7</sup> Respondents' attitudes affect adherence to consuming Fe tablets in pregnant women. Pregnant women who have a negative attitude (not good) tend to be disobedient in consuming Fe tablets because these pregnant women do not have the will and motivation to do this consuming Fe tablet, both from oneself

and others, with the reason that Fe tablets are vitamins for the body and have no side effects for the mother and fetus, not because of ignorance about Fe tablets. So that pregnant women think that Fe tablets are not important to be consumed during pregnancy

Attitude can be interpreted as the respondent's readiness/willingness to act but has not implemented it. This process does not immediately occur by itself, but there are several stages, one of which is the learning process. This learning process occurs because of one's experience with certain objects, by connecting one experience with another. A lot of experience gained can help a person to determine the attitude he will do. In situations that involve emotions, the appreciation of the experience will be deeper and last longer. An anemic pregnant woman will be more positive or negative if she has had a memorable personal experience in her pregnancy, she

will learn more, take better care of and fulfill the nutritional needs that must be met during pregnancy. The influence of other people who are considered important also affects attitudes. A person can be positive or negative due to the influence of people who are considered important such as parents, friends / close relatives, husband.

The low education of pregnant women is also one of the causes of low knowledge so that it affects the attitudes shown by pregnant women regarding the treatment of anemia using Fe tablets. The information/mass media factor also influences a person's attitude. Some forms of mass media, such as television, radio, magazines, or newspapers have a major influence in shaping people's opinions and beliefs. As its main task in conveying information, the mass media carry messages that contain suggestions that can direct one's opinion.

In determining attitudes, knowledge plays an important role, so that the mother's attitude towards the importance of consuming Fe tablets during pregnancy is influenced by her knowledge. So that the number of negative attitudes of anemic pregnant women in this study could be due to low education which will affect adherence to

the administration of Fe tablets in anemic pregnant women. Based on this, it can be assumed that several possibilities caused in this study the attitude of pregnant women was not related to compliance in taking Fe tablets, at the level of adherence there was no visible difference between pregnant women who had negative and positive attitudes. Thus making the relationship between attitudes and knowledge insignificant.

The results of this study are in line with the research of Purnamasari, Margawati, and Widjanarko at the Central Bogor Health Center which produced a statistical test of chi-square p-value of 0.501. It can be concluded that there is no relationship between respondents' attitudes and adherence to consuming Fe tablets.<sup>11</sup>

According to the researcher's assumption, attitude is very influential on compliance with Fe tablet consumption. The level of attitude is directly proportional to compliance with Fe tablet consumption, meaning that the more positive the attitude of the respondent, the compliance with Fe tablet consumption will also increase. Likewise, if the attitude of the respondent is negative, the compliance of Fe tablet consumption in pregnant women with anemia in the third

trimester will be below. It can be drawn an illustration that the overall results in this study are different from previous studies. Where in this study resulted in there was no relationship between attitude and compliance. This can be caused by the number of samples that are too small because it is devoted to pregnant women with anemia in the third trimester and many respondents have a negative attitude or an attitude of not caring about the condition of anemia.

The personal experience of pregnant women due to side effects after taking Fe tablets, namely nausea, difficulty in defecation and also boredom from taking Fe tablets for a long time, also the influence of other people who are considered important in this case the family greatly affects the attitude of pregnant women with anemia in the third trimester. three in non-compliance with Fe tablet consumption. It is also necessary to supervise the family when anemic pregnant women consume Fe tablets by making a control card for taking Fe tablets to increase the compliance of anemic pregnant women in consuming Fe tablets.

## CONCLUSION

There was a correlation between knowledge and adherence to Fe tablet

consumption and there is no relationship between attitude and adherence to Fe tablet consumption, so it is recommended for more intensive socialization and supervision by families with Fe tablet consumption control cards for pregnant women with anemia in the third trimester at Merakurak Health Center. In further research, it is necessary to increase the number of respondents or if one puskesmas does not describe the condition of the population, it is necessary to add another puskesmas so that the sample obtained is more and can describe conditions in the field.

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