

## The Effectiveness of Counselling on the Importance of Fe Tablets to the Motivation to Meet the Fe Needs

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### ABSTRACT

In the period of 2018 maternal bleeding occurred 15% of a total of 40 mothers who then carried out referrals to the hospital due to lack of iron supplements during pregnancy. Lack of knowledge, attitudes, actions of pregnant women are not good, side effects in tablets can lead to someone less to comply with the advice. The design in this research was pre-experimental design used pretest-posttest design approached. The sample consists of 150 correspondences selected by purposive sampling technique. Data obtained by reviewing the motivation of pregnant women before counseling, after counseling, and reviewed the motivation of pregnant women after counseling. This research used statistical test wilcoxon sign rank test and assisted using SPSS For Windows. The result showed that the motivation before counseling was 6,7% high, 80,0% medium and 13,3% low. After motivation counseling to be 80,0% high, 20,0% medium and 0% low. Based on the results of the analysis using statistical test wilcoxon sign rank test obtained p value = 0,000, so p value = 0,000 <  $\alpha$  = 0.05 so that counseling conducted affect the motivation of pregnant women in drinking regularity Fe. From the results of the research, pregnant women are expected to further increase knowledge about Fe in order to increase the motivation of taking Fe tablets.

### KEYWORDS

Motivation  
Tablets Fe  
Pregnancy

## INTRODUCTION

The Maternal Mortality Rate (MMR) in Indonesia is still very high. The decline in MMR according to the Indonesian Demographic and Health Survey (IDHS) from 1994, 1997, until 2000 was 390 / 100,000 live births, 334 / 100,000 live births, and 307 / 100,000 live births. The five main causes of maternal death are bleeding, infection, eclampsia, prolonged parturition, and complications of abortion, while the indirect causes of maternal death are anemia, for 51% according to the Welfare Survey in 1995; Protein Energy Deficiency (PED) and Calorie Energy Deficiency, for 4.8% according to the census in 2000 (Sulistiyawati, 2011). Referring to these conditions, a great effort is needed, the government together with the community is responsible for ensuring that every mother has access to quality health services during pregnancy.

In Indonesia, the anemia prevention program for pregnant women was done by giving iron supplements for 90 tablets during pregnancy. However, many pregnant women refused or did

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not obey with this recommendation, for various reasons. The compliance in taking Fe tablets was less than 90% of iron tablets that should be taken. The compliance in taking iron pills is an important factor in increasing the levels of hemoglobin of pregnant women (Nurhaedi et al, 2013). Anemia in pregnancy is also associated with the increased of maternal pain. Iron deficiency is a major cause of anemia in pregnant women compared to other nutritional deficiencies. This was in line with Muhammad (2019) stated that "Iron deficiency anaemia in young children is the most prevalent form of micronutrient deficiency worldwide. For such conditions, some iron supplement is needed along with foodstuffs such as egg yolk, fish kidney, wheat, maize, spinach, pheasant, meat etc."

During pregnancy, mother must eat foods that contain high-quality nutritional value. It doesn't refer to expensive food. Nutrition during pregnancy must be increased to 300 calories per day. Pregnant women should consume foods that contain protein, iron, and drink enough fluids (Walyani, 2015). The need for iron during pregnancy increases by 300% (1,040 mg during pregnancy) and this increase cannot be fulfilled only from the food intake during pregnancy, but it needs to be supported by iron supplements. Iron supplementation can be given from the 12th week of pregnancy by 30-60 grams every day during pregnancy and 6 weeks after birth to prevent postpartum anemia. Despite the great benefits of iron supplements, it remains to be noted that excessive consumption of iron is not good because iron tablets are proven to reduce zinc levels in serum (Sulistyawati, 2011). Lindsay (2002) also had the same idea related to this by stated "Iron deficiency anaemia in young children is the most prevalent form of micronutrient deficiency worldwide. For such conditions, some iron supplement is needed along with foodstuffs such as egg yolk, fish kidney, wheat, maize, spinach, pheasant, meat etc".

Iron tablets as supplements given to pregnant women according to the rules must be consumed every day. However, due to various factors such as poor knowledge, attitudes and actions of pregnant women, the side effects of the tablets can trigger a person to not adhere the consumption of iron tablets properly. (Nurhaedi et al, 2013). One way to accelerate the reduction of Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) is the quality of human resources in implementing and providing quality and professional services in accordance with applicable midwifery service standards (Novita, 2011).

Based on the survey conducted by the researchers in February 2019 in PKM Kanigoro, it was found that the number of pregnant women in Jatinom village was 120 people with the details of 60 first trimester pregnant women, 40 second trimester pregnant women, and 20 third trimester pregnant women. In 2018 there was 15% of maternal hemorrhages from a total of 40 mothers which were then referred to the hospital. Mothers who experience this bleeding during pregnancy were rarely doing antenatal care and rarely consuming Fe/ iron tablets.

## METHODS

The research design used "Pre-Experimental". The subject of the research was 150 pregnant women selected by Purposive Sampling. The inclusion criteria were TM II and TM III pregnant women and willing to be respondents. The exclusion criteria were pregnant women with the stated of pathology of pregnancy by the doctor. The subject was in or in the working area of the PKM Kanigoro Blitar. The independent variable was counseling and the dependent variable was

motivation to meet the needs of Fe tablets. The data analysis used the Wilcoxon Signed Rank Test with a significance level of 0.05.

## RESULT

Table 1. Frequency Distribution of Counselling to the Motivation to Meet the Needs of Fe Tablets of pregnant mother

No.	Characteristics	<i>f</i>	%
1.	Age		
	<20 years	0	0
	20-35 years	140	93,3
	>35 years	10	6,7
2.	Educational Background		
	Uneducated	0	0
	Primary	30	20
	Secondary	70	46,7
	Senior High School	50	33,3
	College	0	0
3.	Occupation		
	Housewife	130	86,7
	Teacher	0	0
	Private worker	20	13,3
	Entrepreneur	0	0
4	Information about Fe		
	Ever	110	73,3
	Never	40	26,7
5	Numbers of children		
	First pregnancy	30	20
	1	100	66,7
	2	10	6,7
	>2	10	6,7
Total		150	100

Table 2. The Identification of Pregnant Mother Motivation before Counselling

No	Category	<i>f</i>	%
1.	High	10	6,7
2.	Moderate	120	80
3.	Low	20	13,3
Total		150	100

Table 3. The Identification of Pregnant Mother Motivation after Counselling

No	Kategori	<i>f</i>	%
1.	High	120	80
2.	Moderate	30	20
3.	Low	0	0
Total		150	100

Table 4. The Analysis of the Effectiveness of Counselling to the Motivation to Meet the Needs of Fe Tablets of Pregnant Mother by using Wilcoxon Signed Rank Test

	N	Z	pvalue
Before and After Counselling	150	- 3.606	0.005
	<b>p= 0,000</b>	<b>α= 0,05</b>	

## DISCUSSION

### Before the Counselling of the Importance of Fe Tablets

Based on the results of the research conducted on BPM Sri Wahyuni, Jatinom village, Kanigoro, Blitar on April 5, 2017, the respondents who had not been given counseling, it was known that the majority 80.0% of the respondents or 12 respondents were in the category of pregnant women who have moderate motivation in the adherence of taking Fe tablets. Whereas 13.3% respondents or 2 respondents were in the category of low motivation in the adherence of taking Fe tablets, and the remaining 6.7%, or 1 respondent was in the category of high motivation.

The majority (93.3%) of pregnant women were in the range of 20-35 years old meant that the level of maturity in thinking was also high. In addition, not only age could affect the motivation, but also other factors that had an important role such as education and occupation. Nearly half of the respondents (46.7%) was only in secondary education and the majority of respondents (86.7%) either did not work or were only housewives. Education was important because the higher level of education, respondents were more open minded and aware to the information rather than those with lower education (Novita et al, 2011). In secondary level of education there were no material about Fe, so the knowledge about Fe related to pregnancy was still lack. Based on the general data pregnant women who had low levels of education tended to have low motivation towards regular taking of Fe tablets before counseling.

Occupational background also affected the reception of information or motivation. Pregnant women who did not work or only at home usually be busy with housework. Based on the general data tabulation, we could see that pregnant women who work had high motivation in regular taking of Fe tablets before counseling. However, we can see in Tables 4.4 and 4.5 showed that more than half of the respondents (73.3%) had received information about Fe with the majority of information sources (53.3%) from health workers. The lack of motivation of pregnant women who did not work in the regularity of taking Fe tablets could be caused by the lack of extensive sources of information obtained, making it difficult to change the assumptions they believe so far.

With these gaps, the external stimulation was needed to generate motivation in the regularity of taking Fe tablets because motivation was an impulse that was found in a person to change to meet their needs (Hamzah, 2011). Based on table 4.9 it could be seen that each respondent had a different motivation. Differences in motivation could be affected by various factors such as the objectives to be achieved, the clearer the goals, the more motivation they had, and vice versa. Challenges could be said to be important factor, motivation would be different from the presence of challenges or not. Responsibility or decision making also affected the motivation. In addition, the factor of opportunity was also very influential, the existence of opportunity would make the motivation stronger than with no opportunity.

### **After the Counselling of the Importance of Fe Tablets**

Based on the results of research, after the counseling of the importance of Fe tablets, it was known that the majority of the respondents; 80.0% or 12 respondents were included in the category of pregnant women who had a high motivation in the regularity of taking Fe tablets. In other hand, 20.0% or 3 respondents were included in the category of pregnant women who had moderate motivation on the regularity of taking Fe tablets. No respondents were included in the category of pregnant women who had weak motivation on the regularity of taking Fe tablets. In this case, counseling was matched with the final purpose of being able to maintain and improve their own health (Novita et al, 2011).

From table 4.9 we could see that there was a change in the form of increasing motivation before counseling and motivation after counseling. The increase in motivation was not only affected by the level of education, age, occupation and number of children, but also affected by the participation and activeness of pregnant women at the time of the counseling. In participating the counseling conducted by researchers, most of the pregnant women asked questions during the discussion session which resulted in the increase of their knowledge especially in the information of Fe needs. The increased knowledge of pregnant women resulted in the increase of motivation and does not hesitate to take Fe tablets regularly.

### **The Effectiveness of Counselling on the Importance of Fe Tablets to the Motivation to Meet the Fe Needs**

Based on Table 4.9 it could be seen that 6.7% was in the category of high motivation before counseling and the motivation after counseling remains high. Before the counseling, 80% was in the category of moderate, and this changed into 73.3% in the category of high after the counseling, while 6.7% remains in the category of moderate after counseling. Before counseling, 13.3% was in the category of weak motivation and changed into 13.3% in the category of high motivation after counseling. In summary, there was a change before and after counseling namely 6.7% high motivation before counseling to 80.0% high motivation after counseling, then 80.0% moderate motivation before counseling to 20.0% moderate motivation after counseling, and 13.3% weak motivation before counseling to 0% after counseling. From these results it meant that after counseling there was an increase in motivation in every pregnant woman. Wilcoxon signed ranks test results show  $p\text{ value} = 0,000$  so  $p\text{ value} = 0,000 < \alpha = 0.05$  meant counseling about Fe affected the motivation in the regularity of taking Fe of pregnant women in BPM Sri Wahyuni Jatinom village, Kanigoro District, Blitar Regency.

Related to the purpose of counseling which changes people's mindset and behavior from those who did not know became knew, from those who did not want to become willing to and had awareness to behave in a healthy lifestyle, it is expected that there will be an increase in motivation of the pregnant women in the regularity of taking Fe. In accordance with law No. 23 of 1992 mention that increasing the ability of people to maintain and improve the degree of health both physical, mental and social (Novita et al, 2011). Based on Table 4.9 we could see that the effect of counseling was very diverse, the difference was caused by differences in age, educational background, occupation, and number of children. The younger the age, the higher curiosity they

had, resulted in the greater influence. In line with the level of education, the higher the level of education the better reception of the information. This statement was supported by Rosmala stated that "Pregnant women who are highly educated can improve their consumption patterns and nutrient intake as needed. Therefore, health education especially they which are connected to women pregnancy is very important to do." (Rosmala et.al, 2018) The high motivation of pregnant women at BPM Sri Wahyuni, Jatinom village, Kanigoro District, Blitar Regency was due to the activeness of the midwives and health workers in providing counseling and counseling to the community, as proofed in the results of the study that more than half of the respondents (73.3%) had received information about Fe and a small proportion of respondents (26.7%) never received information about Fe. Most (53.3%) sources of community information were obtained from health workers, (20.0%) sources of information were obtained from families and (26.7%) did not get information. Changes could occur in any individual due to the influence, in this study the influence given was counseling. Counseling was essentially an intervention effort aimed at behavioral factors. Education or counseling were two things that cannot be separated. The primary target of the counseling in this research was pregnant women in the BPM Sri Wahyuni working area, Jatinom village, Kanigoro District, Blitar Regency while the secondary target was community leaders or cadres. The result expected in this counseling was that the motivation of pregnant women in the regularity of taking Fe could increase. In this study, all motivations of pregnant women experienced an increase and there was no decrease from before and after counseling.

From Table 4.9 we could see that there were pregnant women who had moderate motivation (6.7%) or 1 respondent. After being given counseling all the motivations of pregnant women could increase without exception, this was due to the level of education. The low level of education would make it more difficult for individuals to receive information to make changes, in addition to these factors there were other factors that had an important effect on increasing the motivation, namely the activeness in the discussion session. By being active in the discussion, pregnant women could find the answer or solutions to problems that made them hesitate the regularity of taking Fe. The activity itself could be affected by the desire that causes curiosity, that was the cause of the existence of pregnant women who had moderate motivation in this research.

According to the assessment conducted, it turned out that many pregnant women had consumed Fe, but did not like vegetables or fruit and the mother still experienced anemia even though they took Fe regularly. So, innovations from health workers was needed in providing information about nutrition, for example if mother did not like vegetables and fruit, it could be processed into other foods such as cakes, snacks, fresh drinks since there were a lot of new innovations of food with the main ingredients of vegetables and fruit. Other innovations such as during the pregnant women classes held, health workers could also provide a nutritional corner by providing the examples of essential foods that were needed during pregnancy. In the nutrition corner, the health workers could also provide information - what are the benefits if the food is consumed regularly during pregnancy.

## CONCLUSION AND SUGGESTION

### Conclusion

The results showed that (1) Before the counseling of the importance of Fe tablets, 80% of the respondents were in the category of moderate motivation (2) After the counseling of the importance of Fe tablets, 80% of the respondents were in the category of high motivation (3) Data analysis using the Wilcoxon Signed Rank Test showed the results of  $p$  value = 0,000, so that the  $p$  value of  $0,000 < \alpha = 0.05$  meant that the counseling had a positive impact in increasing the motivation of pregnant women to meet the needs of Fe tablets during pregnancy.

### Suggestion

It is expected that health worker can be more active in giving the information about things that are needed by pregnant women during pregnancy. Pregnant women should also be more active in finding the information of what they need during pregnancy.

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