

Effect of pregnant women's knowledge and therapy regimentation towards compliance in consuming iron (Fe) tablets and anemia degree in South Kediri Public Health Center year 2016

Dina Dewi Anggraini¹, Windhu Purnomo², Bambang Trijanto³

¹Master Program in Public Health, Faculty of Public Health, Universitas Airlangga, ²Department of Biostatistics and Population, Faculty of Public Health, Universitas Airlangga, ³Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga, Dr Soetomo Hospital, Surabaya

ABSTRAK

Tujuan: Penelitian ini bertujuan untuk menganalisis pengaruh pengetahuan ibu hamil dan regimentasi terapi terhadap kepatuhan mengkonsumsi tablet besi (Fe) dan anemia pada ibu hamil di Puskesmas Kota Wilayah Selatan Kota Kediri.

Bahan dan Metode: Penelitian ini menggunakan observasi analitik dengan rancang bangun cross sectional. Populasi terdiri dari 63 orang ibu hamil trimester III dan sampel yang diambil adalah 34 orang ibu hamil trimester III yang telah mendapatkan 90 tablet besi (Fe), dengan teknik simpel random sampling. Data diperoleh dari kuesioner, buku Kesehatan Ibu dan Anak, dan wawancara yang mendalam. Analisis data yang dilakukan dengan menggunakan regresi ordinal dan regresi logistik.

Hasil: Ada pengaruh pengetahuan ibu hamil terhadap kepatuhan mengkonsumsi tablet besi (Fe), tidak ada pengaruh regimentasi terapi terhadap kepatuhan mengkonsumsi tablet besi (Fe), dan ada pengaruh kepatuhan yang cukup dalam mengkonsumsi tablet besi (Fe) terhadap anemia pada ibu hamil ($p=0,012$).

Simpulan: Semakin tinggi tingkat pengetahuan yang dimiliki oleh ibu hamil, maka semakin cenderung ibu hamil untuk patuh mengkonsumsi tablet besi (Fe) pada masa kehamilan. Dan tidak ada pengaruh regimentasi terapi terhadap kepatuhan mengkonsumsi tablet besi (Fe) pada ibu hamil.

Kata kunci: regimentasi terapi, kepatuhan, anemia.

Correspondence: Dina Dewi Anggraini, Jalan Mawar no. 93, Gempolan Village, Subdistrict Gurah, District of Kediri, 64181, East Java, Indonesia. E-mail: dewidina90@gmail.com

ABSTRACT

Objectives: This study aimed to analyze the influence of knowledge and regimentation of pregnant women consume tablets therapy adherence iron (Fe) and anemia in pregnant women in the South Regional Health Center Kediri.

Materials and Methods: This study used observational analytic with cross sectional design. The population consisted of 63 third trimester pregnant women and samples taken were 34 third trimester pregnant women who have received 90 tablets of iron (Fe), with a simple random sampling technique. Data obtained from questionnaires, books Maternal and Child Health, and in-depth interviews. Data analysis was performed using ordinal regression and logistic regression.

Results: There was an effect of knowledge of pregnant women on adherence to consume tablets of iron (Fe), there is no influence regimentation of therapy on adherence to consume tablets of iron (Fe), and no effect of compliance sufficient to consume tablets of iron (Fe) against anemia in pregnant women ($p=0.012$).

Conclusion: The higher the level of knowledge possessed by pregnant women, pregnant women, the more it tends to stick to consume tablets of iron (Fe) during pregnancy. And no regimentation of therapeutic effect on adherence to consume tablets of iron (Fe) in pregnant women.

Keywords: treatment regimentation, adherence, anemia.

INTRODUCTION

Maternal Mortality Rate (MMR) is one of the indicators used to measure mothers' health status in a region. Based on the Indonesian Demographic and Health Survey (IDHS) in 2012, MMR (relating to pregnancy, childbirth, and postpartum stage) amounted to 359 per 100,000 live births. Bleeding occupies the highest percentage of maternal death's causes (28%). Anemia and Chronic Energy Deficiency (CED) in pregnant women are major causes of bleeding and infection.¹

Iron deficiency is not the only cause of anemia, but when the prevalence increased, iron deficiency is the main cause.² Iron deficiency occurs when the absorbed amount to meet body's need is too small. This insufficiency can be caused by lack of iron consumption, reduced dosage of iron in the diet, increased need for

iron, or chronic blood loss. Iron deficiency is the most common cause of anemia. Pregnant women have higher risk in experiencing iron deficiency anemia.³ According to WHO, a high need of iron (1000 mg) during pregnancy should be obtained from iron tablet supplementation, and could not be obtained from food only.⁴ Anemia may increase the risk of death in childbirth, low birth weight babies, infection-prone fetal and maternal, miscarriage, and prematurity.⁵

Consumption of iron and various amount of iron intake during pregnancy in East Java is 99.4%. Among those who consumed iron, there are 39.9% who consume iron tablet for at least 90 days during their pregnancy. Consumption of iron according to the Riskesdas 2013 in numbers showed that the higher the education and quintile proprietary index, the greater the consumption of iron coverage will be. Consumption of iron and vari-

ous amount of nationwide coverage of iron tablet (Fe) intake in 2014 amounted to 85.1%. Those data has not reached the program’s target in 2014 that is equal to 95%. Fe1 and Fe3 are covered in Public Health Center, with the lowest coverage is City District, which is the Southern Regional Health Center, with Fe1 amounted to 69.81% and Fe3 amounted to 66.29%.⁷

Supplementation of iron in the anemia prevention program has been studied and scientifically tested for its effectiveness if it is implemented according to the dosage and provision. However, the result of iron tablets distribution to pregnant women suffering from anemia is less likely to reality. This is due to two reasons. They are the un-optimal adherence of iron tablets consumption, and iron status of childbearing-age women before pregnancy is very low.^{8,9}

MATERIALS AND METHODS

The type of this research is an analytic observational with cross sectional design. This research was held in June and took place at the South Kediri Public Health Center. The research’ population is the third trimester pregnant women in South Kediri Public Health Center involving 63 people. The samples were 34 third trimester pregnant women who have received 90 iron tablets (Fe) in the South Kediri Public Health Center. The sampling technique in this study was simple random sampling using probability sampling technique.

The independent variable in this study was the knowledge of pregnant women and therapy’s regiment, the intermediate variable in this study was the adherence to consume iron tablets (Fe), and the dependent variable was anemia in pregnant women. The research data obtained from the field, the raw data, were then processed and calculated using a frequency distribution table and cross table. Data analysis in this study used ordinal regression statistical test to see the influence of independent variables (pregnant women’s knowledge, and therapy regimentation) on intermediate variables (adherence to consume iron tablets (Fe)), and to see the effect of the intermediate variable on the dependent variable (anemia in pregnant women) we used logistic regression statistical test.

RESULTS AND DISCUSSION

Predisposing factors are shown by the knowledge of pregnant women and therapy regimentation. The respondents of this study were 34 persons consisting of 24 non-anemic pregnant women and 10 pregnant women suffering from mild anemia.

Table 1. Frequency distribution based on knowledge of pregnant women in South Kediri Public Health Center year 2016

Pregnant Women’s Knowledge	Quantity (people)	(%)
Good	24	70.6
Fair	7	20.6
Poor	3	8.8
Total	34	100.0

Table 2. Distribution of therapies regimentation factor in South Kediri Public Health Center year 2016

Therapy Regimentation	Quantity (N=34)	%
Good	8	23.5
Fair	16	47.1
Poor	10	29.4
Total	34	100.0

Table 3. Frequency distribution of compliance in consuming iron tablet (Fe) in South Kediri Public Health Center year 2016

Iron Tablet (Fe) Consuming Compliance	Quantity (people)	(%)
Obedient	18	52.9
Obedient Enough	6	17.6
Not Obedient	10	29.4
Total	34	100.0

Table 4. Distribution of anemia in pregnant women in South Kediri Public Health Center year 2016

Anemia Degree	Quantity (people)	(%)
Not Anemic	24	70.6
Mild Anemia	10	29.4
Total	34	100.0

Table 5. Pregnant women’s knowledge on their compliance in consuming iron tablet (Fe) in South Kediri Public Health Center year 2016

Pregnant Women’s Knowledge	Compliance in Consuming Iron Tablet (Fe)			Total
	Obedient	Obedient Enough	Not Obedient	
	N (%)	N (%)	N (%)	
Good	14 (58.3)	3 (12.5)	7 (29.2)	24 (100)
Fair	3 (42.9)	2 (28.6)	2 (28.6)	7 (100)
Poor	1 (33.3)	1 (33.3)	1 (33.3)	3 (100)
Total	18 (52.9)	6 (17.6)	10 (29.4)	34 (100)

Table 6. Therapy regimentation to pregnant women's compliance in consuming iron tablet (Fe) in South Kediri Public Health Center year 2016

Therapy Regimentation	Compliance in Consuming Iron Tablet (Fe)			Total
	Obedient	Obedient Enough	Not Obedient	
	N (%)	N (%)	N (%)	
Good	6 (75.0)	1 (12.5)	1 (12.5)	8 (100)
Fair	9 (56.3)	2 (12.5)	5 (31.3)	16 (100)
Poor	3 (30.0)	3 (30.0)	4 (40.0)	10 (100)
Total	18 (52.9)	6 (17.6)	10 (29.4)	34 (100)

Table 7. Compliance in consuming iron (Fe) tablet to pregnant women's anemia degree in South Kediri Public Health Center year 2016

Compliance in Consuming Iron Tablet (Fe)	Anemia Degree		Total
	Not anemic	Mild anemia	
	N (%)	N (%)	
Obedient	18 (100)	0 (0)	18 (100)
Obedient Enough	5 (63.3)	1 (16.7)	6 (100)
Not Obedient	1 (10.0)	9 (90.0)	10 (100)
Total	24 (70.6)	10 (29.4)	34 (100)

Table 8. Effect of pregnant women's knowledge and therapy regimentation to the compliance in consuming iron (Fe) tablet in South Kediri Public Health Center year 2016

Variables		P	Risk Ratio
Pregnant Women's Knowledge			
Good	19.925	0.000	4501
Fair	22.124	0.000	4508
Poor	Comparing Group	-	-
Therapy Regimentation			
Good	-0.740	0.636	-
Fair	-1.345	0.309	-
Poor	Comparing Group	-	-

Table 9. Effect of compliance in consuming iron tablet (Fe) on anemia in pregnant women in South Kediri Public Health Center year 2016

Variables		P	Risk Ratio
Obedient	-23.400	0.998	0.000
Obedient Enough	-3.807	0.012	0.022
Not Obedient	Comparing Group	-	-

Table 8 shows that pregnant women's knowledge affects compliance in consuming iron tablet (Fe).

Pregnant women with the good and fair knowledge showed significant difference of compliance in consuming iron tablet (Fe) compared to those with poor knowledge ($p= 0.000 <0.05$). There was no significant influence of regimentation variables towards compliance in consuming iron tablet (Fe). Table 9 shows that compliance in consuming iron tablet (Fe) affects anemia degree in pregnant women. Pregnant women with good obedience showed significant difference of anemia degree compared with poor obedient ($p=0.012 <0.05$).

CONCLUSION

The higher the level of pregnant women's knowledge, the more they tend to obey consuming iron tablets (Fe) during pregnancy.

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