

ASSOCIATION OF HUSBAND AND HEALTH PROFESSIONAL'S SUPPORT ON IRON TABLET CONSUMPTION COMPLIANCE AMONG PREGNANT WOMEN

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Abstract

The anemia prevalence among pregnant women in Indonesia is still high and need serious attention. The role of health professional are required to support pregnant women regularly consuming iron tablet in order to avoid suffering from anemia. Besides, husband and family's support is expected to be able to increase compliance on iron tablet consumption among pregnant women. This cross-sectional study was conducted at the working area PondokKacangTimur Health Center, South Tangerang City from 25 July to 20 August 2016. The sample of the study was 120 formerly pregnant women who currently have infant age of 0 to 6 years old. Results of the study revealed that only 32.5% of respondents comply to regularly consume iron tablet. In multivariate analysis, it was shown that educational level, working status and role of health professional have significant effect to iron tablet consumption compliance. Therefore, it is necessary to improve role of health professional in terms of giving support for pregnant women. Besides, husband and family still need to be encouraged to engage in supporting pregnant women to comply consuming iron tablet regularly.

Keywords: Iron Tablet, Husband and Health Professional's Support, Pregnant Women

INTRODUCTION

According to 2013 Indonesia Basic Health Research (IBHR), anemia prevalence among pregnant women in Indonesia was 37.1%. The anemia prevalence among pregnant women in Indonesia is still high and need serious attention. WHO (2013) assigned anemia is when the hemoglobin (Hb) in pregnant women is less than 11 gr/dl in trimester I and III and less than 10.5 gr/dl in trimester II. The high of anemia prevalence leads to maternal mortality.

Maternal mortality rate in Indonesia increased from 228 deaths per 100,000 live births in 2007 to 359 per 100,000 live births in 2012 based on Indonesia Demographic and Health Survey (IDHS). Banten (province) Health report (2015) revealed that there was increasing maternal mortality rate from 216 deaths in 2013 to 230 deaths in 2014 per 100,000 live births. It was caused by bleeding (37%), infection (22%) and hypertension (14%).

The 2010 IBHR result showed that 80.7% of pregnant women in Indonesia got 90 iron tablets during pregnancy, but only 18% who reported consume them. Iron deficiency before pregnancy can lead to suffer from anemia. These conditions may increase the risk of death in childbirth, bleeding before or during give birth, the fetus and mother are susceptible to infection, miscarriage, and increase the risk of premature birth (Ministry of Health, 2014). Overcoming the problem of iron deficiency anemia, government is still focused on the provision of iron tablets (Ministry of Health, 2010).

A study in Boyolali found that knowledge, education and family's support are the factors that influence pregnant women's compliance to consume iron tablets (Kamidah, 2015). Women's occupational status is also factor that cause compliance to consume iron tablets (Prawirohardjo, et. al,

2005). A study in Makassar revealed that knowledge, family's support, and role of health professional were highly correlated with iron tablet consumption compliance (Kautshar, Suriah&Jafar, 2013). Husband's support is also very important in fostering compliance of pregnant women consuming iron tablets (Friedman, 2005). According to Carpenito(2000), the factors which affecting compliance are anything that can be a positive influence, whether people will be able or not to maintain their compliance.

METHODOLOGY

This study was qualitative study with cross-sectional design. This study was conducted at the working area of PondokKacangTimur Health Center in South Tangerang City from 25 July to 20 August 2016. Population of the study is all formerly pregnant women who have infant age 0 to 6 years old. Using Lameshow's hypothesis test formula (1997), with 95% confidence interval, the sample was 120 formerly pregnant women. Sampling technique was using simple random sampling. Respondents were interviewed based on questionnaire.

RESULTS

Iron tablet consumption compliance refers to whether pregnant mother always consume iron tablet that they got from health professional. This study found that majority of respondents do not comply on iron tablet consumption (67.5%). Only one-third or 32.5% of pregnant women comply on iron tablet consumption.

Table 1. Frequency and percentage distribution of iron tablet consumption compliance (n = 120)

Measured variable	Frequenc y	Percent
Iron Tablet Consumption Compliance		
Do not comply	81	67.5
Comply	39	32.5

Table 2 shows individual's characteristics of pregnant women. Looking at age group of the respondents, age group of 30 years old and over (55.0%) is larger than age group of less than 30 years old (45.0%). The average age of respondents is 30.2 years old, with minimum age is 15 and maximum is 40 years old. Regarding educational level, only few of respondents (6.7%) had only completed elementary school. More than 80% of respondents had completed junior and senior high school. Some of them had completed university. Majority of respondents are house-wife, followed by private employee (10.0%), entrepreneur (7.5%). Only less than 1% of respondents are government officer.

Table 2. Frequency and percentage distribution of individual's characteristics (n = 120)

Variables	Frequenc y	Percent
Age Group		
Less than 30	54	45.0
30 and over	66	55.0
Mean = 30.22, S.D.=5.17, Min= 15, Max = 40		
Educational Level		
Elementary school	8	6.7
Junior High School	49	40.8
Senior High School	50	41.7
University	13	10.8
Occupational Status		
House-wife (unemployment)	98	81.7
Government officer	1	0.8
Private employee	12	10.0
Entrepreneur	9	7.5

Table 3 shows support to consume iron tablet from health professional and their husbands or families. Looking at role of health professional, majority of respondents (80%) admitted health professionals have significant role to support them consume iron tablet, while only 20% indicated health professional have less role to support them consume iron tablet. In terms of husband and family's support, this study revealed that two-third of respondents got support from their husband and family, while only one-third did not get support from husband and family.

Table 3. Frequency and percentage distribution of all factors (n = 120)

Variables	Frequenc y	Percent
Role of Health Professional		
Less support	24	20.0
More support	96	80.0
Husband and Family's Support		
Do not support	41	34.2
Support	79	65.8

Pearson chi squared test and exact Fischer test were carried out to assess the relationship between individual's characteristics and support to consume iron tablet from health professional and their husbands or families with iron tablet consumption compliance. Based on the statistical test using chi square, it is shown that age group and husband and family's support were not significantly associated with iron tablet consumption compliance. Whilst, educational level, working status, and role of health professional were statistically associated with iron tablet consumption compliance.

Table 4. Percentage distribution of all factors by iron tablet consumption compliance
(n = 120)

All factors	Compliance		Total	Chi-square
	Don't comply	Comply		
Age Group				
Less than 30	39 (72.2%)	15 (27.8%)	54 (100.0%)	0.9980 (p = 0.318)
30 and over	42 (63.6%)	24 (36.4%)	66 (100.0%)	
Educational level				
Primary and Junior School	52 (91.2%)	5 (8.8%)	57 (100.0%)	27.8646 (p = 0.000)
Senior School and University	29 (46.0%)	34 (54.0%)	63 (100.0%)	
Working status				
Unemployment	61 (62.2%)	37 (37.8%)	98 (100.0%)	6.7291 (p = 0.011)
Employment	20 (90.9%)	2 (9.1%)	22 (100.0%)	
Role of health professional				
Less role	22 (91.7%)	2 (8.3%)	24 (100.0%)	7.9867 (p = 0.004)
More role	59 (61.5%)	37 (38.5%)	96 (100.0%)	
Husband and Family's Support				
Do not Support	31 (75.6%)	10 (24.4%)	41 (100.0%)	1.8671 (p = 0.172)
Support	50 (63.3%)	29 (36.7%)	79 (100.0%)	

Logistic regression analysis was carried out to observe the effect of individual's characteristics and support to consume iron tablet from health professional and their husbands or families to iron tablet consumption compliance. The logistic regression analysis is using three models. The first model is only focus on the effect of individual's characteristics to iron tablet consumption compliance, while the second model is focus on role of health professional when controlling individual's characteristics and the third model is focus on husband and family's support when controlling individual's characteristics and role of health professional. All variables are still keep

Table 5 shows logistic regression model for iron tablet consumption compliance. Looking at Model 1, it is shown that there was a positive relationship between age group and educational level with iron tablet consumption compliance. While, there was a negative relationship between working status with iron tablet consumption compliance but not statistically significant. While pregnant women who had completed senior high school and university were 14.66 times more likely to comply iron tablet consumption statistically significant. Those who are employed were 77% less likely to comply iron tablet consumption statistically significant.

Model 2 shows that role of health professional has significant effect to iron tablet consumption compliance when controlling individual's characteristics of pregnant women. Pregnant women who got assistance from health professional were 4.4 times more likely to comply iron tablet consumption statistically significant. Model 3 shows that husband and family's support has no significant effect to iron tablet consumption compliance when controlling individual's characteristics of pregnant women and role of health professional.

Table 5. Logistic regression model for iron tablet consumption compliance (n = 120)

All factors	Model 1		Model 2		Model 3	
	OR	S.E.	OR	S.E.	OR	S.E.
Age group						
Less than 30 (ref.)						
30 and over	1.71	0.83	1.59	0.78	1.61	0.80
Educational level						
Primary & JHS (ref.)						
SHS and University	14.66***	8.15	13.26***	7.46	13.69***	7.79
Working status						
Unemployment (ref.)						
Employment	0.13**	0.11	0.15**	0.12	0.15**	0.13
Role of health professional						
Less support (ref.)						
More support			4.40*	3.70	3.91	3.34
Husband and Family's Support						
Do not Support (ref.)						
Support					1.61	0.86
Constant	0.08***	0.05	0.02***	0.02	0.02***	0.02
Goodness of Fit						
Log likelihood	-55.209026		-53.320732		-52.914704	
N	120		120		120	
LR chi2	40.92 (3)		44.70 (4)		45.51 (5)	
Prob> chi2	0.0000		0.0000		0.0000	
Pseudo R2	0.2704		0.2953		0.3007	

*p<0.10 **p<0.05 ***p<0.01

CONCLUSION

This study revealed that only 32.5% of respondents comply to regularly consume iron tablet. In bivariate analysis, it was shown that educational level, working status and role of health professional were highly correlated with iron tablet consumption compliance. In multivariate analysis, this study shows that role of health professional have significant effect to iron tablet consumption compliance when controlling respondent's characteristics as well as husband and family's support.

The result of this study recommend to improve role of health professional in terms of giving support for pregnant women to regularly consume iron tablets. Besides, husband and family still need to be encouraged to engage in supporting pregnant women to comply consuming iron tablet regularly. Communication and cooperation between health professionals, husband and family are expected to contribute in declining of iron deficiency anemia among pregnant women. We acknowledge information and assistance from Pondok Kacang Timur Health Center.

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