

The Relationship between Knowledge and Attitude and Compliance with Pregnant Women Consuming Iron Tablets at Anutapura Hospital, Palu

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ABSTRACT

There were 129 cases of anemia at Anutapura Hospital in Palu in 2018 due to the lack of compliance of pregnant women in consuming iron tablets during pregnancy. This study aimed to determine the relationship between knowledge and attitudes with maternal compliance in consuming iron tablets at Anutapura Hospital. This research is a quantitative study with cross-sectional study design. Sampling in this study using accidental sampling method to 65 respondents. Analysis of statistical test results in this study using the Chi-Square test with a value of $\alpha = <0.05$. The results of this study indicate that there is a relationship between knowledge and compliance of pregnant women in consuming iron tablets with a p-value of 0.000 and attitudes of compliance with pregnant women consuming iron tablets with a p-value of 0.000. It is recommended for midwives, cadres in posyandu, as well as health workers in the health promotion sector, to conduct counseling on the pattern of consuming iron tablets to overcome nutritional problems, especially in pregnant women.

Keywords - Knowledge, Attitude, Compliance, Iron Tablets

INTRODUCTION

According to the World Health Organization (WHO), some 295,000 women died during and after pregnancy and childbirth in 2017. Most of these deaths (94%) occurred in low-resource settings and were mostly preventable. Sub-Saharan Africa and South Asia accounted for 86% (254,000) of the estimated global maternal mortality in 2017. Sub-Saharan Africa alone accounts for two-thirds (196,000) of maternal deaths, while South Asia accounts for nearly one-fifth (58,000). Simultaneously, between 2000 and 2017, South Asia achieved the most extensive overall decline in MMR: a decrease of almost 60% (from MMR 384 to 157). Although it was a very high MMR in 2017, sub-Saharan Africa has also achieved a considerable reduction in MMR of nearly 40% since 2000. Additionally, four other sub-regions roughly halved their MMR during this period: Asia Central, East Asia, Europe, and North Africa. Overall, the maternal mortality ratio (MMR) in the least developed countries has decreased to just under 50% (1).

The Maternal Mortality Rate (MMR) in Indonesia is still relatively high. This is given the achievement of reducing the Maternal Mortality Rate (MMR) in several ASEAN countries. Maternal Mortality Rate (MMR) in ASEAN countries is already in 40-60 per 100 thousand

live births. Meanwhile, based on the 2015 Inter-Census Population Survey (SUPAS), it still ranks 305 per 100 thousand live births in Indonesia. This is very different from Singapore, which has 2-3 MMR per 100 thousand births. Meanwhile, data on the Indonesian Ministry of Health's performance in 2015-2017 shows that there has been a decrease in the number of cases of maternal death. If in 2015, the Maternal Mortality Rate (MMR) reached 4,999 points, in 2016, it decreased slightly to 4,912 cases and in 2017 experienced a sharp decline to 1,712 instances of Maternal Mortality Rate (MMR) (2).

The Maternal Mortality Rate (MMR) in Central Sulawesi from 2014 to 2016 has fluctuated, from 2016 to 2018; it has decreased, from 186 per 100,000 live births to 153 per 100,000 live births. The most common causes of maternal death in 2018 were the causes of bleeding (retention of placenta, uterine atony), the second cause of hypertension in pregnancy (pre-eclampsia and eclampsia), then other causes such as hepatitis, pulmonary tuberculosis, typhoid, amniotic fluid embolism, causes of system disorders. circulation and heart, causes of infection, and causes of metabolic disorders.

Based on the Results of Basic Health Research (Risikesdas) in 2018, the prevalence of anemia in pregnant women in Indonesia is 48.9%. As much as 84.6% anemia in pregnant women occurs in the 15-24 year age group. To prevent anemia, every pregnant woman is expected to get a Blood Plus Tablet (TTD) of at least 90 tablets during pregnancy. The coverage of giving Blood Plus Tablets to pregnant women in Indonesia in 2016 was 40.2%. The content of giving Blood Plus Tablets (TTD) to pregnant women in Indonesia in 2017 was 80.81%. The range of giving Blood Plus Tablets to pregnant women in Indonesia in 2018 was 81.16% (Risikesdas, 2018). Regulation of the Minister of Health of the Republic of Indonesia number 88 of 2014 describes the Fe tablet supplementation program to overcome iron deficiency. Namely, the government makes a blood supplement program for every pregnant woman as much as 90 tablets during pregnancy (3).

Knowledge is one of the factors that influence the compliance of pregnant women. According to Rahmawati and Subagio (2012), the non-compliance of pregnant women in consuming iron tablets recommended by health workers impacts their ignorance of the importance of adequate iron intake during pregnancy (4). Apart from knowledge, another factor that plays a vital role in compliance is pregnant women's attitude. Pregnant women who have a right attitude will understand the importance of having a pregnancy checkup at a health service and consuming iron tablets (5).

Based on data on inpatients at Anutapura General Hospital, Palu in 2018, there were 22,529, outpatients were 79,797, the number of pregnant women was 1,348 people, and the number of mothers with anemia was 129. The criteria in this study were third-trimester pregnant women who had given birth; the reason was to determine pregnant women's compliance in consuming Fe tablets during pregnancy. Based on the background explanation above, the authors are interested in researching the Relationship of Knowledge and Attitude with Compliance with Pregnant Women Consuming Iron Tablets at Anutapura General Hospital, Palu.

METHODOLOGY

This research is a quantitative study with cross-sectional study design. Sampling in this study with the Accidental Sampling method of 65 respondents. Analysis of the results of statistical tests in this study using the Chi-Square test with a value of $\alpha = <0.05$.

RESULT

Univariate Analysis

Table 1: Frequency Distribution of Pregnant Women by Age at Anutapura Hospital, Palu, 2020

Characteristics	Frequency (f)	Percentage (%)
16-25	28	43.1
26-35	28	43.1
36-45	9	13.8
Total	65	100

Based on table 1, the characteristics of the frequency of pregnant women based on age are known to be 28 respondents (43.1%) aged 16-25 years, 28 respondents (43.1%) aged 26-35 and 9 respondents (13.8%) aged 36-35 years.

Table 2: Frequency Distribution of Pregnant Women by Education at Anutapura Hospital, Palu, 2020

Characteristics	Frequency (f)	Percentage (%)
TS	3	4.6
SD	4	6.2
SMP	10	15.4
SMA	33	50.8
D3	5	7.7
S1	8	12.3
S2	2	3.1
Total	65	100

Based on table 2 of the frequency characteristics of pregnant women based on education, it is known that TS is 3 respondents (4.6%), SD is 4 respondents (6.2%), SMP is 10 respondents (15.4%), SMA is 33 respondents (50.8%), D3 is 5 respondents (7.7%), S1 as much as 8 respondents (12.3%), and S2 as much as 2 respondents (3.1%).

Table 3: Frequency Distribution of Pregnant Women by Occupation at Anutapura Hospital, Palu, 2020

Characteristics	Frequency (f)	Percentage (%)
URT	48	73.1
Honorar	6	9.2
Private	11	16.9
Total	65	100

Based on table 3 the characteristics of the frequency of pregnant women based on education, it is known that URT is 48 respondents (73.8%), Honorary is 6 respondents (9.2%), Private is 11 respondents (16.9%).

Table 4: Frequency Distribution of Pregnant Women Based on Knowledge Variables

Characteristics	Frequency (f)	Percentage (%)
Good	43	66.2
Not Good	22	33.8
Total	65	100

Based on table 4 of the characteristics of the frequency of pregnant women based on knowledge variables, it is known that pregnant women who have good knowledge are 43 respondents (66.2%), with poor knowledge as many as 22 respondents (33.8%).

Table 5: Frequency Distribution of Pregnant Women Based on Attitude Variables

Characteristics	Frequency (f)	Percentage (%)
Good	39	60
Not Good	26	40
Total	65	100

Based on table 5, the characteristics of the frequency of pregnant women based on attitude variables, it is known that pregnant women who have a good attitude are 39 respondents (60%), and 26 respondents (40%) have unfavorable attitudes.

Table 6: Frequency Distribution of Pregnant Women Based on Compliance Variables

Characteristics	Frequency (f)	Percentage (%)
Obey	44	67.7
Less Obedient	21	32.2
Total	65	100

Based on table 6, the characteristics of the frequency of pregnant women based on the compliance variable, it is known that obedient pregnant women are 44 respondents (67.7%) and 21 respondents (32.3%) are not obedient.

Bivariate Analysis

Table 7: Frequency Distribution of Pregnant Women Based on Knowledge and Compliance with Taking Iron Tablets at Anutapura Hospital, Palu

Knowledge	Obedience						p-value
	Less Obedient		Obey		Total		
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Good	15	68.2	7	31.8	22	100	0.000
Not Good	6	14.0	37	86	43	100	
Total	21	32.3	44	67.7	65	100	

Based on table 7 shows that of the 22 respondents who had poor knowledge, 15 respondents (68.2%) were disobedient and 7 respondents (31.8%) were obedient. Meanwhile, there were 43 respondents with good knowledge, 6 respondents (14.0%) who were disobedient, and 37 respondents (86%) who obeyed.

Based on the chi-square test, it shows that the p -value = 0.000 (p -value < 0.05), then H_0 is rejected, meaning that there is a relationship between knowledge and compliance with consuming iron tablets at Anutapura Hospital, Palu.

Table 8: Frequency Distribution of Pregnant Women Based on Attitudes and Compliance with Taking Iron Tablets at Anutapura Hospital, Palu

Attitude	Obedience						<i>p</i> -value
	Less Obedient		Obey		Total		
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Not Good	18	69.2	8	30.8	26	100	0.000
Good	3	7.7	36	92.3	39	100	
Total	21	32.3	44	67.7	65	100	

Based on table 8, it shows that of the 26 respondents who had a bad attitude, 18 respondents (69.2%) were disobedient, and 8 respondents (30.8%) were obedient. Meanwhile, 39 respondents had good attitudes, 3 respondents (7.7%) were disobedient, and 36 respondents (92.3%) were obedient.

Based on the chi-square test, it shows that the p -value = 0.000 (p -value < 0.05), then H_0 is rejected, meaning that there is a relationship between attitude and compliance with consuming iron tablets at Anutapura Hospital, Palu.

DISCUSSION

Knowledge of Compliance with Pregnant Women Consuming Iron Tablets. Based on the results of the study showed that of the 22 respondents who had a poor experience, 15 respondents (68.2%) were disobedient, and seven respondents (31.8%) were obedient. Meanwhile, there were 43 respondents with adequate knowledge, six respondents (14.0%) who were disobedient, and 37 respondents (86%). The statistical test results obtained p -value = 0.000 (p -value < 0.05), which means that H_0 is rejected, meaning that there is a relationship between knowledge and compliance with consuming iron tablets. According to the researchers' assumption, pregnant women's experience is good about adherence to swallowing iron tablets because pregnant women already know the benefits of these iron tablets to prevent anemia during pregnancy, which can cause the risk of bleeding during childbirth. The results of this study are in line with research conducted by Martini S, et al. (2017), Hastanti (2016) show that there is a relationship between knowledge and adherence to consuming iron tablets (6,7).

Attitude to Compliance with Pregnant Women in Consuming Iron Tablets. Based on the results of the study showed that of the 26 respondents who had a bad mood, 18 respondents (69.2%) were disobedient, and eight respondents (30.8%) were obedient. Meanwhile, 39 respondents had good attitudes, three respondents (7.7%) were disobedient, and 36

respondents (92.3%) were obedient. From the statistical test results obtained, p -value = 0.000 (p -value < 0.05), which means that H_0 is rejected, which means that there is a relationship between attitude and compliance with consuming iron tablets. According to the researchers' assumption, the philosophy of pregnant women is good in consuming iron tablets because, according to them, consuming iron tablets regularly can be useful for the health of mothers and children in their womb. A good and bad attitude of pregnant women can be influenced by their knowledge, because the higher their experience, the better their perspective will be. But there are also pregnant women whose attitudes are not good because of the influence of their environment who provide information about iron tablets so that the mother's response is also useful in consuming iron tablets. This study's results are in line with Wartisa F et al. (2018) showing that there is a relationship between attitudes and compliance with consuming iron tablets (8).

CONCLUSIONS

The research concludes a relationship between knowledge and compliance of pregnant women in consuming iron tablets with a p -value of 0.000 < 0.05. There is a relationship between attitude and compliance of pregnant women in consuming iron tablets with a p -value of 0.000 < 0.05.

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