THE RELATIONSHIP OF KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN ABOUT ANEMIA AND TABLET Fe BEHAVIOR FOR CONSUMING TABLET Fe IN BOGOR CITY

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Abstract

Background : The internal mortality rate in Indonesia is still high at 359 / 100,000 live births. The cause of the highest maternal mortality is that which is indirectly caused by anemia. In the city of Bogor , prevalence of anemia is still high . It is 50.58%. Based on previous research, the level of compliance of pregnant women at the Bogor Public Health Center , Bogor City is still low at 39.6% . W hile the coverage of the tablet F e in Public Health Center in Bogor in 2014 is good enough. T here are to consider when taking a Fe tablet. Those are ways to take tablets Fe, time drinking and Fe storage tablets . As this may damage the tablet F e and absorption Becomes not optimal. The purpose of this research is to know the correlation between knowledge, attitude about anemia and tablet Fe to b ehavior for consuming t ablet Fe in Bogor City .

Methods : This research is observational researchusing a cross sectional approach , with a minimum sample size of 109 respondents. This research was conducted in four regions work Public health centers in Bogor City that is Bogor Tengah , Tanah Sereal, Bogor Utara and Pasir Mulya. The analysis used in this study was univariate and bivariate. To analyze the relationship between knowledge and attitude of pregnant women towards the behavior consume iron tablet using the chi-square test.

Result : Most respondents had poor behavior in consuming Fe tablets as much as 71.8% while respondents who had good behavior in consuming Fe tablets only amounted to 28.2%. the number of respondents who have high knowledge about anemia and Fe tablets is not too much different from respondents who have low knowledge. Respondents who have high knowledge about anemia and Fe tablets are 54.5% while respondents who have a low level of knowledge are 45.5%.

Conclusion : there is a significant as sociation between attitudes of pregnant women about anemia and tablet Fe to behavior for Consuming Tablet Fe

Keywords: Knowledge, Attitude, Behavior consumption of Fe tablets

Introduction

AKI in Indonesia has increased dramatically, from 228 / 100,000 live births (Indonesian Health Demographic Survey (SDKI), 2007) to 359 / 100.00 0 live births (IDHS, 2012) . In Bogor City, mothers who died due to causes related to pregnancy, birth and postpartum period in 2012 were reported as 10 people (Bogor City health profile, 2013) and in 2013 there were an increase of 13 people (City health profile Bogor, 2014). According to a routine report on Monitoring of Local Maternal and Child Health Areas (PWS KIA) of the Indonesian Ministry of Health in 2007, the direct causes of maternal deaths were bleeding after childbirth (39%), hypertensive disorders (20%), infections (7%) and others (33%), while in Bogor City, the cause of maternal death due to bleeding was 23.07% (Health profile of Bogor City, 2014).One of the indirect causes of postpartum hemorrhage that can contribute to maternal mortality is anemia, which is 40.1%, (MOH, 2008).

One of the nutritional problems of pregnant women is iron deficiency anemia . Iron deficiency anemia in pregnant women is a

health problem experienced by women throughout the world, especially developing countries. In the city of Bogor the rate of anemia is still quite high at 50.58%, (in the Bogor City Health Center, 2011), even though the coverage of Fe tablets at the Central Bogor Health Center in 2014 was quite good, namely the coverage of 100% Fe1 tablets and Fe3 tablets of 96.92%. Purnamasari's research (2015) regarding the compliance of pregnant women in consuming Fe tablets in the work area of Bogor City Central Bogor Health Center, it turned out that only 39.6% of respondents were obedient in consuming Fe tablets. It is possible to be one of the causes of anemia prevalence rates are still high.

Based on the results of Purnamasari's (2015) study of 54 respondents, 28 respondents (87.5%) were not obedient in consuming Fe tablets even though the respondents had high knowledge about anemia. While respondents who received counseling about anemia and iron tablet of healthcare workers is only 22.64%, and of those respondents who have received counseling only 11:32% received counseling about the dangers of anemia in pregnancy and who get counseling about side effects of just 9.43%. This lack of information can lead to low knowledge of pregnant women about anemia and can increase the noncompliance of pregnant women in consuming Fe tablets due to side effects. Knowledge is a very important factor for the formation of a person's behavior. The formation of a new behavior, especially in adults, starts from the cognitive domain, in the sense that the subject knows in advance the stimulus in the form of material or objects outside, giving rise to new knowledge on the subject and subsequently raises an inner response in the subject's attitude towards the object he already knows . Finally, the stimulus that has been known and fully realized will lead to a further response, namely in the form of behavior in connection with the stimulus.

Mann (1969) says that even if it is assumed that attitudes are evaluative predispositions that largely determine how individuals behave, attitudes and behavior are often different. This is because behavior is not only determined by attitude, but by various other external factors. According to Bloom, the stimulus received by the subject can immediately cause behavior, meaning that someone can behave new without knowing in advance the meaning of the stimulus he receives. In other words, a person's behavior does not have to be based on knowledge and attitude, (Notoatmodjo, 2003).

Based on the above, the authors are interested in examining "The relationship of knowledge, attitudes of pregnant women about anemia and Fe tablets to the behavior of consuming Fe tablets in Bogor City."

Methods

The research design used was observational using a *cross sectional* approach . This study was sealed sanakan in 4 Work area health centers in the city of Bogor, Bogor Central Land for Cereals, North Bogor and Pasir Mulya from April - August 2016 . The sampling technique is done by *multistage sampling* , the sample size is calculated using the proportion 2 difference test formula so that the minimum number of samples obtained is 109 respondents.

Data retrieval is done when pregnant women come directly to the Puskesmas to carry out antenatal care. Pregnant women who meet the criteria for inclusion criteria are given an explanation and asked to be willing to become respondents, then interviews were conducted to obtain information about the knowledge and attitudes of pregnant women about anemia and Fe tablets about behavior in consuming Fe tablets based on questions in the questionnaire. Analysis using the chi-square test to determine the relationship of knowledge and attitudes of pregnant women about anemia and Fe tablets to the behavior of consuming Fe tablets.

Results

An overview of the behavior distribution of pregnant women in consumption of Fe tablets can be seen in the table below:

Table 1. Frequency distribution of behavior of pregnant women in consuming Fe tablets

Behavior Consumption of Fe tablets	n	%
Poor	79	71.8
Good	31	28.2
Total	110	100

Table 1 shows that most respondents had poor behavior in consuming Fe tablets as much as 71.8% while respondents who had good behavior in consuming Fe tablets only amounted to 28.2%. This means that the

behavior of pregnant women in consuming Fe tablets tends to be poor. The formation of a new behavior, especially in adults, starts from the cognitive domain, in the sense that the subject knows in advance the stimulus in the form of material or objects outside, giving rise to new knowledge on the subject and subsequently raises an inner response in the subject's attitude towards the object he already knows . Finally, the stimulus that has been known and fully realized will lead to a further response, namely in the form of behavior in connection with the stimulus.

Mann (1969) says that even if it is assumed that attitudes are evaluative predispositions that largely determine how individuals behave, attitudes and behavior are often different. This is because behavior is not only determined by attitude, but by various other external factors. According to Bloom, the stimulus received by the subject can immediately cause behavior, meaning that someone can behave new without knowing in advance the meaning of the stimulus he receives. In other words, a person's behavior does not have to be based on knowledge and attitude, (Notoatmodjo, 2003).

Table 2: Relationships Knowledge about the level of anemia and iron tablet on the behavior of pregnant women in consuming Fe tablet

Knowledge	n	%	Behavior				*sig n*
			Less		Well		
			n	%	n	%	
Low	50	45.5	36	72	14	28	0.96
High	60	54.5	43	71.6	17	28.4	
total	110	100					

Table 5. 2 shows that the number of respondents who have high knowledge about anemia and Fe tablets is not too much different from respondents who have low knowledge. Respondents who have high knowledge about anemia and Fe tablets are 54.5% while respondents who have a low level of knowledge are 45.5%.

The results of cross tabulation of knowledge about anemia and Fe tablets with the behavior of pregnant women in consuming Fe tablets showed that from groups that had knowledge of anemia and low Fe tablets 72% had poor behavior in consuming Fe tablets. But from the *Chi square* test results have not shown a significant result between knowledge about anemia and Fe tablets with the behavior of pregnant women in consuming Fe tablets. Notoatmodjo (2003) said that knowledge is a very important domain for the formation of one's actions. Knowledge is an accumulation of experience and education obtained by people before, the higher a person's level of education the higher his knowledge about something. Knowledge is a predisposition to behavior and according to Bloom (1980) in Notoatmodjo (2010), states that knowledge is a domain of behavior formation.

Ibu having knowledge about reproductive health will be more confident, waw asa n and m ladies antuk kema m engambil good decisions for themselves and their families but the fact someone who has a good knowledge belum certainly has behaviors premises knowledge of such a statement Green (1980), which states that good knowledge does not always cause behavior change, knowledge is important but this factor is not enough to make someone behave healthily.

Research by Purnawan (2006) regarding the relationship of knowledge, attitudes and practices of pregnant women about prevention of nutritional anemia with adherence to taking Fe tablets showed the same results as this study, where the results of the study showed that there was no relationship between knowledge of pregnant women and the behavior of consuming Fe tablets. The absence of a significant relationship between knowledge and behavior of consuming Fe Tablets in this study shows that pregnant women with good knowledge do not necessarily have good behavior in consuming Fe tablets, this may occur because in addition to knowledge there are still other variables that are more related to behavior pregnant women consume Fe tablets.

Therefore, the knowledge of pregnant women about Fe tablets needs to be improved by increasing health promotion efforts for pregnant women regarding anemia and Fe tablets for example by counseling and providing information through pamphlets, stickers and other communication media.

Table 3 : Relationships attitude about anemia and Fe tablets to the behavior of pregnant women in consuming Fe tablets

Attitude	n	%	Behavior				Sign
			Less		Well		
			n	(%)	n	(%)	
Less	50	45.5	41	82	9	18	0, 030
Well	60	54.5	38	63.3	22	36.7	
total	110	100					

Table 3 shows that the number of respondents who have a good attitude about anemia and Fe tablets is not too different from the respondents who have a bad attitude. Respondents who had good attitudes about anemia and Fe tablets were 54.5% while respondents who had an unfavorable attitude were 45.5%. The results of the cross tabulation of attitudes toward pregnant women 's behavior in consuming Fe tablets showed that 82% of mothers who had an unfavorable attitude also had poor behavior in consuming Fe tablets, this was confirmed by the *Chi square* test results which showed a significant relationship between attitude of respondents with the behavior of consuming Fe tablets.

Attitude is a term that reflects the feeling of pleasure, displeasure or feeling of ordinary (neutral) of a person towards something that can be in the form of attitudes towards objects, events, situations of people or groups. If that arises from something that is feeling happy / interested will be called a positive attitude, whereas if that arises that feeling of displeasure is called a negative attitude. (Lutfi, 2009). In the opinion of Newcomb in Melyanti (2011) attitudes have not been an action or activity, but it is a predisposition of action or behavior, Niven (2002) argues that a person's attitude is a very important component in his health behavior, which is then assumed that there is a direct relationship between attitudes and someone's behavior.

In this study most of the groups of mothers who had poor attitudes also had poor behavior in consuming Fe tablets. This is in line with the opinion of Sarlito in Lutfi (2009), who said that attitudes are a tendency to behave, attitude is readiness or willingness to act, someone who has a positive attitude has a tendency to do positive behavior too vice versa.

Conclusion

There was a significant relationship between the attitudes of pregnant women about anemia and Fe tablets on behavior in consuming Fe tablets. Pregnant women who have a bad attitude about anemia and Fe tablets tend to have poor behavior in consuming Fe tablets .

References

Almatsier, Sunita, 2006, *Basic Principles of Nutrition,* Jakarta; Gramesia Main Library.

Ariawan, 1998, *Large and Sample Methods in Health Research* . Jakarta: Biostatistics and Population Department. University of Indonesia Faculty of Public Health

Arikunto Suharsini, 2006, *Research Procedure a Practice Approach* . Jakarta: Rineka Cipta, Revised Edition VI.

Arisman, 2010, *A Textbook on the Sciences of Nutrition, Nutrition in the Life Cycle* . Jakarta: EGC.

Becker, 1979, *The Health Belief Model and Personal Health Behavior* , New Jersey: CBS inc.

Bobak, 2005. *Maternity Nursing Books* . Jakarta: EGC;

De Mayer, 1993, *Prevention and Control of iron deficiency anemia.* Jakarta: WHO. Geneva. Translated by Ronaldy DH Jakarta: Widya Medika;

Indonesian Ministry of Health, 1995, *Indonesian Pharmacopoeia* , Ministry of Health

Republic of Indonesia Ministry of Health, 2001. *Guidelines for the Introduction of Hazard Signs for Pregnancy, Childbirth and Postpartum* , Jakarta, Ministry of Health of the Republic of Indonesia.

Republic of Indonesia Ministry of Health, 2003, *Guidelines for Giving Iron Folate Tablets and Iron Syrup for Officers.* Jakarta: RI Ministry of Health Directorate General of Community Health Development.

RI Ministry of Health, 2003, *Nutrition Anemia Prevention Program for Fertile Women (WUS) Nutrition Anemia Adventure Program Strategy*

at WUS , Ministry of Health of the Republic of Indonesia Directorate General of Community Health Development.

RI Ministry of Health, 2008, *Indonesian Demographic and Health Survey 2007* , Jakarta, Ministry of Health of the Republic of Indonesia.

Republic of Indonesia Ministry of Health, 2008, *Normal Childbirth Care, Essential Care, Prevention, and Immediate Management of Complications of Childbirth and Newborns,* Jakarta. MOH, RI

RI Ministry of Health, 2010, *Basic Health Research* . In: Ministry of Health, Jakarta.

RI Ministry of Health, 2013, *Indonesia Demographic and Health Survey 2012* , Jakarta.Depkes RI,

Bogor City Health Office, 2014, *Bogor City Health Profile in 2013,* Bogor

Bogor City Health Office, 2015, *Bogor City Health Profile 2014,* Bogor

Bogor City Health Office, 2011, *Health survey in 2010,* Bogor

Fauzi M, 2001, *Role of Supplementary Coverage of Fe3 Blood Addition Tablets for Pregnant Women and Other Factors Against III Trimester Hb Levels in Donggala District, Sulawesi Province* , 2001.

Lund Walter, 1994, *The Pharmaceutical Codex* , London, The Pharmaceutical Press.

Machfoedz, Ircham, et al. 2005, Techniques for Making Research Tools in the fields of health, nursing and midwifery. Yogyakarta: Fitramaya ,; 21-25

Mardiana, 2004, *Factors related to adherence of pregnant women consume fe tablets at Sako Health Center and Multi Wahana Health Center Sako District, Palembang City* : Post-graduate program at the University of Indonesia; Depok

Masrizal, 2007, *Iron Deficiency Anemia* , Public Health; 02: 140-4

Mochtar. 1998, *Synopsis of Obstetrics* . 2 ed. Jakarta: EGC;

Niven, 2002, *Health Psychology* : *Introduction to Nurses and Other Health Professionals* . 2 ed. Esther M, editor. Jakarta: EGC ...

Notoatmodjo, Soekidjo. 2003, *Health Promotion and Behavioral Sciences* . Jakarta, Rineka Cipta.

Notoatmodjo, Soekidjo. 2005, *Theory Health Promotion and Application,* Jakarta, Rineka Cipta.

Patimah, 2007, *Pattern of Consumption of Pregnant Women and Their Relation to the incidence of Iron Deficiency Anemia* , Journal of Science & Technology; 7 (3): 137-52.

Prawirohardjo, Sarwono. 2005, *Midwifery Science* , Jakarta, Bina Pustaka Sarwono Prawirohardjo.

Sandjaja, Kartono J, 1986. *Iron tablet distribution system in overcoming the problem of nutritional anemia in pregnant women* , Nutrition and Food Research; 9: 14-22.

Sarafino, 2006. *Health Psycology of Biopsychosocial Interactions* 5ed. USA: John Wiley & Sons Inc.

Sopiyudin DM 2011, *Sample* Size *and Method of Sampling* , Jakarta: Salemba Medika;

Sopiyudin DM 2011. *Statistics for medicine and health* , Jakarta: Salemba Medika ...

Stockley, 1994, *Drug Interactions* . London, Pharmaceutical Press

Subagio H, 2002, *Relationship between Vitamin A and Zinc status of Pregnant Women with Success in Iron Supplementation,* Dissertation, Semarang, UNDIP.

Triratnawati, 1998., *Efforts to increase adherence of pregnant women to taking blood-increasing pills* , Journal of Indonesian Epidemiology 2

Wasnidar, 2007, *Anemia Pocket Book for Pregnant Women Concept and Management* , Jakarta: Trans Info Media.

Widayatun, 2009, *Behavioral Sciences* , Jakarta, Sagung Seto

Widyakarya National Food and Nutrition VIII. 2000, *Food and Nutrition Resilience in the Era of Globalization Regional Autonomy* , Jakarta, Editor Soekirman, et al.

Windiasari. 2009, *Compliance with medication (Compliance)* ; Available from: http://dinna-windiasari.blogspot.com .