



## DESCRIPTION OF PREGNANT WOMEN'S KNOWLEDGE ABOUT ANEMIA

Fitri Windari<sup>1</sup>, Dwi Rosmawati<sup>2</sup>, Heni Anggaraini<sup>3</sup>, Tri Riwayati Ningsih<sup>4</sup>

<sup>1234</sup>*Universitas Islam Negeri Raden Intan Lampung*

Corresponding author: Fitri Windari

Email: [fitriwindari03@gmail.com](mailto:fitriwindari03@gmail.com)

### ABSTRACT

**Background** :: Anemia is a health problem that affects people worldwide and affects both developed and developing countries. Anemia occurs during every human life cycle, with one in four suffering from anemia. Most people with anemia are pregnant women. Anemia is an indirect cause of death for pregnant women. According to the World Health Organization (WHO), defines anemia during pregnancy as a hemoglobin level of less than 11 g or less than 33% at any time during pregnancy. The hemoglobin level during pregnancy is less than 11 g and is in early pregnancy

**Objective:** Explain the characteristics of pregnant women's knowledge about anemia based on age, education level, and mother's occupation

**Methods:** Quantitative descriptive research with a study with a total of 56 respondents in the Working Area of the Karang Anyar Health Center, South Lampung. Data collection used a knowledge questionnaire sheet, data testing was carried out using Chi Square.

**Research result:** the characteristics of the respondents which include age, education level, and mother's occupation, most of the respondents are aged 20-35 years, with a high school education level, the second article has elementary school education, and the respondent's occupation is that most of the respondents do not work. Overview of pregnant women's knowledge about anemia was obtained from the majority in the sufficient category. Knowledge can be influenced by the support factor from the family. Other factors that can help pregnant women's knowledge about anemia with education and information from health workers must be further improved so that the quality of knowledge of pregnant women will be even better

**Conclusion:** Knowledge of pregnant women about anemia can be influenced by factors from family support and health workers, education of pregnant women and motivation for health education so that the quality of knowledge of pregnant women is getting better.

**Keywords:** Pregnant Women, Knowledge, Anemia

### Introduction

Anemia is a condition in which the body has a too small number of red blood

cells (erythrocytes), where the red blood cells contain hemoglobin which is useful for carrying oxygen throughout the body's

tissues.<sup>1</sup> Anemia in pregnancy is a condition where the hemoglobin level is less than 11 g/L in the first and third trimesters, the hemoglobin level is less than 10.5 g/L in the second trimester.<sup>1</sup> Anemia in pregnant women is called "potential danger to mother and child" (potentially endangering mother and child), that's why anemia prioritizes serious attention from all parties involved in health services.<sup>2</sup>

Anemia that occurs during pregnancy is caused by various factors such as conditions that cause a decrease in hemoglobin concentration in the blood such as malaria and HIV, parasitic infections and micronutrient deficiencies and the main cause is iron deficiency during pregnancy.<sup>3</sup> Knowledge of pregnant women about nutrition has an important role in fulfilling maternal nutrition. Knowledge of pregnant women about nutrition is influenced by several factors, namely experience, education and age. Lack of knowledge of pregnant women about the benefits of nutrition can cause anemia.<sup>1</sup>

The results of research by medical faculties throughout Indonesia prove that the prevalence of anemia in pregnant women in Indonesia is 50-63%.

Meanwhile, research by Puspongoro and Anemia World Map at the same time stated that 51% of pregnant women suffer from anemia, resulting in the death of up to 300 people per da.<sup>3</sup>

Maternal mortality is an indicator to see the health status of a country. The 2012 Indonesian Health Demographic Survey (IDHS) proved that the Maternal Mortality Rate (MMR) at childbirth showed an increase from 228 per 100 thousand live births to 359 per 100 thousand live births. This is very far from the government's target of 108 per 100 thousand live births. Estimates of anemia risk factors globally are around 51%.<sup>4</sup> Based on the 2013 Riskesdas, there were 37.1% of pregnant women with anemia, namely pregnant women with Hb levels of less than 11.0 gram/dl, with nearly the same proportion in urban areas (36.4%) and rural areas (37.8%). In 2018, the incidence of anemia in pregnant women increased to 48.9%, which was quite large for mothers approaching the age of 15-24 years, amounting to 84.6% (Riskesdas, 2018)

Knowledge of pregnant women about health, especially anemia, will influence the behavior of pregnant women in implementing anemia prevention

programs. Pregnant women who have a good level of knowledge about anemia mean a good interpretation of the meaning of anemia, things that cause anemia, signs and symptoms of anemia, things that are caused if anemia occurs, as well as about health behavior to prevent anemia occurring. during pregnancy.<sup>5</sup>

The prevalence of anemia in Indonesia is still quite high. Based on data from the Indonesian Ministry of Health (2013) it shows that the prevalence of anemia in pregnant women reaches 37.1% throughout Indonesia. The prevalence of anemia by region shows that patients living in rural areas have a higher rate (22.8%) than those living in urban areas (20.6%). Meanwhile, the prevalence of anemia in adolescents aged over 15 years was 22.7%. In 2018, the proportion of anemia in pregnant women reached 48.9%.<sup>6</sup>

**Methods**

This research uses a quantitative study design with a cross sectional method. The research was conducted using an interview method using a questionnaire on 56 pregnant women respondents in the Work Area of the Karang Anyar Health Center, South

Lampung. Data test was performed using Chi Square.

**Results and Discussion**

Table 1. Description of Respondents' Characteristics by Age

Age (Years)	Percentage	
	N	%
20-35	35	62.5
36 - 45	15	26,7
>45	6	10,7

Most of the respondents aged 20-35 years as much as 62.7%

Table 2. Description of Respondents' Characteristics based on education level

Level of education	Percentage	
	n	%
Elementary School	6	10,7
Junior High School	10	17
Senior High School	35	62.5
College	5	0.8

Most of the respondents have education up to senior high school (SMA).

Table 3. Description of Respondents' Characteristics by Occupation

Work	Percentage	
	n	%
Housewife	35	62.5
Private sector worker	15	26,7
civil servant	6	10,7

As many as 35 respondents did not work outside the home, as housewives.

Table 4. Description of Respondents' Characteristics based on pregnancy status

Pregnancy	Percentage	
	n	%
Primipara	20	35
Multipara	36	65

At the time of the study, 36 respondents were pregnant with their second and third children.

Table 4. Description of Knowledge of Pregnant Women Regarding Anemia

Knowledge	Percentage	
	n	%
<b>Not enough</b>	6	10,7
<b>Enough</b>	35	62,5
<b>Good</b>	15	26,7

Of the 56 respondents, 35 respondents had sufficient knowledge about anemia during pregnancy

1. Characteristics of Knowledge of Pregnant Women About Anemia Based on Mother's Age, Education Level, and Occupation

The results of the study show that respondents based on age, education level, and mother's occupation were found to be aged 20-35 years, with an education level obtained from high school, and based on the mother's occupation, they were found to be unemployed.<sup>7</sup> Then the results of research also showed the same results, namely respondents aged 20-35 years, had elementary school education, and respondents were found to be

unemployed.<sup>8</sup> Likewise, the results of research also showed that based on the respondents, the respondents were aged 21-40 years, had a junior high school education, and the mother's occupation was found to be unemployed.<sup>7</sup>

Characteristics of respondents based on age is that most of the respondents are classified as early adults, namely 20-35 years old, at which age they can choose what is good and what is bad for them. This shows that most pregnant women are of healthy reproductive age or are not at risk.<sup>9</sup> Then the characteristics of education, researchers argue that there is a relationship between education and knowledge because a low level of education can result in a lack of mother's knowledge in dealing with problems, especially in taking action. And the characteristics of work, researchers argue that there is a relationship between work and knowledge, because working mothers often leave the house,

2. Overview of Knowledge of Pregnant Women About Anemia

Knowledge about anemia needs to be mastered by every individual because it greatly affects the health of the fetus in the mother's womb. Healthy conditions are

not only for a mother, but also for the child who is being conceived. This effort must start from the role of a mother in instilling a healthy and nutritious diet to prevent anemia during pregnancy. This is in line with the opinion of that with good knowledge about anemia, pregnant women understand better what supports the quality of pregnancy, chooses food ingredients, and prevents anemia and other diseases that can threaten the mother and baby. Knowing anemia and how to prevent it is the first step in overcoming anemia yourself.<sup>11</sup> Based on the results of the study regarding the description of pregnant women's knowledge about anemia, namely, the knowledge of pregnant women has a low level of knowledge with a percentage of 43.3%. While the results of research have an adequate level of knowledge with a percentage of 56.9%.<sup>12</sup> Likewise the results of also showed the results of the study that pregnant women had an adequate level of knowledge with a percentage of 50%.<sup>13</sup> According the research a person's knowledge has different levels, broadly divided into six levels, namely: 1) Know; 2) Understanding; 3) Application; 4) Analysis; 5) Synthesis; 6) Evaluation et al

(2017) that the knowledge of pregnant women has a low level of knowledge with a percentage of 43.3%.<sup>14</sup> While the results of research have an adequate level of knowledge with a percentage of 56.9%.<sup>15</sup> Likewise the results of research also showed the results of the study that pregnant women had an adequate level of knowledge with a percentage of 50%.<sup>16</sup> Knowledge has different levels, broadly divided into six levels, namely: 1) Know; 2) Understanding; 3) Application; 4) Analysis; 5) Synthesis; 6) Evaluation et al (2017) that the knowledge of pregnant women has a low level of knowledge with a percentage of 43.3%.<sup>17</sup> While the results of research have an adequate level of knowledge with a percentage of 56.9%.<sup>18</sup> Likewise the results of research also showed the results of the study that pregnant women had an adequate level of knowledge with a percentage of 50%.<sup>14</sup> Knowledge has different levels, broadly divided into six levels, namely: 1) Know; 2) Understanding; 3) Application; 4) Analysis; 5) Synthesis; 6) Evaluation Likewise the results of research also showed the results of the study that pregnant women had an adequate level of knowledge with a percentage of 50%.

Most of the respondents had sufficient knowledge that the parity of pregnant women was affected by the large number of multiparas. Experience is something that has been done and experienced by someone so that this experience will increase one's knowledge. So the higher the parity level of a mother, the more experience and knowledge she has.<sup>15</sup> The results of research conducted by showed that 61.8% of respondents had sufficient knowledge and 94% of parity respondents.<sup>14</sup> Most of the respondents did not work, low job status often affects a person's level of knowledge.<sup>13</sup>

Knowledge of pregnant women about the meaning of anemia in the moderate category is influenced by the age of pregnant women who are still in the productive age of 20-35 years, pregnant women who are old enough will be more mature in thinking, the education of pregnant women is in the highly educated category, the higher a mother's education, the easier it is for her to accept and understanding new information, the work of pregnant women who are not working and sources of information from the internet. Mothers who are not working have a lot of free time to obtain

information about anemia from both electronic and print media.<sup>13</sup>

The knowledge of pregnant women about the classification of anemia in the less category is influenced by the education of pregnant women with low education, pregnant women who do not work and sources of information from midwives. The higher the education of a pregnant woman, the easier it is for pregnant women to receive and understand new information. Pregnant women who don't work have a lot of free time to find information about anemia, but mothers who are less knowledgeable don't use electronic media to get information about anemia

### **Conclusion**

Knowledge of pregnant women about anemia can be influenced by factors from family support and health workers, education of pregnant women and motivation for health education so that the quality of knowledge of pregnant women is getting better. Efforts are being made to support pregnant women's knowledge about anemia by providing full support to pregnant women and providing information about the meaning of anemia, the causes of anemia, the dangers of

anemia and the prevention of anemia in pregnant women.

#### References

1. Astutik, RY & Ernawati, D. (2018). Anemia in Pregnancy. Jember: CV. Pustaka Abadi.
2. Republic of Indonesia Ministry of Health. 2013. Indonesian Health Profile. Jakarta: Ministry of Health of the Republic of Indonesia.
3. Papua Provincial Health Office (2018). Papua Health Profile 2017.
4. Provincial Health Office Papuan. Efendy, GN, (2018). Fundamentals of Family Nursing. Jakarta: EGC.
5. Fanny, Lydia, TheresiaDewiKB, HjSitiZaenab. Description of Anemia Levels in Pregnant Women at the Bara-Baraya Health Center, Makassar City in 2011. In, published in the Journal of Food Nutrition Media Vol XII, Issue 2 July-December 2011.
6. Fauzi, Yan at all (2011). Palm Oil Smart Book. Gromedia. New York: Library.
7. Hariyani, B., Yulia, NK, & Fitria, PA (2019). Description Of The Knowledge Of Pregnant Women About Anemia In Bergas Lor Village, Bergas District, Semarang District (Doctoral dissertation, Ngudi Waluyo University).
8. Hasdianah, S. 2014. Pathology and Pathophysiology of Disease. Yogyakarta: Nuha Medika. RI Ministry of Health (2018).
9. Indonesian Health Profile. Jakarta: RI Ministry of Health. RI Ministry of Health (2019).
10. Primary Health Research Results. Jakarta: RI Ministry of Health.
11. Lestari, D., Zuraida, R., & Larasati, TA (2013). The relationship between the level of knowledge of Halim's mother about breast milk and the mother's occupation with exclusive breastfeeding in Fajar Bulan sub-district. Majority Journal, 2(4).
12. Manuaba, 2014. Obstetrics. Jakarta: EGC.
13. Marmi, SAR & Fatmawati, E. 2011. Pathology Midwifery Care. Yogyakarta: Student Libraries.
14. Notoatmodjo, (2016). Health Promotion and Behavioral Sciences. Jakarta: PT Rineka Cipta.
15. Proverawati, A. 2013. Anemia and Anemia of Pregnancy. Yogyakarta: Nuha Medika.
16. Putri, Y., & Yuanita, V. (2020). Factors Related To The Incidence Of Anemia In Pregnant Women At The Bukit Sangkal Palembang Health Center, 2019. Journal of Health and Development, 10(19), 114-125.
17. WHO (2018). Maternal Health. <http://www.who.int.com>. accessed April 10, 2019.
18. Widoyoko, APH, & Septianto, R. (2020). Effect of Anemia on Maternal Death. Journal of Professional Nurse Research, 2(1), 1-6