

The Effectiveness of Consumption of Dates on Increased Hemoglobin Levels in Pregnant Women with Mild Anemia at the Arrabih Primary Clinic

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ABSTRACT

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Anemia in pregnant women has a negative impact on both the mother and the fetus. Possible adverse effects on pregnant women, namely the occurrence of premature birth, low birth weight babies, disability and even infant death, length of parturition due to lack of uterine propulsion (Fadlun & Feryanto, 2012). Based on the author's experience, there are still pregnant women who do not take blood-boosting tablets because the side effects of these tablets are nausea, black stools. The population in this study were all pregnant women who were recorded at the Arrabih Primary Clinic. The sample in this study was pregnant women in the first trimester who had anemia. The sampling technique used is accidental sampling. The method used in this study is a quasi-experimental. The type of design in this study was in the form of a non-equivalent design (pretest and posttest). The results of this study showed that the average hemoglobin level of pregnant women before being given dates was 9.17 gr%, while the average hemoglobin level of pregnant women after being given dates was 10.15 gr%. Statistical test results value 0. To the midwives and lecturers to be able to provide more health information about the benefits of dates for increasing Hb levels in pregnant women so that the high risk of bleeding caused by anemia can be overcome.

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1. Introduction

Anemia of pregnancy is a maternal condition with hemoglobin (Hb) levels <11 g% in the I and III trimesters or hemoglobin (Hb) levels below 11 g% in the I and III trimesters or levels < 10.5 g% in the second trimester. Anemia in pregnant women has a negative impact on both the mother and the fetus. Possible adverse effects on pregnant women include premature birth, low birth weight babies, disability and even infant death, length of parturition due to lack of uterine propulsion. (1)

Anemia can be caused by several factors. There are direct and indirect factors. In general, anemia is caused by malnutrition, lack of iron levels, malabsorption, large blood loss during first delivery, menstruation and chronic diseases such as pulmonary TB, intestinal worms, malaria and so on (2)

Anemia is a health problem throughout the world, especially in developing countries where an estimated 30% of the world's population suffers from anemia. The indirect cause of maternal death is anemia. The top five causes of death were still dominated by bleeding (32%), hypertension in pregnancy (25%), infection (5%), prolonged labor (5%), abortion 1% and other causes (32%). Thus anemia in pregnancy increases the risk of maternal death (3).

According to the results of research (4) in the journal analysis of factors that affect the level of anemia in anemic pregnant women at the Sentolo II Health Center Kulon Progo, it was found that adherence to consumption of Fe tablets had an effect on anemia. A similar study conducted by (5) in the journal of factors related to the incidence of anemia, found that there is a close relationship between iron intake and the incidence of anemia.

Another way to increase iron in the body is to consume dates. Unlike most other fruits, dates contain carbohydrates and iron which is quite high, namely 0.9mg/100gr of dates (6).

Based on the author's experience when providing guidance to midwifery students who practice midwifery clinics, there are still pregnant women who do not consume blood-boosting tablets because the side effects of these tablets are nausea, black bowel movements. So the mother is lazy to take the blood-boosting tablet.

Midwives provide services based on knowledge and competence in the field of midwifery in accordance with Law No. 4 of 2019. In addition to providing pharmacology-based services and treatment, midwives are also required to provide non-pharmacological midwifery care for mild anemic pregnant women.

Based on the above background, the authors are interested in conducting research on pregnant women about the effectiveness of consuming dates with an increase in hemoglobin levels in pregnant women with mild anemia at the Pratama Arrabih Clinic, Pekanbaru in 2020.

2. Method

This study uses a quantitative approach, the method used in this study is a quasi-experimental (7). This study is to see whether there is a change in hemoglobin levels before and after giving dates. The population in this study were all pregnant women who were recorded at the Arrabih Pratama Clinic, while the sample in this study were pregnant women who were willing to consume 100 grams of dates every day for 14 days. The data analysis used was bivariate with dependent T test. This study uses a value of 0.05 or 5% and the confidence level of this study is 95%.

3. Research Results and Discussion

3.1 Research result

a. Univariate Analysis

Table 1

Frequency Distribution of HB Levels of Pregnant Women with Mild Anemia Before and After Giving Dates at the Arrabih Pratama Clinic

Variable	n	HB Levels Before Giving Dates			
		%	mean	Min	Max
Date Therapy	30	100	9.17	7	10
HB Levels After Giving Dates					
Date Therapy	30	100	10.15	8	11

Table 1 above shows that the highest hemoglobin level of pregnant women before being given dates is 10 g%. Meanwhile, the highest hemoglobin level of pregnant women after being given dates is 11 g%

b. Bivariate Analysis

Table 2

Distribution of Average HB Levels of Pregnant Women with Mild Anemia Before and After Giving Dates at the Arrabih Primary Clinic

Variable	mean	SD	SE	P Value	N
Hb . level					
Before	9.17	0.834	0.152	0.001	30
After	10.15	0.800	0.146		

Table 2 above shows that the average hemoglobin level of pregnant women before being given dates is 9.17 gr% with a standard deviation of 0.83gr%. While the average hemoglobin level of pregnant women after being given dates is 10.15gr% with a standard deviation of 0.800 gr%. It can be seen that the mean difference before and after being given dates is -0.983 with a standard deviation of 0.278. The results of the statistical test value of 0.001 means that there is a significant difference between Hb levels before and after being given dates.

3.2 Discussion

Consumption of dates eaten in the morning for 14 days can help increase hemoglobin levels because dates contain iron minerals and B complex vitamins that play an important role in the formation of hemoglobin and red blood cells. This study was conducted on 30 pregnant women with measurements of 2x Hb levels, namely before and after consumption of dates. After the research was conducted on the effectiveness of the consumption of dates on the increase in hemoglobin levels in pregnant women with mild anemia, it was carried out with a dependent T test where the p-value < (0.001), meaning that there was a significant difference between the Hb levels of pregnant women before and after being given Dates at the Arrabih Primary Clinic, Pekanbaru City.

This is in accordance with research (3) which says consuming dates for 14 days as much as 100 grams or approximately 5-7 pieces on a regular basis will help increase hemoglobin levels in the blood.

The results of this study are supported by theory (8) which says dates can be categorized as an

alternative choice in meeting iron needs during pregnancy as long as they are consumed regularly so that the desired increase in hemoglobin can occur properly. Dates contain high natural sugars such as glucose, fructose and sucrose. So effective to increase energy directly.

Then from the results of the literature review presented by (9) with the title The Effect of Date Consumption on the Increase in Hemoglobin Levels: A Review concluded that of the seven research results that have been carried out, there is one journal which says that there is no effect of increasing hemoglobin consumption of dates or date juice. .

Meanwhile, other journals (11) said that the effect of consuming dates and date juice could increase hemoglobin levels. The average result of hemoglobin before being given dates was mild anemia, but after being given dates or date juice the average hemoglobin increased.

The results of another study on the administration of date palm juice to postpartum mothers (12) showed that there was an effect or effectiveness before and after the administration of date palm juice on increasing hemoglobin levels in postpartum women in the UPT area of Kereng Bangkirai Health Center, Palangka Raya City.

This study is in line with research conducted by (11) with the title The Effect of Dates Extract on Increased Hemoglobin Levels of Pregnant Women in the Third Trimester. That the effect of giving date palm juice on increasing hemoglobin levels in pregnant women by Wilcoxon statistical test, with p value <0.05 (0.002). it can be concluded that there is an effect of giving date palm juice to increase hemoglobin levels in pregnant women.

4. Conclusion

The effectiveness of the consumption of dates on increasing hb levels in mild anemic pregnant women with a value of *p-value* < (0.001).

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