Nutra: Jurnal Gizi Dan Kesehatan
https://saintifypublish.com/index.php/nutra
Volume 01 | Number 02 | January |2024
e-ISSN: 3025-9886

EFFECTIVENESS OF GIVING RED SPINACH SYRUP TO PREGNANT WOMEN WITH MILD ANEMIA AGAINST INCREASE IN HB LEVEL

Ani T Prianti[1*], Sutrani syarif [1], Nurhidayat Triananingsih[1]
[1] Bachelor of Midwifery, Faculty of Nursing and Midwifery, Megarezky University
***Corresponding author email address: anhyanhy401@unimerz.com**

Article History
Received 13 Dec 2024
Accepted 21 Jan 2024

Keyword
Red Spinach, Anemia, pregnant woman

DOI
xxxxxxxx

Abstract
Pregnant women's anemia that not treated properly can increase the risk of dangerous complications, such as premature labor. In addition, anemia can also increase the risk of low birth weight in infants. On the mother's side, anemia can increase the risk of postpartum depression and post-saline maternal death. the effect extract on increasing hemoglobin levels in pregnant women with moderate anemia on average experienced a significant increase from before and after giving red spinach extract. that condition where your body does not have enough red blood cells whose job is to deliver oxygen to all body tissues so that these organs can work normally. As a result, you will feel symptoms of anemia such as weakness, fatigue, and lethargy. In mild and temporary conditions of anemia, you can overcome it by consuming vegetables, fruits, and drinking enough water. Consume foods that are high in iron and folic acid such as red spinach, liver, seafood, and green leafy vegetables.This study aims to determine the effectiveness of giving red spinach to increase HB levels for pregnant women with anemia by consuming red spinach. The research design used was pre-experiment with Post-Test Only Control Group Design.The population in this study were pregnant women .the type of sampling was purposive sampling with the fulfillment of criteria, the sample size in this study was 30. The research sample in this design was Post-Test Only Control Group Design. Data collection techniques are primary data by observation (observation) directly to the respondents of this study to look for changes or things that will be examined. the results of the research conducted, the value of P = 0.000 was obtained,which means that red spinach syrup is effective in increasing Hb levels in pregnant women with anemia. where by consuming red spinach syrup can increase HB faster

Introduction

In the process of pregnancy, many pregnant women experience complications that can threaten the life of the mother and even the fetus in the womb. Pregnancy complications are problems that arise during pregnancy, either due to the pregnancy itself, or problems that existed before pregnancy and become severe due to pregnancy. A poor obstetric history in late pregnancy and early labor is often a risk factor for the onset of postpartum

complications (1). The four leading causes of maternal mortality are hemorrhage (30.3%), hypertension during pregnancy (HDK) (27.1%), infection (7.3%), and other factors, which are secondary causes of maternal death (35.3%), such as kidney, heart, or cancer in the mother (2).

It was discovered that almost 800 women worldwide lost their lives to difficulties during pregnancy and childbirth in 2018. These complications can result in bleeding throughout the birthing process and ultimately lead to anemia. The majority of these deaths are avoidable, and almost all are the result of inadequate resource management. Maternal mortality is mostly caused by hemorrhage, infection, hypertension, and indirect causes. Compared to women living in wealthy countries, women in underdeveloped countries are more likely to die from bleeding, infections, and hypertension (3).

According to WHO estimates, anemia affects 40% of pregnant women and 42% of children under the age of five globally (4). Pregnant women experiencing a blood iron deficit are said to be experiencing anemia. Furthermore, a condition known as anemia in pregnancy is defined as having hemoglobin levels less than 11 grams per deciliter throughout pregnancy (5).

Anemia in pregnancy causes low physical ability because body cells do not get enough oxygen supply. In addition, pregnant women who are anemia ill experience many disorders, such as fainting easily, increasing the frequency of complications in pregnancy and childbirth, or the process of giving birth that lasts a long time due to poor contractions. The effect can cause abortion premature birth prolonged labor because the uterus does not contract, postpartum bleeding, continuous bleeding, shock and infection during labor or after. Another bad impact, anemia can also cause heart failure which will occur in women if their Hb is less than 4 gr/dl. This causes the maternal mortality rate to remain high. Anemia can be prevented easily, but people take it too lightly, and think it is just weak, tired, tired and tired (6).

Pregnant women in Indonesia continue to experience a relatively high anemia rate. The percentage of anemia in pregnant women has increased over the last five years, from 2013 to 2018, according to the 2018 Riskesdas data. According to Riskesdas, the majority of pregnant women who suffered from anemia in 2018 were between the ages of 15 and 24 (84.6%), 24-34 (33.7%), 35–44 (33.6%), and 45–55 (24%). The health of children at delivery, particularly the possibility of low birth weight, is significantly impacted by the prevalence of anemia and the risk of chronic energy deficit in women of reproductive age(7).

Based on data obtained from the Tolo 'Puskesmas of Jeneponto Regency in 2018, there were 983 pregnant women and 256 (26.04%) were anemic, in 2019 there were 997 pregnant women and 241 (24.02%) were anemic, and in 2020 there were 968 pregnant women and 391 (40.39%) were anemia.. From the data of pregnant women who experience

anemia, the average pregnant woman experiences mild anemia with hb levels of 10 g/dl-9 g/dl.

Research conducted by (8). , the effect of giving red spinach extract on increasing hemoglobin levels in pregnant women with moderate anemia on average experienced a significant increase from before and after giving red spinach extract.

In line with research conducted by several researchers on the effectiveness of red spinach to increase hb, namely research (9). where the average pregnant woman experienced an increase in hb levels after being given red spinach extract.

Anemia in pregnant women who are not treated properly can increase the risk of dangerous complications, such as premature labor. In addition, anemia can also increase the risk of low birth weight in infants. On the mother's side, anemia can increase the risk of postpartum depression and post-saline maternal death (6).

Materials and Methods

Pre-experiment research design with Post-Test Only Control Group Design approach is used in this study. There are two groups in this design, and each is chosen at random. Treatment (x) is administered to the first group while not to the second. The untreated group is referred to as the control group, and the treated group is referred to as the experimental group. The population used in this study were pregnant women with anemia Pregnant women with mild anemia or hemoglobin levels (9%), living in the working area of the Tolo Health Center, Jeneoponto Regency, met the sample criteria set for this study. Willing to be a respondent. The sample in this study was part of the population, namely some of the pregnant women with anemia. The sampling technique in this study was the puposive sampling method. Namely in taking purposive sampling by meeting the inclusion criteria as follows, Inclusion Criteria: Willing to be a respondent, pregnant women with anemia, primi pregnant women, mothers who have never consumed red spinach soup, mothers who do not consume anemia prevention drugs.

Results

This chapter describes the results of research on the comparison of the effectiveness of moringa syrup and red spinach syrup on increasing the Hb levels of pregnant women who experience mild anemia on February 01 to September 30, 2023 with the number of respondents who met the criteria in this study were 60 people. Respondents were divided into two groups, namely 30 respondents every table is typed in 1 space. As stated in the texts, the number of tables is arranged systematically, and each one is finished with a brief title. Rather than explaining the title, do so in the footnotes. Kindly elucidate all non-standard information contained in the table using the footnotes.

Nutra: Jurnal Gizi Dan Kesehatan
https://saintifypublish.com/index.php/nutra
Volume 01 | Number 02 | January |2024
e-ISSN: 3025-9886

Table 1. Percentage of Hb levels of pregnant women before and after receiving interventions in the Tolo' Health Center Working Area in 2023

Kelompok	Kadar Hb			
	Normal Hb ≥ 11 gr		Tidak Normal <11 gr	
	N	%	N	%
Red Spinach Syrup				
Pre-Test	0	0	30	100
Post-Test	4	13,3	26	86,7

Tabel 1 Table 1.1 shows that all pregnant women's Hb levels (n=30) before the intervention were <11 grams with abnormal categories and increased to ≥11 grams with normal categories after receiving moringa syrup intervention, while the red spinach syrup group showed only 13.3% who experienced an increase in Hb levels to normal.

Table 2. Analysis of the Effect of Giving Red Spinach Syrup on Hb levels of pregnant women in the Tolo 'Health Center Working Area in 2023

	Klp Pengukuran	N	%	Negatif Rank	Positif Rank	Ties	Nilai P
Red Spinach Syrup	PreTest PostTest	30	100	0	4	26	0,004

Table 2 The results of the analysis using the Wilcoxon test showed that there was an effect of moringa leaf syrup and red spinach syrup on increasing the Hb levels of pregnant women with a value of P <0.05. The results of the analysis using the Mann-Whitney test showed there was a significant difference between moringa leaf syrup and red spinach syrup in increasing Hb levels in pregnant women with a value of P = 0.004.

DISCUSSION

Tabel 2 shows the findings from the Wilcoxon test analysis, which indicates that both red spinach syrup and moringa leaf syrup have an impact on pregnant women's hemoglobin levels, with a value of P <0.05. Additionally, the analysis reveals that red spinach syrup has a significant effect on Hb levels in pregnant women, with a value of P-0.000. Based on these findings, it can be said that red spinach syrup works better to raise pregnant women's hemoglobin levels.

This study is in line with research conducted by (9). Pregnant women's Hb levels increased after consuming red spinach, according to research done in the Pangkep district

on the herb's benefits for treating anemia. This was because the hypothesis test results showed that the P value was smaller than the value.

From the results of the study that there is an effect of increasing the Hb level of pregnant women after consuming red spinach leaf extract. Research has also been conducted by Usastiawati (2019) and Sylvie (2013) has also conducted research with the research title "the effectiveness of red spinach powder supplementation on increasing Hb levels in anemic pregnant women". The study's findings indicated that pregnant women's hemoglobin levels had increased both before and after therapy.

In this study, the authors faced several limitations that could affect the conditions of the research conducted, namely this research was less maximized because the researcher did not directly see the patient consuming red spinach syrup for up to 7 days but only a few days directly seen by her husband or family. The sample in this study was not homogeneous, where the samples in the study had different general characteristics. This research was not only conducted at the health center but home visits were also carried out.

Conclusion

Based on research conducted at Tolo Health Center in 2023, it can be concluded that before giving red spinach syrup 30 pregnant women who experience anemia and after giving red spinach syrup there is an effect of red spinach syrup on increasing the HB levels of pregnant women. This can be seen from the presence of 4 pregnant women who experienced an increase in HB so that their HB became normal, Following the Wilcoxon test, a p value, or Asymp.sig (2-tailed) 0.04 <0.05, was achieved. Thus, it may be said that in 2023, administering red spinach syrup to expectant mothers at Tolo Health Center will cause their HB levels to rise.

Reference

1. Ani T Prianti et.al. PIRAMIDA : Jurnal Pengabdian Masyarakat Health Improvement Education Through Nutrition Education for Pregnant Women Piramida : Jurnal Pengabdian Masyarakat Piramida : Jurnal Pengabdian. 2022;1:34–9.
2. Ike N, Kurniasih D, Marwati TA, Hidayat A, Yogyakarta UA. ANTENATAL CARE (ANC). 2020;12(2).
3. Kolola T, Morka W, Abdissa B. Antenatal care booking within the first trimester of pregnancy and its associated factors among pregnant women residing in an urban area: A cross-sectional study in Debre Berhan town, Ethiopia. BMJ Open. 2020;10(6):1–6.
4. Kemenkes 2016. Modul Bahan Ajar Praktikum Asuhan Kebidanan Kehamilan. Kementrian Kesehat Republik Indones. 2016;
5. Kemenkes RI. Kemenkes RI 2019. J Chem Inf [Internet]. 2019;53(9):1689–99. Available from:

https://pusdatin.kemkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/PROFIL_KESEHATAN_2018_1.pdf

6. Nuru Yesuf N, Agegniche Z. Prevalence and associated factors of anemia among pregnant women attending antenatal care at Felegehiwot Referral Hospital, Bahirdar City: Institutional based cross- sectional study. Int J Africa Nurs Sci. 2021;15:100345.
7. Kemenkes RI K. Kementerian Hukum dan HAM. Peraturan Pemerintah Republik Indonesia No 33 Tahun 2012 Tentang Pemberian Air Susu Ibu Eksklusif. 2014.
8. Dhilon DA, Lubis DS, Arsita E. Pengaruh Pemberian Jus Bayam Hijau Terhadap Kadar Hemoglobin Ibu Hamil Di Pmb Rosmidah Wilayah Kerja Puskesmas Kuok. J Doppler [Internet]. 2020;4(2):140–5. Available from: https://journal.universitaspahlawan.ac.id/index.php/doppler/article/view/1226
9. Jaya N, Sary L, Astriana A, Putri RD. Manfaat Bayam Merah (Amaranthus Gangeticus) Untuk Meningkatkan Kadar Hemoglobin Pada Ibu Hamil. J Kebidanan Malahayati. 2020;6(1):1–7.