

The Effect of Leaves Sweet Potato Stew on Hemoglobin Levels in the Third Month of Pregnancy

Alfika Awatiszahro^{a,1}, Betanuari Sabda Nirwana^{a,2}

^aMidwifery Profession Program, Faculty of Health Science, Kadiri University, Indonesia

¹alfika90@unik-kediri.ac.id, ²betanuarisabdanirwana@unik-kediri.ac.id

ARTICLE INFO

Article history:

Received: 3rd October 2021

Revised: 20th October 2021

Accepted: 2nd November 2021

Keywords:

Anemia

Third trimester pregnant women

Boiled water of sweet potato leaves

ABSTRACT

Anemia is often experienced by pregnant women on average due to iron deficiency. Anemia can cause complications in pregnancy and childbirth. Provision of boiled sweet potato leaves containing vitamin C and iron is expected to be an alternative in increasing hemoglobin levels in pregnant women.

This study aims to determine the effect of giving boiled water from sweet potato leaves to increase hemoglobin levels in third trimester pregnant women in the Gemarang Ngawi Health Center Work Area.

Method. The research design used was a pre-experimental design with a pre-experimental design. The research sample was pregnant women in the third trimester in the Gemarang Ngawi Health Center working area, totaling 16 respondents. The data collection instrument used an Hb measuring device and an observation sheet. This study used a paired T test, a p value of 0.000 was obtained, which means that there was an effect of giving boiled water from sweet potato leaves to the Hb levels of pregnant women in the third trimester. Sweet Potato Leaf Boiled Water contains vitamin C and iron, where vitamin C helps iron absorption, while iron in Sweet Potato Leaf Boiled Water can help synthesize hemoglobin in third trimester pregnant women to reduce the incidence of anemia. Health workers should recommend that pregnant women consume boiled water of sweet potato leaves because it can be used as an alternative in overcoming anemia in third trimester pregnant women.

I. Introduction

Pregnancy is a unique natural condition because although it is not a disease, it often causes complications due to various anatomic and physiological changes in the mother's body. Pregnancy triggers physiological changes that often obscure the diagnosis of a number of haematological disorders and the assessment of their treatment. This applies to anemia. Pregnant women are prone to various blood disorders that may affect any fertile woman.

Anemia in pregnant women can be overcome by increasing hemoglobin levels using supplements and food. Supplements that can increase hemoglobin levels such as iron tablets, folic acid and vitamin C supplements. Types of foods that can increase hemoglobin levels such as vegetables, fruit and meat. Vegetables that are easily obtained by the people of Ngawi Regency are sweet potatoes. Sweet Potato Leaves contain vitamins and minerals needed by the body. Minerals such as calcium, phosphorus, iron, sodium and potassium are abundant in Sweet Potato Leaves, in 100gr of sweet potato leaves it contains 117 mg of calcium, 1.8 mg of iron, 3.5 mg of carotene, 7.2



mg of vitamin C, 1, 6 mg of vitamin E and 0.5 mg of vitamin K, vitamin B, beta-carotene. Sweet potatoes are very good for building body cells to produce energy, increase body metabolism and prevent various diseases. Giving sweet potato boiled water is expected to be an alternative to reduce anemia in pregnant women so that the incidence of bleeding decreases and AKI can be suppressed.

A preliminary study by means of a documentation study at the Gamarang Health Center showed that from 10 pregnant women, 6 people had anemia with hemoglobin levels <11gr%. This shows that there are still high levels of pregnant women who have hemoglobin levels <11 g%. Given the serious consequences of anemia during pregnancy and the high incidence of anemia, researchers are interested in conducting a study entitled "The Effect of Sweet Potato Boiled Water on Hemoglobin Levels in Third Trimester Pregnant Women in the Gamarang Health Center Work Area in 2021"

II. Method

A. Design and Samples

The research design used was pre-experimental with pre-experimental design. The research sample was pregnant women in the third trimester in the Gamarang Ngawi Health Center working area, totaling 16 respondents. Data collection instruments using Hb measuring devices and observation sheets

B. Data Analysis

The sampling technique used in this study is non-probability sampling with incidental sampling, which is a sampling technique by taking samples from the entire population. Statistical tests for both variables used *shapiro wilk* All tests were performed using SPSS.

III. Results and Discussion

Differences in hemoglobin levels before and after treatment with sweet potato leaf boiled water.

Table 1. Differences in hemoglobin levels before and after being given sweet potato boiled water therapy in third trimester pregnant women in the Gamarang Health Center Working Area in 2021.

	n	Mean	Min	Max	Std. Deviasi	P Value
Pre Treatment	16	8,9	7,5	10,2	,861	0.000
Post Treatment	16	10,1	8,8	11,4	,819	

Based on the results of the study, it was interpreted that the average pre-test Hb value was 8.9 mg/dl with the lowest Hb 7.5 mg/dl and the highest 10.2 mg/dl with a standard deviation of 0.861. The average post-test Hb value was 10.1 mg/dl. The lowest Hb was mg/dl and the highest was 11.4 mg/dl with a standard deviation of 0.819. The results of the normality test of the data were normally distributed so that the Paired T test was used to obtain a p value of 0.000, which means that there was an effect of giving boiled water from sweet potato leaves to the increase in hemoglobin levels in third trimester pregnant women.

IV. Conclusion

Most of the respondents before being given boiled water from sweet potato leaves, the average pre-test Hb value was 8.9 mg/dl with the lowest Hb 7.5 mg/dl and the highest 10.1 mg/dl with a standard deviation of 0.861. Most of the respondents before being given boiled water therapy with green sweet potato leaves, the average Hb Post test value was 10.1 mg/dl, the lowest Hb was 8.8 mg/dl and the highest was 11.4 mg/dl with a standard deviation of 0.819. The final result of the study is that there is an effect of giving boiled water from sweet potato leaves to the hemoglobin level of pregnant women in the third trimester.

Acknowledgment

The author would like to thank the respondents at Gemarang Health Center, Ngawi Regency, East Java for their cooperation during the research and thank you for taking the time to participate in this research.

References

- [1] Akbar, R. (2015). Various Pharmacy Plants Live Around Us. Jakarta: One Books.
- [2] Ginting. Al.2011. Potential of Purple Sweet Potato as Functional Food. science and technology
- [3] Nasihi.C., 2010. The Role of Microbes in Organic Agriculture. Department of Pests
- [4] Ajeng, N. 2012. Changes in Physiological Adaptation of Third Trimester Pregnant Women. Yogyakarta.
- [5] Donsu. Anxiety Level. Journal of Chemical Information and Modeling, 53(9), 1689–1699, 2017
- [6] Damayanti, E. 2012. Healthy and Enjoyable Pregnancy and Childbirth
- [7] Jedeng, I. W. 2011. Effect of Type and Yield of Sweet Potato (*Ipomoea batatas*. L) Var. Local Purple. Udayana University Postgraduate Program. Denpasar. Bali.
- [8] Ginting. Al.2011. Potential of Purple Sweet Potato as Functional Food. science and technology
- [9] Primasnia P, Wagiyo, Elisa. Husband's Mentoring Relationship with Level Anxiety of Primigravida Mothers in Facing the First Stage of Labor Maternity Home for Ungaran City Region. p. 1(4):212–6, 2017
- [10] Susiloningtyas, Is. 2017. The level of knowledge of pregnant women about the signs of The Danger of Pregnancy in Gemulak Village, Sayung District, Demak Regency.
- [11] Hani, U. (2010), Midwifery Care in Pregnancy Physiology. Jakarta: Salemba medicine.
- [12] Prawirohardjo, S. 2010. Midwifery. Jakarta: Sarwono Foundation Bina Pustaka Prawirohardjo.