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Madu Bayu" Pudding (Honey Spinach for Mothers) to Treat Anemia in Pregnant Women

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Abstract

Based on a preliminary survey on maternal and child health in Cibunar Village taken from the health center report, the number of pregnant women was 124 pregnant women, with 13 pregnant women (11%) experiencing anemia. One alternative that can help increase hemoglobin levels is consuming "Madu Bayu" (Bayam Honey) pudding to overcome anemia in pregnant women which has a composition as a substitute for blood-boosting supplements, the iron contained in spinach is very high at 3.9 mg / 100 grams, calcium, Vitamin A, Vitamin C, Vitamin E, beta-carotene and fiber. Consuming spinach regularly can prevent anemia because it contains high iron. **Purpose:** This community service aims to empower the community by increasing the knowledge of pregnant women on how to overcome and treat anemia in pregnant women with the alternative of consuming Spinach Honey Pudding. **Method:** The method used in community service is to provide counseling on how to overcome and treat anemia in pregnant women with the alternative of consuming Spinach Honey Pudding "Madu Bayu". **Result**: There was an increase in knowledge before the counseling was given, it was found that the majority of respondents were in the less than good category, namely 12 respondents (60%), becoming good knowledge, namely 7 respondents (40%) after the counseling was given. **Conclusion:** There was an increase in participant knowledge as seen from the participants being able to answer questions about how to overcome anemia in pregnant women.

Keywords: Anemia, "Madu Bayu" Pudding, Pregnant Women.

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Introduction

Pregnancy is a physiological and natural process. The pregnancy process is a single chain starting from conception, nidation, maternal adaptation to nidation, pregnancy maintenance, and hormonal changes in preparation for the birth of the baby (Manuaba, 2007). Pregnancy generally develops normally, but sometimes it does not go as expected and it is difficult to predict whether the pregnant woman has problems during pregnancy or is fine (Febrianti, 2022).[1]

Pregnancy is a period that greatly determines the quality of human resources and the future, because the growth and development of children is very much determined by their condition during the fetus in the womb. Nutritional intake during pregnancy affects the fulfillment of iron needs because there is an increase in the expansion of red blood cell mass, so the need for iron increases. The changes that occur when the mother is declared pregnant are the addition of body fluids or plasma volume that is not comparable to the addition of red blood cells, so that blood dilution occurs in the body.[2]

Hemoglobin levels are a measure to determine whether someone is anemic or not, by using a tool to check hemoglobin levels in the body. Hemoglobin levels in the body of pregnant women are divided into three categories, namely normal > 11 gr /% then mild anemia 8-11 gr /% and severe anemia <8 gr /%.[3]

Hemoglobin levels in pregnant women occur if red blood cell production increases, normal hemoglobin values (12 to 16 gr /%) and normal hematocrit values (37% to 47%). If the hematocrit value drops to 35% or more, then the woman is anemic.[4]

The World Health Organization (WHO) reports that the prevalence of pregnant women with iron deficiency is around 35-75%. Iron deficiency anemia is more likely to occur in developing countries than in developed countries 36% (or around 1400 million people) of an estimated population of 3800 million people. In Indonesia, the prevalence of anemia in pregnancy is still high, based on a household health survey (SKRT, 2012) which is around 40.1%. Lautan J, (2007) reported that out of 31 pregnant women in the second trimester, 23 (74%) suffered from anemia and 13 (42%) suffered from iron deficiency. In the West Java Health Service survey data, 42.6% of pregnant women experienced anemia.[5]

Based on a preliminary survey on maternal and child health in Cibunar Village taken from the health center report, the number of pregnant women was 124 pregnant women, with 13 pregnant women experiencing anemia (11%).[6]

The cause of the condition where the number of red blood cells or the amount of hemoglobin (oxygen-carrying protein) is less than normal during pregnancy is the inadequate amount of iron in the food consumed by pregnant women and a lack of folic acid, vitamin B12, and vitamin C. In addition, other causes are pregnant women consuming a lot of food containing substances that can inhibit iron absorption, high parity, short births, ANC (Antenatal Care), inadequate or inadequate pregnancy care and low socioeconomic levels.[7,8]

The impact of iron deficiency during pregnancy can be risky for the mother and fetus, for pregnant women who suffer from anemia can occur bleeding during pregnancy or during childbirth, weakness and fatigue that interfere with daily activities. In the fetus can cause BBLR (low birth weight) due to disruption of nutritional fulfillment while in the womb, premature birth, and abortion.[8]The solution to overcome anemia in pregnant women through Hemoglobin examination in the early trimester in order to find out early whether the mother is anemic or not. For this reason, pregnant women are given 90 blood-boosting tablets during pregnancy.[9]

One alternative that can help increase hemoglobin levels is consuming "Madu Bayu" (Bayam Honey) pudding to overcome anemia in pregnant women who have a composition as a substitute for blood-boosting supplements. One alternative to meet iron needs can be done by consuming green vegetables, one of which is spinach. The iron contained in spinach is very high at 3.9 mg / 100 grams . [10]Green spinach is good for the body because it is a source of iron that plays a role in the formation of hemoglobin (Rohmatika, 2018), in addition spinach also contains calcium, Vitamin A, Vitamin C, Vitamin E, beta-carotene and fiber. Minerals contained in spinach such as folic acid also play a role in preventing anemia (Nasution, 2016). Consuming spinach regularly can prevent anemia because it contains high iron. Every 100 grams of spinach contains 3 grams of iron, 2.3 grams of protein, 3.2 grams of carbohydrates and 81 grams of calcium. Spinach also contains various minerals and vitamins.[6]

Spinach should be combined with honey because honey helps blood formation. Honey provides a lot of energy needed by the body for blood formation. Furthermore, it

also helps cleanse the blood. Honey has a positive effect on regulating and helping blood circulation. [10]

Honey is a food containing iron (Fe), vitamin C, vitamin B complex and folic acid which can help the formation of red blood cells. So by consuming honey in people who suffer from anemia can help increase the formation of red blood cells and prevent anemia.[6,11]

In this community service, spinach and honey are made in the form of pudding so that it is delicious to eat by pregnant women.

Based on this background, they are interested in doing community service about providing "Pudding" Honey Bayu "(Spinach Honey for Pregnant Women)

Methode

This community service was carried out in Cibunar Village, Cibatu District, Garut Regency on December 9-14, 2024, with details of the FGD survey carried out on December 12, 2024 and implementation on December 14, 2024.

The instruments used in this community service are

1. OHP
2. Leaflet
3. Pre-Test and Post-Test Questionnaire Sheets
4. Honey Spinach Pudding Innovation Product

The implementation method in order to carry out the counseling and training program with partners is as follows:

1. Coordinating with partners for program implementation
2. Preparing all equipment or needs to run the program
3. Conducting counseling to the community about "Madu Bayu" Pudding (Bayam Honey for Pregnant Women)

Result

1. The planning phase begins with an area orientation
    a. Planning
    b. Making activity permits
    c. Secondary data collection

d. Focus Group Discussion (FGD)

e. Preparation of Action Plan (POA)

Knowledge value based on the results of the pre-test and post-test on the knowledge of pregnant women on how to overcome anemia in pregnant women

2. Intervention

This community service is carried out by providing counseling to the community about the innovation of making "Madu Bayu" Pudding (Madu Bayam for Pregnant Women). Community service was carried out on 14 pregnant women respondents. Before the counseling was carried out, a Pre-Test and Post-Test were carried out on knowledge of anemia in pregnant women and knowledge of mothers about madam bayam can prevent and overcome anemia in pregnant women.

3. Evaluation

Knowledge value based on the results of the pre-test and post-test on knowledge of pregnant women on how to overcome anemia in pregnant women.

Table 1 Results of the Pre-Test Knowledge Questionnaire

Category	Frequency	Persentage
Very Good	1	7,1
Good	2	14,2
Good enough	3	21,5
Not good	8	57,2
Total	14	100

Based on Table 1, it is known that knowledge before being given counseling, most respondents' knowledge was in the poor category, namely 8 respondents (57.2%). This poor knowledge is caused by the lack of information on how to overcome anemia in pregnant women, especially about the benefits of honey and spinach for anemia in pregnant women.

Table 2 Post Test Questionnaire Results

Category	Frequency	Persentage
Very Good	4	28,6
Good	7	50,0
Good enough	2	14,3
Not good	1	7,1
Total	14	100

Based on Table 2, it is known that knowledge after being given

counseling, half of the respondents after being given counseling had good knowledge, namely 7 respondents (50.0%) about how to overcome anemia in pregnant women, especially about the benefits of honey and spinach for anemia in pregnant women.

With training for pregnant women and cadres on prevention and anemia using Honey Spinach pudding, it is expected to increase the knowledge of pregnant women in increasing the knowledge of pregnant women on how to prevent and treat anemia in pregnant women with honey spinach pudding.

One alternative that can help increase hemoglobin levels is consuming "Madu Bayu" (Bayu Honey) pudding to overcome anemia in pregnant women who have a composition as a substitute for blood-boosting supplements.[15] One alternative to meet iron needs can be done by consuming green vegetables, one of which is spinach. The iron contained in spinach is very high at 3.9 mg / 100 grams.[6] Green spinach is good for the body because it is a source of iron which plays a role in the formation of hemoglobin. in addition spinach also contains calcium, Vitamin A, Vitamin C, Vitamin E, beta-carotene and fiber. Minerals contained in spinach such as folic acid also play a role in preventing anemia.[9,12]

Consuming spinach regularly can prevent anemia because it contains high iron. Every 100 grams of spinach contains 3 grams of iron, 2.3 grams of protein, 3.2 grams of carbohydrates and 81 grams of calcium. Spinach also contains various minerals and vitamins.[6,14]

Spinach should be combined with honey because honey helps blood formation. Honey provides a lot of energy needed by the body for blood formation. Furthermore, it also helps cleanse the blood. Honey has a positive effect on regulating and helping blood circulation.[7, 15,17]

Honey is a food containing iron (Fe), vitamin C, vitamin B complex and folic acid which can help the formation of red blood cells. So by consuming honey in people who suffer from anemia can help increase the formation of red blood cells and prevent anemia.[7,12,18]

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Figure 3.1 Documentation of Community Service

Conclusion

1. The knowledge of pregnant women before being given counseling was found that most respondents' knowledge was in the poor category, namely 12 respondents (60%)
2. The knowledge of pregnant women after being given counseling was found to be good, namely 7 respondents (40%) on how to overcome anemia in pregnant women

Acknowledgment

1. Pregnant women's knowledge needs to be improved again about anemia in pregnant women, its impact and how to overcome it.
2. Innovation of spinach honey pudding can be used as an alternative to increase HB in pregnant women.
3. Support from family and people around them is needed to reduce the incidence of

anemia in pregnant women.

Conflict of Interest

In the community service that has been carried out, we did not encounter any obstacles either during community service or during the preparation of this paper. We as all writers work well with each other in compiling this paper.

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