HEALTH EDUCATION ON THE USE OF MORINGA LEAVES AS AN EFFORT TO PREVENT ANEMIA IN PREGNANT WOMEN

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ABSTRACT

The pregnancy period is a period that really determines the quality of human resources in the future because a child’s growth and development is determined from the time the fetus is in the womb. Pregnant women are one of the groups most vulnerable to nutritional problems such as chronic energy deficiency (CED) and anemia. One of the complementary therapies is using Moringa leaves to prevent anemia in pregnant women. The aim of this community service activity is to increase mothers' understanding of the use of Moringa leaves as an effort to prevent anemia in pregnant women. The method used in this community service stage consists of 3 stages, namely pretest, then Health Education about the use of Moringa leaves to prevent anemia, then followed by a post-test process to determine the level of knowledge of pregnant women. Results: The posttest results showed an increase in knowledge, with 23 (76.6%) pregnant women having good knowledge and 23.3% of pregnant women having sufficient knowledge about nutrition for pregnant women. Conclusion: The outreach activities carried out are expected to make understand more about Moringa leaves to prevent anemia in pregnant women. The material provided is knowledge about anemia in pregnant women and is presented in a straightforward and clear manner. The community becomes enthusiastic in participating in outreach activities, considering the large benefits that can be derived from community service activities.

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1. INTRODUCTION

Pregnancy is a period that determines the quality of human resources in the future because the growth and development of children is determined since the fetus in the womb. Pregnant women are one of the groups most vulnerable to nutritional problems such as chronic energy deficiency (CED) and anemia. The World Health Organization (WHO) reports that 56% of pregnant women in developing countries suffer from anemia (World Health Organization, 2004). The Basic Health Research Agency of the Ministry of Health of the Republic of Indonesia in 2013 showed that the prevalence of anemia among pregnant women in Indonesia was around 37.1% (SDKI, 2013). The consequences of anemia in pregnant women include an increased risk of maternal morbidity and mortality. (Benson et al., 2022) In addition, maternal anemia is also associated with a higher risk of low birth weight, premature birth, perinatal and neonatal mortality. Anemia in pregnant women can increase the risk of premature birth, maternal and child mortality, and infectious diseases. Iron deficiency anemia in mothers can affect the growth and development of the fetus/baby during pregnancy and afterwards (Lestari et al., 2018). The results of Riskesdas 2018 stated that in Indonesia 48.9% of pregnant women experienced anemia. As many as 84.6% of anemia in pregnant women occurred in the age group 15-24 years. To prevent anemia, pregnant women are expected to get blood supplement tablets (TTD) at least 90 tablets during pregnancy. Anemia is also one of the causes of bleeding after childbirth which results in maternal death. It is reported that the national maternal mortality rate (MMR) is around 307/100,000 live births. The cause of maternal death is bleeding, 58% of which is triggered by anemia during pregnancy. Meanwhile, the neonatal mortality rate is around 987/100,000 live births. Twenty-nine percent of infant deaths are caused by mothers suffering from chronic energy deficiency (CED) during pregnancy (Bappenas RI, 2012). In general, the cause of anemia is lack of iron intake. Several factors influence the lack of iron intake during pregnancy: decreased iron fulfillment and increased iron requirements for the fetus (Laflamme, 2010). In addition, anemia during pregnancy is caused by a decrease in hemoglobin levels due to an increase in plasma volume, which is greater than the volume of red blood cells. This decrease in hemoglobin levels occurs at 8 to 32 weeks of gestation. Anemia can cause oxygen transport to be disrupted so that nutrients to the fetus are reduced. Iron deficiency anemia can cause pregnant women to become weak, pale, lethargic, and bleed (Abd Rahman et al., 2022).

Anemia in pregnant women caused by iron deficiency is the main cause of anemia in pregnant women compared to other nutritional deficiencies (Córdova et al., 2019). Therefore, nutritional anemia during pregnancy is often identified with iron nutritional anemia ( Ishibashi et al., 2017). Iron is an essential micronutrient in the human body and iron deficiency leads to anemia as well as various serious consequences. Lack of iron in the diet or malabsorption will lead to iron deficiency anemia (IDA), which affects millions of people worldwide, especially among pregnant women. Due to the increased need for iron during pregnancy, pregnant women are considered the most vulnerable group to IDA. Estimated by the World Health Organization (WHO), the prevalence of anemia in pregnant women is 38% (Stevens et al., 2013). Factors that cause anemia in pregnancy are maternal age, gestational age, gestational age and level of knowledge, other factors that cause anemia in pregnancy are parity, ANC visits and compliance with taking iron tablets, factors that cause anemia in pregnancy are food intake, education, and income. The incidence of anemia in pregnancy can have a negative impact on the mother such as postpartum hemorrhage and infection. While the negative impact on the fetus is Intra Uterine Growth Retardation (IUGR), Low Birth Weight (LBW), premature birth and abortion (B. M. Labib et al., 2022) Government policy to detect the risk of anemia in pregnant women is by giving Fe as much as 90 tablets. Prevention of anemia in pregnancy can be done by increasing the consumption of iron and natural sources, especially foods from animal sources (hemiron) that are easily absorbed such as liver, meat, and fish. It is also necessary to increase the consumption of foods that contain lots of vitamins C and A (fruits and vegetables) to help the absorption of iron and help the process of Hb formation. (Mishra et al., 2021). Complementary therapies are chosen to support conventional medical care or as alternative medicine (Lyndall Mollart, Virginia Stulz, 2021).
2. Method

The community service partner is the Village Head of Jempong Baru Village, Sekarbel, Mataram City. The method of implementing this service consists of two stages. The first is the planning of activities to be carried out and the second stage is the implementation of community service activities in the form of solutions that have been approved by the Village Head of Jempong Baru Village, Sekarbel, Mataram City. The solution offered is the provision of Health Education on Moringa Utilization as an Effort to prevent anemia in pregnant women. This activity consists of several stages, namely pretest, implementation of health education, and posttest (Wahyudin & Perceka, 2021). The implementation of the activity was carried out for 1 day, namely the provision of health education on anemia management, which was held on August 27, 2023 in conjunction with Posyandu activities with the target group being pregnant women. The community service implementation activities consisted of three stages.

The stages of this community service consist of 3 stages. The first stage is the pretest stage, where the service team distributes questionnaires to 30 pregnant women participants. After completing the pretest activity, the service team provided health education material for 15 minutes and continued with questions and answers. The media used are LCD, leaflets and laptops, using Microsoft power point. which contains material equipped with pictures so that participants easily understand the material presented. Activities to increase understanding through health education programs on nutrition for pregnant women in Jempong Baru Village, Sekarbel, Mataram City, with a total of 30 pregnant women.

3. Result And Discussion

a. Results

This community service activity resulted in including the characteristics of respondents based on gender, age, education level, knowledge level before and after counseling activities on menopause.

1. Increased Knowledge of Pregnant Women Health Education on the Utilization of Moringa and its Processes as an Effort to prevent anemia in pregnant women.

Pre-test Stage

The service implementation activity consists of three stages. The first stage is the pretest stage, where the service team distributes questionnaires to 30 participants. The first stage of the service team distributed questionnaires about Moringa leaf utilization as a prevention of anemia in pregnant women totaling 30 pregnant women, which contained 20 questions.

From the pretest activity, it was found that 10 pregnant women, (33.4)% had good knowledge and 20 pregnant women (66.6%) mothers had sufficient knowledge about the use of moringa leaves to prevent anemia in pregnant women.
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a. Brainstorming Stage

After completing the pretest activity, the service team provided health education material for 15 minutes and continued with questions and answers. The media used are leaflets and PPT containing material with pictures so that participants can easily understand the material presented.

Figure 2. Brainstorming activity

The participants were very enthusiastic in participating in the activity, seen from the number of participants who asked and answered when asked questions. A total of 5 questions asked can be answered easily by the participants. The questions in the quiz were prepared based on the material in the educational session which was packaged in the form of an animated video. Likewise, when entering the question and answer session, as many as 3 pregnant women gave feedback by asking the presenters about the health condition of their children.

b. Post test stage

The next stage is the post test stage, at this stage the community service team distributed questioners about the use of moringa leaves as a handler of anemia in pregnant women as many as 20 questions. The post-test results showed an increase in knowledge, with 23 (76.6%) pregnant women having good knowledge and 23.3% of pregnant women having sufficient knowledge. Health education for pregnant women is proven to reduce the incidence of nutritional deficiencies in pregnancy. IEC in pregnant women pregnant women are always given at every posyandu or every pregnancy control to health services but also emphasize the importance of counseling, information and education.

2. Conclusion

Counseling activities carried out can increase the knowledge of pregnant women about pregnant women understand the meaning of anemia in pregnancy, complaints that are often experienced by pregnant women, physical and emotional changes in pregnant women, pregnancy checks, health services for pregnant women, things that should be avoided by mothers during pregnancy. Pregnant women who attended the counseling knew and understood the understanding of Moringa leaves in overcoming pregnancy anemia, which was indicated by an increase in knowledge and understanding of the mother after being given counseling and discussion. The material provided was knowledge about moringa leaves to overcome the problem of anemia in pregnant women and was delivered in a straightforward and clear manner according to the level of education of the community in Jempong Baru Village, Sekarbela Subdistrict, Mataram City on August 27, 2023. In addition, a discussion forum was also opened without limits to questions, this caused the community to be more enthusiastic in participating in counseling activities. Given the large benefits that can be taken from this community service activity, comprehensive coaching activities also need to be carried out every month in order to continue to control and monitor the counseling activities that have been carried out.
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previously. Efforts to increase knowledge about nutrition include health counseling is an educational activity carried out by disseminating information messages, instilling confidence, so that the community is aware, knows and understands, but also wants and can do a recommendation that has to do with health and there is an increase in knowledge, skills, and attitudes.

Health education provides the knowledge needed to gain new behaviors and habits in health science. Pregnancy period is a favorable moment for the development of knowledge and good lifestyle in health. Therefore, group gatherings of pregnant women to get health promotion about the offerings of pregnant women and the needs of pregnant women in an integrated manner. Participation in attending counseling and health education in groups to get health education about the needs and nutrition of pregnant women.

5. Reference


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