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Optimizing the Health of Pregnant Women with Socialization of Anemia Prevention and Giving Blood Supplement Tablets to Pregnant Women

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ABSTRACT

Anemia in pregnant women remains an important public health issue in Indonesia. This condition can lead to adverse effects for both the mother and the fetus, including risks of preterm birth, low birth weight, and even mortality. This research seeks to improve pregnant women's awareness of anemia and significance of taking Iron and Folic Acid Tablets (IFA) by utilizing an educational method. The method employed involved lectures supplemented by pre-test and approach used included lectures along with pre-test and post-test evaluations. The findings indicated a notable increase in post-test scores incomparison to the pre-test, indicating that the lecture method was effective in delivering health information. In addition to education, this activity also involved the distribution of IFA tablets to pregnant women as a concrete step in preventing anemia. The lecture approach proved to be an effective promotive and preventive strategy in improving maternal health.

Keywords: Anemia, Pregnant Women, Iron and Folic Acid Tablets, Lecture, Health Education

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INTRODUCTION

Pregnancy is an important phases for women and requires special attention, especially in terms of health and nutritional factors. Currently, the body's need for nutrients, especially iron, is increasing to strengthen fetal growth and maintain maternal health. Iron deficiency in pregnant women causes anemia (Nurkhayati & Sulingkar, 2021).

Anemia is characterized by a decrease in red blood cells (erythrocytes) in the bloodstream or a reduction in hemoglobin mass, rendering it unable to perform its role as an oxygen carrier throughout tissues. In Indonesia, the prevalence of anemia among pregnant women is 70%, indicating that 7 of 10 pregnant women are affected by this condition (Kadir, 2019). According to the WHO, anemia is defined as a state in which hemoglobin (Hb) levels in the blood fall below the normal threshold, specifically less than 10g/dl in pregnant women (Mutiara *et al*., 2023).

Anemia negatively affects childbirth and can lead to fatalities in both the mother and baby. The effects of anemia on the fetus include growth retardation (IUGR), premature birth, congenital anomalies, low birth weight (LBW), and a heightened risk of fetal death in utero. The consequences of anemia in pregnant women includee shortness of breath, fatigue, palpitations, hypertension, sleep disturbances, preeclamsia, miscarriage, and an increased risk of bleeding before and during delivery, which can result in maternal death (Asmin *et al.,* 2021).

The World Health Organization (WHO) reports that the prevalence of iron deficiency among pregnant women ranges from 35% to 75%, with an increase in iron deficiency as the gestational age progresses. Iron deficiency anemia is more prevalent in developing countries than in developed countries. Approximately 36% (or approximately 1.4 billion people) of the estimated 3.8 billion population in developing countries are affected by iron deficiency anemia, whereas in developed countries, only approximately 8% (or roughly 100 million people) of the estimated 1.2 billion population are affected. In Indonesia, the prevalence of anemia during pregnancy remains high at approximately 40.1% (Haque *et al*., 2024).1)

Anemia in pregnant women can be influenced by their level of knowledge. Knowledge is a crucial factor that can lead to the adoption of healthy behaviors. If pregnant women are aware of the consequences and prevention methods of anemia, they can avoid the various risks and complications associated with anemia (Yanti *et al.,* 2023). A lack of knowledge about anemia among pregnant women can be attributed to internal factors such as inadequate prenatal care and limited access to information through mass and electronic media. Other factors that can affect knowledge levels include age, occupation, education, information, interest, experience, and environment. Possessing knowledge and positive attitudes can support efforts to prevent anemia. Education on anemia prevention is an effective way to increase knowledge and promote positive attitudes, enabling pregnant women to take proactive steps to prevent anemia (Erryca *et al.,* 2022)

In addition to the knowledge factor, iron deficiency is one of the causes of anemia during pregnancy. During pregnancy, the body requires more oxygen (Ulfa *et al.,* 2023). To overcome this, pregnant women can be administered Blood Supplement Tablets (TTD). Blood Supplement Tablets, also known as Fe tablets, are iron supplements that are essential for the production of hemoglobin (Mutiara *et al.,* 2023). Administering iron tablets to pregnant women is an effective strategy to prevent and address anemia caused by iron or folic acid deficiency. These tablets can be provided to women of childbearing age as well as to pregnant women, and it is recommended that they be taken daily during pregnancy, with a minimum of 90 tablets throughout the period (Ministry of Health, 2020).

METHOD

The implementation method was conducted through lectures and questionnaires. The lecture contained the definition, danger signs, symptoms, and ways to prevent anemia during pregnancy. Before the lecture, a pretes as carried out, which contained knowledge related to the danger signs, symptoms, and impact of anemia on pregnant women and foods high in iron for anemia in pregnant women. After the lecture, a posttes as conducted using the same questionnaire to determine knowledge related to anemia in pregnant women. At the conclussion of the lecture session, blood supplement tablets were administered, highlighting the importance of consuming these supplements during pregnancy

RESULTS AND DISCUSSION

The results of the service included the administration of blood supplement tablets and the provision of knowledge to pregnant women regarding the definition, warning signs, symptoms, and effects of anemia, along with the importance of taking blood supplement tablets during pregnancy to prevent anemia. enhancement of participants knowledge was assessed through a pre-test conducted before the lecture and a post-test administered afterward. Increased knowledge is an indicator of the success of an activit. The results of the evaluation are shown in Figure 1.

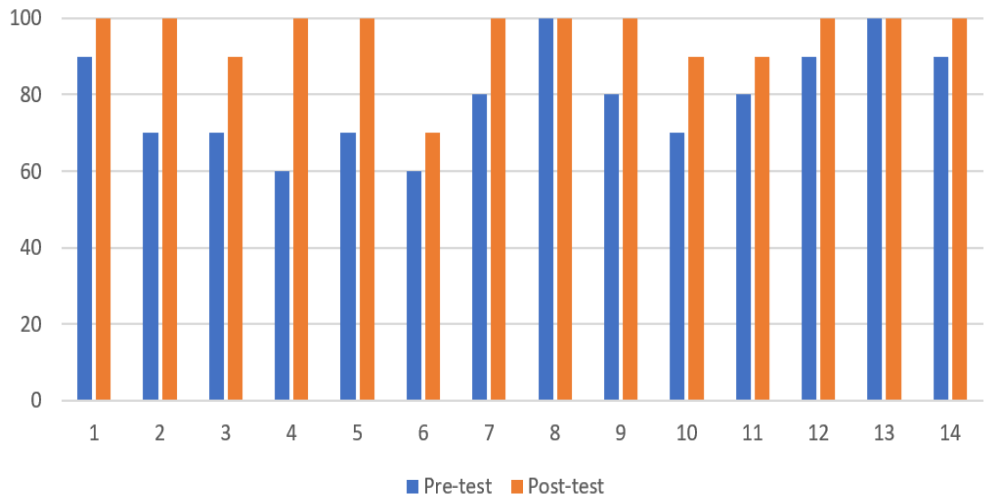

Figure 1. Pre and post-test results of pregnant women's knowledge related to anemia using the lecture method

The graph above illustrates the comparison of pre-test and post-test results from 14 participants who participated in counseling on anemia in pregnant women. It can be seen that in general there is an increase in post-test scores compared to pre-tests, which indicates an increase in knowledge after lectures.

Participant number 1 had a pre-test score of 90 which increased to 100 on the post-test. Participants 2, 4, 5, 7, 8, and 9 had pre-test scores that varied between 60 and 80.

Subsequently, the post-test results increased to 100. Participant number 3 received a pre-test score of 70 which increased to 90 after the lecture. Participant 6 experienced an increase from a pre-test score of 60 to a post-test score of 70, which was the smallest increase compared with the other participants. Meanwhile, participant number 10 increased from 70 to 90. Participants 12 and 14 showed an increase in scores from 90 to 100. Participant number 13 had pre-test and post-test scores of 100 because the participant already hads good knowledge beforehand.

Overall most participants demonstrated a notable enhan cement in post-test results, indicating that the lecture method was quite good at improving participants' knowledge. Increasing knowledge shows that counseling activities are effective in increasing community understanding (Syahfitri *et al.,* 2023). This increase in knowledge demonstrates that lecture-based education can serve as an effective approach to enhance the understanding of anemia in pregnant women. In line with previous research (Safitri et al., 2024), there was an increase in public knowledge when given post-tests. The results of the service included the administration of blood supplement tablets and the provision of knowledge to pregnant women about the definition, warning signs, symptoms, and impact of anemia on pregnant women, along with the significance of consuming blood supplement tablets during pregnancy to prevent anemia in pregnant women. The increase in participants' knowledge was evaluated using a pre-test before giving a lecture and a post-test after giving a lecture. Increased knowledge is an indicators of the success of activit.

Figure 2. Activity Documentation

CONCLUSION

Service activities have succeeded in enhancing pregnant women's understanding of anemia. This increased understanding is expected to encourage better preventive behaviors, thereby minimizing the risk of anemia during pregnancy and maintaining the health of both the mother and the fetus.

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