

Increasing Knowledge on the Prevention and Management of Anemia in Pregnant Women

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Abstract

The prevalence of anemia in Indonesia remains relatively high. One of the efforts to prevent and manage anemia in pregnant women includes increasing their knowledge. This community service project aimed to enhance the knowledge of pregnant women regarding the prevention and treatment of anemia. The activity was carried out at the Putri Ayu Public Health Center, Jambi City, targeting pregnant women participating in pregnancy exercise programs. The outreach activity began with trust-building and a time contract. Counseling was delivered through a PowerPoint presentation and supported by leaflets distributed at the end of the session. The activity included an opening, material presentation, evaluation through Q&A, and closing. Evaluation results showed that all participants understood the material and committed to implementing the knowledge provided.

Keywords: Anemia, Knowledge, Pregnant Women

A. INTRODUCTION

Anemia is a condition characterized by a reduction in red blood cells or hemoglobin mass, limiting oxygen delivery to tissues. During pregnancy, anemia is defined as hemoglobin levels <11 g/dL in the first and third trimesters and <10.5 g/dL in the second trimester (Astuti & Ertiana, 2020). Pregnancy increases blood volume by 20–30%, raising the body's demand for iron and vitamins to produce hemoglobin. Additionally, blood must be shared with the fetus, further increasing the demand (Noversiti, 2021).

According to WHO (2021), global anemia prevalence in pregnant women is 41.8% – 48.2% in Asia, 57.1% in Africa, 24.1% in America, and 25.1% in Europe. In developing countries, around 40% of maternal deaths are related to anemia. In Indonesia, 48.9% of pregnant women suffer from anemia. Data from the Jambi City Health Office (2022) indicated 1,421 cases (84.6%) of anemia among pregnant women, with the highest number reported at Putri Ayu PHC (141 cases or 18%).

Prevention and management of anemia include improving knowledge and attitudes via education on nutrition, minimum four antenatal visits, 90 iron tablets, hemoglobin checks in the first and third trimesters, prompt care when symptoms appear, and family education on food selection and preparation (Solehati et al., 2020).

Waryono (2020) emphasizes the need for adequate rest, iron-rich foods, and consistent iron supplement intake. According to Safrudin (2020), iron absorption can be improved by consuming vitamin C, citrus, and meat, while avoiding inhibitors like tea and coffee.

Astriningrum (2021) highlights the need for folate, B12, and B-complex vitamins from vegetables, fruits, eggs, meat, and grains.

Handling anemia in pregnant women according to Safrudin (2020), including consuming foods containing iron, dark green vegetables and fruits, Getting used to consuming foods that facilitate the absorption of Fe such as vitamin C, orange juice, meat and fish, and avoiding drinks that inhibit the absorption of Fe such as tea and coffee. According to Astriningrum (2021), getting used to consuming foods that obtain vitamin B complex from various vegetables and fruits as well as from eggs, fish, seafood, meat and wheat and consuming vitamin B12. Efforts to prevent and treat anemia in pregnant women can be carried out optimally if pregnant women and their families behave positively towards these efforts.

The results of a case study conducted at the Putri Ayu Health Center by recording data on visits by pregnant women on Monday, April 22, 2024, obtained 29 pregnant women with Hb checks, 15 pregnant women had low Hb with an average result of Hb for pregnant women of 8 g/dl.

B. METHODS

The activity took place at Putri Ayu PHC, Jambi City, targeting pregnant women attending pregnancy exercises. Trust-building and time agreements initiated the session, followed by a 30-minute presentation using PowerPoint and the distribution of leaflets. The session involved opening remarks, content delivery, Q&A evaluation, and closing.

C. RESULTS

This community service activity was carried out by lecturers and students of the Nursing Profession Study Program, Department of Nursing, Faculty of Medicine and Health Sciences, University of Jambi. This activity was carried out at the Putri Ayu Health Center on Saturday, May 4, 2024. This activity was attended by pregnant women who had participated in pregnancy exercises at the Putri Ayu Health Center.

The material delivery activity has been adjusted to a previous survey that there were pregnant women who checked themselves to Putri Ayu in anemic conditions. The material delivered was made by adjusting the characteristics of the participants, using language that is easy for mothers to understand and using interesting pictures to prevent boredom during the activity.

The counseling activity is guided by a moderator who plays a role in opening and closing the event, introducing himself, setting the rules of the counseling event, maintaining the smooth running of the event, leading the discussion and working together with the facilitator in the counseling event. The role of the moderator can be carried out well so that the event runs smoothly according to the objectives.

The resource person delivered the material well, conducted interactive communication so that participants were enthusiastic about listening to the material presented and were active in the Q&A. The material includes: 1) understanding anemia, 2) causes of anemia, 3) signs and symptoms of anemia, 4) impacts of anemia, 5) treatment of anemia in pregnant women, and 6) prevention of anemia in pregnant women.

Students as facilitators have a good role to work together with the moderator to establish cooperation in presenting counseling materials, motivating participants in the activity to ask questions, preparing patients to participate in the activity so that participants play a more active and enthusiastic role.

The counseling activity ended with an evaluation. The resource person asked again about the material given to the participants. All participants had the opportunity to ask questions and provide answers. All participants were able to answer the resource person's questions using their own language. This shows that the objectives of the activity can be achieved. Knowledge transfer as an effort to increase the knowledge of pregnant women about handling anemia can be achieved.

According to research conducted by Solehati et al. (2020) and Sugiarto (2020), it is known that health education affects the average knowledge of respondents in early detection, prevention and treatment of anemia in pregnant women. With education, there is an increase in knowledge and attitudes of pregnant women about the prevention and treatment of anemia in pregnant women, with increased knowledge supported by supportive attitudes, it is hoped that pregnant women will consciously prevent and treat anemia. The theory developed by Notoatmojo (2021), states that changes in a person's behavior are influenced by the knowledge and attitudes they have.

Documentation



D. CONCLUSION

There was an increase in knowledge of pregnant women about the prevention and treatment of anemia, indicated by all participants being able to answer the speaker's questions correctly. Participants stated that they would carry out anemia prevention and make efforts to practice what they had learned.

Community service activities targeting pregnant women patients at Putri Ayu Health Center, Jambi City are expected to help mothers understand the prevention and

treatment of anemia in pregnant women. Furthermore, pregnant women are expected to make efforts to prevent anemia both during pregnancy and in the period after giving birth.

E. ACKNOWLEDGEMENTS

We would like to express our gratitude to all community service participants, the Head of Putri Ayu Health Center, Jambi City, along with staff and students involved in this community service.

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