

Efforts to improve nutritional knowledge in pregnant women through education on pregnant women's nutritional needs at bpm nurhenni s, s.st., kab.gowa



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Abstract: During pregnancy, some of the nutrient requirements will increase. The important thing that must be considered by pregnant women is that the food consumed consists of a balanced menu composition. The purpose of this community service is to increase the knowledge of pregnant women about pregnancy nutrition. The facts found in the field are that there is low public knowledge about the importance of nutrition in pregnant women. The method of solving problems that is carried out is Education about providing ducation on the importance of nutrition to pregnant women. During the community service activities, 18 pregnant women attended the attendance. The results of the activity were obtained. Participants were enthusiastic about the extension material, none of the participants left the extension site during the extension process and more than 75% of the participants who attended were able to answer questions from the extension agents about the material presented. This proves that the participants pay attention to the material presented. The conclusion is that the provision of knowledge about the importance of nutrition in pregnant women has a positive impact on society, so that people understand the importance of nutrition in pregnant women. It is hoped that further counseling will focus on nutrition in the first, second and third trimesters of pregnant

Keywords: Nutritional knowledge, Pregnant women, Maternal nutrition, Nutrition education

1. Introduction

The nutritional status of pregnant women can be influenced by the socio-economic conditions and health conditions of pregnant women during pregnancy, various risks can occur if pregnant women experience malnutrition, namely abortion, stillbirth, low birth weight, and mental retardation. Upper arm circumference can indicate the nutritional status of pregnant women, an upper arm circumference <23.5 cm indicates a lack of nutritional status of pregnant women (Hariyani, 2012).

Nutrition is a very important component during pregnancy. As long as it ensures the health of the mother and fetus, nutrition plays an active role in the formation of character and abilities possessed by the fetus. Not many who are malnourished cause the fetus to suffer from certain diseases that can be realized after birth or during the baby's growth and development. To anticipate this, it is necessary to improve nutrition. Improving the nutrition of pregnant women is one part of the panca karsa husada and panca karya husada conveyed by WHO as a national health system.

Nutritional status is a measure of success in fulfilling nutrition for pregnant women. Nutrition for pregnant women is a nutrient that is needed in large quantities to fulfill the mother's own nutrition and the development of the fetus she is carrying. Food needs are seen not only in the portions eaten but must be determined by the quality of the nutrients contained in the food consumed. The nutritional status of pregnant women is one indicator in measuring the nutritional status of the community. If the nutritional intake for pregnant women from food is not balanced with the body's needs, nutritional deficiencies will occur (ZAKI, 2019). Balanced nutrition for pregnant women is a state of balance between the nutrients needed by pregnant women for the health of the mother and the growth and development of her fetus which can be met by nutritional intake from a variety of foods. During pregnancy, prospective mothers need more nutrients than women who are not pregnant, because pregnant women's food is needed for themselves and the fetus they are carrying. Likewise, if the mother's food is lacking, the growth and development of the fetus will be disrupted, especially if the mother's condition before pregnancy was also bad (Retnaningtyas E, Kartikawati E, Nilawati D. 2022)



Nutritional needs during pregnancy will increase by 15% compared to the needs of normal women. The food consumed by pregnant women will be used for fetal growth by 40% and the remaining 60% is used for maternal growth. The increase in energy and nutrient needs occurs with increasing gestational age (Dewi, 2017). During pregnancy, additional energy of 80,000 calories (cal) or 285-300 cal/day is needed

Meeting nutritional intake for the body is something that must be done, especially for pregnant women. The reason is that during pregnancy, women are not only "responsible" for themselves but also for their future babies. In fact, the growth and development of the fetus during pregnancy is greatly influenced by the mother's habits. Including the habit of consuming nutritious foods., Adequate nutritional intake in pregnant women is an important factor in ensuring that the mother's nutritional needs are met during pregnancy. If the mother's nutritional needs are not met in terms of quantity and quality, then the weight gain of the mother and fetus will be difficult to increase. This condition can increase the health risks for the mother and the baby to be born. Pregnant women with poor nutritional and health status are at risk of giving birth to premature babies, low birth weight and the risk of morbidity and mortality for the mother and baby. (Ministry of Health of the Republic of Indonesia, 2023) and increase

Based on an initial survey conducted at BPM Nurhenni S, S.ST., Gowa Regency, the number of pregnant women who visited in August - November 2024 was 38 pregnant women and 8 of them were malnourished, and based on interviews with 10 pregnant women, 5 had good knowledge in meeting nutritional needs during pregnancy while 8 pregnant women did not have good knowledge about nutritional needs during pregnancy so that the 7 pregnant women did not have a good attitude in meeting their nutritional needs.

In general, the cause of malnutrition in pregnant women is due to low levels of knowledge causing mothers not to understand how to fulfill the nutritional needs of pregnant women during their pregnancy. Inadequate knowledge, inappropriate practices are obstacles to improving nutrition, and consumption of foods that do not meet nutritional requirements. In general, people do not realize the importance of nutrition during pregnancy, so it is necessary to provide counseling to pregnant women at BPM Nurhenni S, S.ST., Gowa Regency so that pregnant women understand the importance of Nutrition in Pregnant Women. The purpose of this activity is to provide Education or Health Education to Pregnant Women at BPM Nurhenni S, S.ST., about Nutrition During Pregnancy and to see an understanding of nutrition during pregnancy, nutrition needed during pregnancy, foods that can be consumed during pregnancy, understanding the importance of paying attention to good nutrition during pregnancy, and understanding the benefits of consuming nutritious foods. In addition to providing information, educational activities can also open up space for discussion and exchange of experiences between participants. Through direct interaction, participants can understand the obstacles they may face in fulfilling balanced nutritional needs for pregnant women. Thus, counseling activities on nutritional status in pregnant women at BPM not only directly improve health and welfare temporarily but also have the potential to provide long-term impacts in addressing nutritional problems at the community level.

2. Materials and Methods

Community service activities are carried out offline (face-to-face) directly at BPM Nurhenni S, S.ST. on December 27, 2024, the target of this activity is 18 pregnant women. This service activity is in the form of counseling on nursification education for pregnant women. to appease pregnant women who lack nutrients such as anemia, bleeding, and also premature babies. The method used in this activity is to provide education and continue with a presentation with powerpoint. Education is expected to increase the knowledge of pregnant women about the importance of knowing balanced nutrition in pregnancy. Then the discussion and Q&A continued. The discussion was carried out after the provision of material was completed. Participants asked about material that was not yet understood about the nutritional status of pregnant women. To see the success of community service activities, an evaluation was carried out on the improvement of pregnant women's knowledge related to balanced nutrition through the pre-post test method. The obstacle faced is the lack of concentration of pregnant women because pregnant women feel tired easily.

3. Results and Discussion

Education is a health promotion medium that can affect a person's knowledge. The educational activity was carried out face-to-face and was attended by 20 pregnant women. Education is provided by the lecture method using power points as a tool. Education with the lecture method allows for two-way communication so that educators can quickly find out the target response of the message. In addition, lectures also allow for education with a wide range. Then continued with a discussion and question and answer session In the discussion session, participants were very active in providing questions related to balanced nutrition during pregnancy, Before the presentation of the material, an initial evaluation was carried out to find out the basic knowledge that the target had. The evaluation was carried out by the questionnaire method with the help of instruments in the form of questionnaires. The results of the evaluation can be seen in table 1. During the education, participants were given materials in the form of: the benefits of balanced nutrition, the four pillars of balanced nutrition, and the triguna of food, the three important materials were given to pregnant women so that mothers could provide adequate



nutrition to their fetuses during pregnancy. Mothers who are adequately nourished before and during pregnancy have a high probability of giving birth to a healthy and full-term baby (Bohari & Gaffar, 2021). To determine the effectiveness of education, a final evaluation (post test) is carried out.

Table 1. Pregnant Women's Nutrition Knowledge Pre and post Education

Knowledge	Pre Education	Post Education
	(%)	(%)
Less	72,5	12,6
Good	27,5	87,4
Total	100	100

Based on the test results, there was an increase in the knowledge score of pregnant women. The knowledge of pregnant women before education was in the poor category of 72.5% and after being given education, knowledge increased to the good category of 87.4%. Thus, education is considered effective. (knowledge scores can be seen in table 1). The use of power point as a lecture aid is thought to be one of the factors influencing the increase in knowledge. Power point is considered effective because the material and images provided can be viewed many times and explained in depth by the educator.

Several studies have also shown that education has increased the knowledge of pregnant women (Amalia et al., 2018; Retnaningtyas et al., 2022). Education is one of the health education activities. Health education is defined as a learning process that is carried out with the target of individuals, families, groups or communities with the aim of changing unhealthy behavior to healthier patterns. Many methods are used in this health education process, including strategies for sharing knowledge, maintaining commitment to behavior change and health education focused on behavior change as a basis for changing health status (Listyarini et al., 2020).

After being given education, there was interest from pregnant women in the material delivered through the distributed leaflet media. This can be seen from the enthusiasm of pregnant women to find out more about healthy food during pregnancy. Pregnant women are motivated to maintain their baby's nutritional patterns from an early age by finding out information on good and healthy nutrition for pregnant women to consume by asking questions to the counselor. In the counseling activities, mothers are also taught to do Kegel exercises which aim to strengthen the pelvic muscles and increase the elasticity of the prenum muscles. Kegel exercise activities can be done by mothers flexibly anywhere and anytime that do not interfere with the mother's main activities. Mothers who do Kegel exercises regularly until the delivery process will reduce the incidence of prenum rupture. The material delivered during the counseling provides interest and enthusiasm so that it can increase the knowledge of pregnant women.



Figure 1. Dokumentasi

This activity provides education consisting of delivering material using powerpoint and discussion sessions. This approach allows participants to receive information visually through presentations while also providing opportunities for them to actively participate in discussions and Q&A. This combination is expected to increase participants' understanding of knowledge related to balanced nutrition during pregnancy.



The provision of education covers several aspects about balanced nutrition for pregnancy in improving nutritional status during pregnancy. This comprehensive material is important to provide participants with an understanding of the importance of adequate nutritional intake for the growth and development of the fetus.

The discussion and question and answer session held after the delivery of the material aims to facilitate interaction between the presenter and the participants. Participants were given the opportunity to express any questions or confusion they had regarding the material presented. This not only improves their understanding, but also allows for the exchange of information and experiences between participants and enriches the understanding of nutritional status in pregnant women during pregnancy.

4. Conclusions

Socialization and nutrition for pregnant women as an effort to prevent anemia in pregnant women and provide knowledge about things that need to be done during pregnancy so that the fetus process improves and is healthy, such as consuming lots of vegetables and fruits, getting enough rest, routinely carrying out pregnancy checks, doing pregnancy exercises, etc. Positive things that are done during pregnancy will have a good impact on the fetus/pregnancy..

Conflict of Interest

No conflicts of interest

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