

Healthy Pregnancy Preparation with Nutritional Fulfillment The Balanced One

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ABSTRACT Adolescents often face challenges in understanding and maintaining their reproductive health due to limited access to accurate information and appropriate guidance. This community service project aims to enhance adolescents' self-efficacy in maintaining reproductive health through structured reproductive health education. The program was implemented in collaboration with local schools and involved interactive sessions, discussions, and educational media tailored to the developmental needs of adolescents. The results showed a significant improvement in participants' knowledge, attitudes, and confidence in making informed decisions related to their reproductive health. This activity highlights the importance of early, comprehensive, and culturally sensitive health education as a preventive strategy to promote healthier adolescent development. It also emphasizes the role of community involvement in empowering youth to take responsibility for their well-being.

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1. INTRODUCTION

When planning a pregnancy, preparing the body in advance is essential. However, in many cases, pregnancy comes before the body is ready because a strong body condition is essential for pregnancy. Pre-pregnancy preparation is important to prevent various health complications. In addition to preconception, health care focuses on things that can be done before or between pregnancies to increase the chances of having a healthy baby (Hartini et al., 2023). The Preconception Period, pregnancy, and breastfeeding are phases in the life cycle that require special attention, especially in meeting their energy and nutrient needs. Optimal nutritional status of women in the preparation period for pregnancy is crucial and affects the outcome (Sanjaya et al., 2021). Maternal mortality is one of the parameters used to assess women's health levels and is a component of the development index and quality of life index (Souza et al., 2024). In Indonesia, there are 4,627 deaths. This number has increased from 2019, when 2019 there were 4,221 maternal deaths (Kemenkes RI, 2022).

The occurrence of SEZs is generally caused by several things related to the availability of food and the vulnerability of food consumption (improper diet), which is influenced by poverty, low education, and customs or beliefs that include food taboos

(Wulansari & Herliana, 2020). Various factors cause the occurrence of KEK in pregnant women. Heryunanto also said that the problem of SEZ is influenced by several factors, namely consumption patterns, parity, nutritional intake, economy, knowledge, consumption of additional foods, and consumption of FE tablets (Heryunanto et al., 2022).

One of the factors that affects stunting is Chronic Energy Deficiency (SEZ) (Ismawati et al., 2021). In pregnant women, stunting prevention can be done from before pregnancy or the preconception period, where this period is a crucial stage to determine a successful pregnancy. The targets range from teenagers, brides-to-be, and mothers who delay pregnancy. Tackling stunting problems should be done before a child is born to break the chain of stunting (Nurvitasari et al., 2023). One of the important factors related to stunting is nutritional factors.

Nutritional status before and during pregnancy will determine the baby's size. Various studies have shown that a woman's nutritional status before pregnancy is related to the baby's birth weight. A mother's weight before pregnancy is a good predictor of the baby's birth weight (Lestari et al., 2023). The awareness of the importance of maintaining balanced nutrition is still lacking today for most people, especially women of childbearing age. Most women of childbearing age still often consume foods that do not meet balanced nutrition (Marshall et al., 2022). The problem of nutritional status is serious because, in addition to being able to pose a disease risk, it can also affect daily activities. This nutritional status depends on the food received and the body's needs. A good nutritional status will be achieved if food and body needs are balanced. However, if the intake of nutrients is insufficient or excessive, it will affect nutritional status and quality of life (Fachruddin & Muntaha, 2022).

Fetal development in pregnant women is greatly influenced by the nutritional intake consumed by the mother during pregnancy, so if the necessary dietary intake is not met, the mother can be at risk of giving birth to a baby with BBLR (Mate et al., 2021). Energy deficiency during pregnancy can disrupt embryonic and fetal development (Heryunanto et al., 2022). So far, many people do not understand the importance of the conditions in the preconception phase, so that fathers-to-be and mothers-to-be only concentrate on preparing for the pregnancy and childbirth process. This is understandable because the lack of knowledge about preconception conditions is due to the absence of counseling for them (Rohmatika et al., 2022). The high cases of anemia have a terrible impact on pregnancy, so women in the preconception period need to be equipped with pregnancy preparations, both physical, psychological, and social preparation. The duties of midwives in partnerships that include promotive activities are health counseling and education, not only for women, but also for the family and society. The role of midwives as advocates for evidence-based midwifery practices can also be valuable in advancing public health policies regarding women's health and maternal and child health services (Ayunda et al., 2023).

2. METHOD

The community service activity will be held in July 2024 with a team of students from the DIII midwifery study program, STIKes Nani Hasanuddin. This activity was implemented at the posyandu in the work area of the Bara-baraya health center. It was aimed at respondents, especially women of childbearing age who are planning a pregnancy and brides-to-be, by providing counseling on preparing for a healthy pregnancy with balanced nutrition. The provision of education was followed by discussions, as well as questions and answers, and demonstrations using leaflets. Taking proactive and preventive steps related to nutrition and health education during pregnancy to realize a healthy pregnancy and safe childbirth.

The method of implementing community service activities (PKM) is divided into several stages as follows:

Preparation Stage

First, observation of the place that will be used as a place for service activities at this stage, collecting data and discussing and coordinating with Midwives, preparation of administrative materials, division of duties and responsibilities of lecturers and students involved in PKM, and logistic preparation for the implementation of the relationship. In addition, observing Wus and Catin's knowledge of nutrition prepared during pregnancy as an effort to realize a healthy pregnancy and safe childbirth. The measuring tool uses a questionnaire that contains general and specific data.

Program Implementation

1. Carry out pre-activity tests (investigating the knowledge and understanding of WUS and Catin).
2. Organizing health education about nutrition for mothers that must be prepared during pregnancy, a healthy lifestyle, and the consequences caused by nutritional deficiencies during pregnancy

Evaluation

At this stage, a simple evaluation is carried out to measure the level of knowledge before and after getting counseling by conducting simple questions and answers with participants.

3. RESULT AND DISCUSSION

RESULT

Community Service activities are carried out in the form of counseling by providing health education with the target of Women of Childbearing Age, Catin, and Adolescents about Preparation for a healthy pregnancy with the fulfillment of balanced nutrition in the work area of the Bara-Barayya Health Center in Makassar city. Community service activities will be held on June 28, 2024, from 09.00 to 12.00 WITA. The number of participants who participated in the activity was 20. During the activity, from the pretest, material session, to the evaluation post, participants actively listened to the educational material provided, and several participants provided questions and responses in connection with the education provided after the

education session ended. The purpose of community service is for pregnant women to know and understand the importance of pregnancy preparation, what preparations must be fulfilled from the preconception to the delivery period, what changes will be experienced during pregnancy, and what nutrition must be fulfilled.

From the results of the pretest analysis, most of the participants of the activity did not know about the importance of preparing for a healthy pregnancy and what nutrients and nutrients must be prepared, but after counseling and the Post Test showed that almost all participants of the activity understood the importance of preparing for a healthy pregnancy with the fulfillment of balanced nutrition and nutrition before pregnancy. One of the outputs of this community service activity is the increase in public knowledge that comes, especially couples of childbearing age, Catin and adolescents at the posyandu work area of the Bara-Barayya Makassar health center, understanding of preparation from an early age about the preparation of healthy pregnancy with the fulfillment of balanced nutrition and nutrition from the preconception period so that during pregnancy the mother already understands what must be prepared and consumed during pregnancy until childbirth so that mothers do not experience anemia and KEK during pregnancy, do not experience bleeding during childbirth and babies do not experience BBLR at birth and toddlers do not experience stunting during the growth period.

The expected results in this activity are as planned, where participants can understand the importance of preparation from the period of chronoabsorption, what foods contain good nutrients and nutrients to consume before pregnancy, during pregnancy, until after childbirth, and the importance of psychological preparation from the preconception period.



Picture 1. Participants and Community Service Implementation Team

DISCUSSION

The results of this community service activity highlight the critical importance of providing education on healthy pregnancy preparation beginning in the preconception phase. Before the counseling session, most participants lacked an adequate understanding of the role of balanced nutrition in preparing for a healthy pregnancy. This reflects the generally low awareness among women of reproductive age (WRA), prospective brides, and adolescents regarding preconception nutritional needs and their impact on maternal and neonatal outcomes. Following the intervention, participants demonstrated a significant increase in knowledge. They were able to recognize the importance of proper nutrition in preventing complications such as anemia, chronic energy deficiency (CED), hemorrhage during labor, and even stunting in children (Marbun et al., 2024). This improved understanding is vital for pregnant women and those planning pregnancy, as part of a comprehensive promotive and preventive health strategy. Interactive and contextually tailored educational methods such as discussions, Q&A sessions, and distributing informational leaflets proved highly effective in raising awareness. This aligns with previous studies Abu-Rasheed et al. (2023), which emphasized the pivotal role of preconception counseling in equipping women with the knowledge to mitigate health risks during pregnancy.

Additionally, this community-based educational approach strengthens the role of healthcare workers, especially midwives, as change agents. Their involvement delivers information and empowers women to actively prepare themselves physically, psychologically, and socially before conception (Jarden et al., 2025). This preparedness translates to improved pregnancy experiences and healthier birth outcomes. Strategically, such initiatives support national public health goals, including reducing maternal and infant mortality and preventing childhood stunting, which are often linked to nutritional issues during pregnancy (Nurhanifah & Sharil, 2024). Therefore, this program must be continued and institutionalized through regular health education initiatives integrated into local maternal health services, such as community health posts and public health centers.

The need to change the paradigm of health services focuses on preparation during the preconception period to screen couples ready to become potential parents, and with couples who are not prepared to become parents. Boente et al also state that being a ready parent is any couple's most fundamental moral responsibility. Awareness of this moral responsibility will make couples more responsible for preparing and planning before pregnancy so that the couple's condition is more prepared physically, mentally, socially, and economically. This readiness will impact more responsible parenting patterns (Sultan et al., 2025).

Promoting preconception family health is an important strategy to improve the quality of the child to be born while helping to reduce maternal and infant pain and mortality. This situation found that known risk factors that harm the mother and baby that may occur before pregnancy must be addressed, for example, the mother has a deficiency of hemoglobin (anemia), folic acid deficiency, and behaviors that can

interfere with the health of the mother and fetus during pregnancy. Preconception counseling is an essential component of preconception health services. Through counseling, service providers educate and develop strategies to improve maternal and fetal health (Akkineni et al., 2023).

4. CONCLUSION

Based on the results of community service activities in the work area of the Bara-Barayya Makassar Health Center, it was concluded that the importance of education from the preconception period about preparing for a healthy pregnancy with the fulfillment of balanced nutrition was obtained. After the activity, the participants, especially women of childbearing age, Catin, and Adolescents, experienced increased knowledge and understanding of the importance of pregnancy preparation from the preconception period. It is hoped that with the counseling held, participants of the activity, especially WUS, Catin, and Adolescents, can prepare early on to fulfill the nutrients needed during pregnancy. To the health workers to be able to follow up on the results of this community service activity by providing health education to WUS, Catin and Adolescents in their work areas so that the incidence of anemia and KEK in pregnancy is reduced, the incidence of bleeding is reduced and the incidence of BBLR and Stunting in toddlers is diminished.

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CONFLICT OF INTERESTS

All authors declare no conflict of interest in this community service program.

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