

Pregnant Women's Knowledge of Chronic Energy Deficiency with Economic Status

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Abstrak

One of the causes of maternal and child mortality is poor nutritional status and low nutritional intake of pregnant women during pregnancy which can cause health problems for mothers and babies. The purpose of this community service is to increase the knowledge of pregnant women about Chronic Energy Deficiency as an effort to prevent it both short and long-term. This community service was carried out in March 2022. Community service activities focused on increasing awareness of pregnant women in fulfilling nutrition during pregnancy so that chronic energy deficiency did not occur. Pregnant women do a pre-test before being given counseling with the aim of knowing the description of pregnant women's knowledge about chronic energy deficiency. Counseling is carried out directly, after being given counseling, pregnant women return to doing a post-test with the aim of knowing the picture of the community after being given counseling. The results obtained after being given counseling on knowledge of pregnant women about chronic energy deficiency increased, and there was a significant relationship between knowledge of pregnant women about chronic energy deficiency and economic status. This activity went well and the pregnant women were very enthusiastic.

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INTRODUCTION

Indonesia is a developing country where nutritional problems are a major public health problem and can cause maternal and child mortality. One of the causes of maternal and child mortality is poor nutritional status and low nutritional intake of pregnant women during pregnancy so that it can cause health problems for the mother and baby (Rostarnia, Kurnia Yusuf 2021). Number of pregnant women in 34 provinces is 4,656,382, pregnant women who experience the risk of chronic energy deficiency during pregnancy are pregnant women with LILA < 23.5 cm, namely as many as 451,350 pregnancies based on the size of the upper arm circumference. The presentation of chronic energy deficiency in Indonesia is expected to decrease by 1.5% annually, but the prevalence of chronic energy deficiency risk is still quite high, namely 17.3%. While the number of chronic energy deficiency in pregnant women in Bogor Regency per 2020 is 4897 people (Ma'ruf 2020).

In village of Cimanggu Satu Kec. Cibungbulang, the data we got from 3 RW in the village, 20 pregnant women experience chronic energy deficiency. Therefore, we are interested in holding a nutritional health consultation for pregnant women in Cimanggu Satu village, Kec. Cibungbulang. In addition to giving, pregnant women will be checked for weight, LILA and height measurements to determine BMI and anticipate chronic energy deficiency in pregnant women.

The low nutritional status of pregnant women can be caused by several factors, such as low knowledge of pregnant women about nutrition, below average family income and irregular eating patterns. Conditions related to the nutritional status of pregnant women where the community still has a low level of knowledge and poor economic status, this is one of the factors causing chronic energy deficiency in pregnant women (Metasari and Kasmiasi 2020).

Ignorance cause pregnant women to experience nutritional deficiencies. Knowledge plays an important role in one's life. Person who consumes non-nutritive food can be caused by this ignorance. Therefore, it is important for pregnant women to know nutrition and health so that nutritional needs during pregnancy can be met properly. The factors that affect the nutrition of pregnant women are Energy Adequacy, Age, workload of pregnant women, disease or infection, mother's understanding of nutrition, and household income (Fadilah and Fatimah 2021).

In addition to maternal knowledge about nutrition during pregnancy, other factors that affect pregnant women experiencing chronic energy deficiency, one of which is socioeconomic status/income. Pregnant women with good economic status are easier to meet their nutritional needs. The majority of pregnant women who experience chronic energy deficiency have parity 2-4 times. Pregnant women who have given birth more than 2 times are less concerned about the nutrition consumed by mothers who have been pregnant and given birth several times, so many are found with disturbed health conditions such as anemia and malnutrition (Rostarnia, Kurnia Yusuf 2021).

Based on the initial data collection that we conducted on March 2, 2022 to 20 pregnant women respondents which were obtained through data sampling techniques in the form of observations and questionnaires, pregnant women with chronic energy deficiency in Cimanggu Satu Village, Cibungbulang is 1 pregnant woman. Based on our observations and interviews with Mrs. E The pregnant woman has less knowledge about nutrition. If viewed theoretically, one of the factors that support the quality of one's knowledge is knowledge, while knowledge itself is a factor behind the formation of one's attitudes and behavior.

The employment status of pregnant women is categorized into 2, namely pregnant women who work and those who do not. In this case, Mrs. E does not work or is a housewife where the mother is more focused on her family than the condition of her pregnancy and food intake. Mrs. E became a lot of movement because of the variety of household chores that were done. Based the results (Fadilah and Fatimah 2021) of the study where the more activities the mother eats, the more energy the mother expends. Employment status is related to a person's economic level, where mothers who earn will have more freedom and freedom to get nutritious food.

Several things that pregnant women need to pay attention to in order to meet the nutritional needs of their babies perfectly: eat a variety of side dishes, fruits and vegetables in larger portions, consume iron tablets for three months, stay away from cigarettes, do not consume carbonated drinks and alcohol, Instant noodles should not be consumed as a staple food, avoid foods that contain preservatives, do not take drugs carelessly, participate in exercise for pregnant women, take care of the breasts to prepare for breastfeeding and check themselves during pregnancy and plan delivery with health workers (Ernawati 2018).

Chronic energy deficiency in pregnant women has a short-term impact that can result in stunted fetal growth, infant and fetal death, bleeding, maternal death, low birth weight (LBW), birth defects, premature and prolonged labor. While the long-term chronic energy deficiency in pregnant women is to interfere with the growth and development of the baby such as less than optimal physical growth (stunting), brain development and poor metabolism which can cause infectious diseases in adulthood (Ibti Aulia, Besti Verawati, Dhini Anggraini Dhilon 2020).

METHOD

Community service activity was carried out in Cimanggu Satu Village, Cibungbulang District on 02 to 10 March 2022 offline. The target of this community service is 20 pregnant women in Cimanggu Satu Village, Cibungbulang District. In the implementation of community service through direct meetings, the methods used are counseling and discussion. The activity began with a pre-test, then continued with counseling materials on chronic energy deficiency for 20 minutes. After giving the material, pregnant women held discussions with related resource persons. In the end, from these outreach activities, pregnant women again did a post-test with the aim of knowing the activities of counseling activities about pregnant women's knowledge about chronic energy deficiency.

Stages of community service activities to increase knowledge of pregnant women about chronic energy deficiency as a prevention effort, both short and long term, consist of planning, implementation and evaluation with the following description:

1. Planning

- a. Preparation for this community service activity has been carried out since March 2022, previously we communicated with the Cimanggu Satu Village Head and asked for permission to do community service. This stage is carried out smoothly with the permission of the village head regarding the problems and obstacles that exist in the community. Needs analysis was carried out by holding hearings with pregnant women in Cimanggu village, village heads, village midwives and cadres. This counseling activity is needed by pregnant women in Cimanggu village regarding the knowledge of pregnant women about chronic energy deficiency and socio-economic.
- b. Conducting a literature review on chronic energy deficiency with socio-economic and prevention efforts through the fulfillment of food nutrition for pregnant women.
- c. Coordinate with village heads, village midwives and cadres regarding scheduling and implementation of outreach

2. Implementation

Implementation of this activity is carried out with direct counseling including:

- a. Pre-test was carried out before the extension activities began with the aim of knowing the description of the knowledge of pregnant women about chronic energy deficiency with economic status before being given counseling materials.
- b. Giving the first counseling material about chronic energy deficiency for 20 minutes. The material presented on chronic energy deficiency includes understanding, causes, signs and symptoms, impacts and methods of prevention. The media used in this counseling activity is in the form of lectures



Figure 1. Counseling Chronic Energy Deficiency

The implementation of counseling activities on chronic energy deficiency was carried out for 20 minutes. The material provided includes understanding, causes, signs and symptoms, impacts and ways of prevention. The media used in this activity is a presentation.

3. Evaluation

Post-test evaluation stage, which was carried out after the counseling was completed with the aim of knowing the effectiveness of health education counseling about chronic energy deficiency to pregnant women. The post test was conducted by giving a questionnaire about knowledge of SEZ with a total of 20 questions to pregnant women who attended the counseling. The last session opened a discussion session with the speaker.

RESULT

Counseling activity was carried out in Cimanggu Satu Village, Cibungbulang Sub-district on March 2022 from 10.00 to finish and participants who attended complied with strict health protocols. The results of community service that have been carried out are as follows:

Tabel 1. The results of pre-test and post-test knowledge of pregnant women about chronic energy deficiency

Pre-test		Post-test	
Knowledge		Knowledge	
Low knowledge	High knowledge	Low knowledge	High knowledge
14	6	7	13
63,3%	27,3%	31,8%	59,1%

Table 1. The pretest results of 20 pregnant women respondents in the Cimanggu Satu Village area, Cibungbulang district, namely respondents with less knowledge 14 (63.3%), respondents with good knowledge 6 (27.3%). The results of the posttest of 20 respondents showed that

many as 7 (31.8%) had poor knowledge and many as 13 (59.1%) pregnant women had good knowledge much 13 (30%).

Table 2. Frequency distribution of the economic status of pregnant women

Socio economic		Socio economic	
Low		High	
Chronic energy deficiency	No shortage of chronic energy	Chronic energy deficiency	No shortage of chronic energy
16	4	5	5
80,0%	20,0%	25,0%	75,0%

Table 2. Distribution of the frequency of low socio economic in pregnant women is known as 16 (80.0%) pregnant women with chronic energy deficiency and as many as 4 (20.0%) pregnant women do not experience chronic energy deficiency. High socio economic in pregnant women, as many as 5 (25.5%) experienced chronic energy deficiency and as many as 15 (75.0%) pregnant women did not experience chronic energy deficiency.

Table 3. Relationship between knowledge of pregnant women about chronic energy deficiency and Socio-Economic

Pretest-posttest	Paired Samples Test			p-(value)
	Paired Differences			
	Mean	Std. Deviation	Std. Error mean	
	-0.350	-0.489	-0.109	0.005

Table 3. Known that the p value is 0.005, it can be concluded that there a relationship between knowledge of pregnant women about chronic energy deficiency and socio-economic.

DISCUSSION

The results showed that there was a significant relationship between knowledge of pregnant women about chronic energy deficiency and socioeconomic status, where the results of statistical tests obtained $p = 0.005 (<0.05)$. Knowledge a factor that affects the nutritional status of pregnant women, lack of knowledge and misperceptions about food needs and food value can also affect a person's nutritional status which of course will have an impact on pregnant women such as chronic energy deficiency.

Chronic energy deficiency during pregnancy can cause problems for both mother and fetus. The problem caused by the mother is anemia. Anemia can cause bleeding before and after childbirth, bleeding is the biggest contributor to maternal mortality by 32 percent. While the fetus will affect the process of fetal growth resulting in miscarriage, stillbirth, neonatal death, congenital defects, anemia in the fetus, intra-partum aphixia and birth with low birth weight (Novita Mansoben 2020). The nutritional adequacy of the baby is influenced by the mother's knowledge, because the knowledge possessed by a mother can influence her decisions and behavior (Fitrianiingtyas, Pertiwi, and Rachmania 2018).

The existence of significant relationship between knowledge of pregnant women about chronic energy deficiency with socio-economic, can occur because in families with low economic levels usually most of the income will be spent to meet food needs. The economic status of the family will determine the type of food to be purchased. The higher the income, the more the fulfillment of food need (Metasari and Kasmiati 2020).

Socio economic can affect the pregnancy process which is associated with poverty, lack of hygiene and sanitation, health problems and low levels of education, good household improvement can improve nutritional status due to increased income they may be able to buy

food with good quality and quantity, pregnant women with chronic energy deficiency are caused by low socioeconomic status and are also related to the mother's habits and perceptions about food (Ernawati 2018).

Knowledge of the fulfillment of nutrients is the basis for the formation of attitudes in meeting nutritional needs. Knowledge of pregnant women about nutrition is one of the factors that influence food consumption. Knowledge about nutrition possessed by the mother will affect the behavior of pregnant women, mothers with good nutritional knowledge are likely to provide adequate nutrition (Apriliani, Nikmawati, and Yulia 2019). This is in line with the results of research where one's knowledge will appear when someone uses his senses or mind to recognize certain objects or events that have never been seen or before (Ambarwati 2017). Therefore, the nutritional needs during pregnancy will increase compared to the needs of normal women. The food consumed by the mother will be used for fetal growth and used for growth.

CONCLUSIONS AND RECOMMENDATIONS

Community service activities in Cimanggu Satu Village, Cibungbulang District, succeeded in increasing the knowledge of participants, namely pregnant women, the results of counseling through pre-test and post-test evaluations showed significant changes 59.1% of pregnant women knew about chronic energy deficiency during pregnancy and based on the results of the analysis obtained that the knowledge of pregnant women about chronic energy deficiency with economic status is related to the p value of 0.005. It is hoped that in the future similar activities can be carried out with different topics, especially health education about pregnant women and as knowledge material so that mothers can prepare for a healthy pregnancy for both mother and baby.

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