

# Treating Chronic Energy Deficiency in Pregnant Women with NUTATEL

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Submission date: 14-01-2025; Date of received: 23-02-2025

## **Abstract**

Based on the preliminary survey results, TPMB JUNIKA ISTI is located at Jl. Lintas Desa Terulung No. 85, Manna District, South Bengkulu Regency, Bengkulu Province, South Jakarta City, TPMB Junika Isti. Based on data obtained from the Patient Visit Report, it was obtained that pregnant women visited TPMB. JUNIKA ISTI in the last 3 months an average of 82 visits, out of 82 pregnant women, there were 7 visits of KEK pregnant women, namely in September as many as 2 people, in October as many as 3 people and in November as many as 2 people. Of the 7 KEK pregnant women, 4 people were too young. KEK is a condition where a person suffers from an imbalance in nutritional intake (energy and protein) that lasts for years. Pregnant women who experience KEK will have problems during pregnancy, childbirth and postpartum. In addition, it will also have an impact on fetal development. The government has made efforts to help reduce the incidence of KEK in pregnant women by providing additional food regularly to pregnant women, but these efforts have not been able to achieve the expected target. The purpose of implementing community service is to increase the knowledge of pregnant women, cadres, and community leaders about the impacts caused by pregnant women experiencing KEK and how to handle it. The implementation of the intervention was carried out by pre-test and post-test assessments to see the effectiveness of the counseling provided. The evaluation results showed that there was an increase in knowledge in pregnant women with an average value of the pre-test results of 42 and the post-test results of 82. So it can be concluded that pregnant women understand the impacts caused by KEK during pregnancy. We advise pregnant women to be able to meet balanced nutritional intake during pregnancy by consuming foods that are high in calories and protein, by the innovation provided, namely NUTATEL (Carrot Egg Tofu Nuggets)



**Keywords:** KEK, NUTATEL, Pregnant Woman

## Introduction

In Indonesia to date, the MMR is still in the range of 305 per 100,000 Live Births, not yet reaching the specified target of 183 per 100,000 KH and likewise, the infant mortality rate which is targeted at 16 per 1000 KH in 2024. One of the factors contributing to the high AKI is a lack of quality midwifery care, especially at the community level (Ministry of Health of the Republic of Indonesia, 2020). Chronic Energy Deficiency (CED) in pregnant women is a nutritional problem that has quite high prevalence in Indonesia. KEK is characterized by an upper arm circumference (LILA) of less than 23.5 cm, which indicates a lack of energy and protein intake over a long period (Ministry of Health of the Republic of Indonesia, 2019). Chronic Energy Deficiency (CED) in pregnant women is a nutritional problem that has quite high prevalence in Indonesia. Pregnant women with CED are at risk of experiencing pregnancy complications, such as anemia, bleeding and low birth weight (LBW) (Rahmawati et al., 2021).

### Method

Based on data obtained from patient visit reports, there were 7 visits from pregnant women at TPMB Junika Isti in the last 3 months, an average of 82 visits, out of 82 pregnant women, 7 people received KEK pregnant women, namely in September there were 2 people, in October there were 2 people. 3 people and in November there were 2 people. Of the 7 pregnant women with KEK, 4 people were too young, with an educational history of completing elementary school, 1 person, 3 people did not graduate from junior high school, and did not graduate from high school. 1 person, 2 people graduated from high school. Based on economic history and the work of pregnant women, they are casual daily laborers and ordinary housewives, while their husbands work partly as farmers and construction workers.



#### **Results**

No	Participant	Pretest	Posttest
1	Ny. E	30	70
2	Ny. N	40	80
3	Ny. E	40	90
4	Ny. F	50	80
5	Ny. N	20	70
6	Ny. Y	60	80
7	Ny. N	40	90
8	Ny. M	30	90
9	Ny. Y	50	90
10	Ny. R	60	100
	Total	420	820
	Average	42	84

## **Discussion**

Based on data obtained from the Patient Visit Report, it was obtained that pregnant women visited TPMB.JUNIKA ISTI in the last 3 months an average of 82 visits, from 82 pregnant women, there were 7 visits of KEK pregnant women, namely in September as many as 2 people, in October as many as 3 people and in November as many as 2 people. Of the 7 KEK pregnant women, 4 people were too young, with an educational history of graduating from elementary school 1 person, not graduating from junior high school 3 people, not graduating from high school 1 person, graduating from high school 2 people. Based on the economic history and employment of pregnant women, they are casual laborers and ordinary housewives. While her husband's job is partly a farmer and construction worker.

The implementation of the intervention began by providing pre-test questions that were distributed to participants with the aim of finding out the extent of the participants' knowledge regarding the problem of chronic energy deficiency in pregnant



women. The intervention used a counseling method that was carried out on December 23, at TPMB JUNIKA ISTI. The target was 10 pregnant women with KEK. The source of funding came from LPPM Universitas Nasional. The indicator of the success of this counseling was an increase in the knowledge of pregnant women from before and after the counseling. Participants were given counseling with the theme of the Impact of Pregnant Women with KEK during the activity, all participants listened and followed the activities enthusiastically. Participants actively asked questions about KEK and the management that must be carried out so that this KEK can be handled. So we can conclude that participants have the motivation to improve their nutritional intake patterns.

The introduction of the innovative product that has been made was distributed to the participants. Participants tasted this NUTATEL carefully and gave positive comments. The taste of this NUTATEL is considered delicious to be consumed as a side dish in staple foods or as a family snack. Participants were given leaflets on how to make NUTATEL so that participants are expected to try making it at home. The final activity of this counseling was to provide post-test questions to the participants, with the hope that after receiving counseling there will be an increase in knowledge about the impact of pregnant women with KEK. We hope that with the increase in knowledge of mothers, it can influence the attitudes and behavior of mothers in consuming foods that are needed by mothers during pregnancy so that the prevalence of KEK in Terulung Village, South Bengkulu is by the expected target

# Conclusion

The community service carried out in Terulung village, Manna District, South Bengkulu, started with conducting a preliminary survey which resulted in 3 problem topics, namely pregnant women with SEZ, pregnant women with anemia and pregnant women with risk factors. From the results of the FGD, it was found that the priority problem was pregnant women with CED. Next, an intervention was carried out by conducting outreach with the theme Impact of Pregnant Women with KEK and the introduction of NUTATEL innovation. The results of the counseling showed an average pre-test score of 42 and an average pre-test score of 82. Thus it can be concluded that there was an increase in participants' knowledge. The targets for this community service activity are



pregnant women with KEK who are in the TPMB Junika Isti area in Terulung Village, South Bengkulu

# Acknowledgment

The intervention used the counseling method which was carried out on December 23, at TPMB JUNIKA ISTI. The target is 10 pregnant women with CED. The source of funds comes from LPPM National University. The indicator of the success of this counseling is the increase in knowledge of pregnant women between before and after counseling. Participants were given counseling on the theme of the Impact of Pregnant Women on KEK. During the activity, all participants listened and participated in the activity enthusiastically. Participants actively asked questions about KEK and the procedures that must be carried out so that this KEK can be handled. So we can conclude that the participants have the motivation to improve their nutritional intake patterns.

## **Conflict of Interest**

Based on the results of a preliminary survey in the village of pregnant women who experience KEK. Information obtained from the Village Midwife that pregnant women who experience KEK have been experiencing it since before pregnancy. The cause of KEK experienced by mothers is a lack of nutritional intake due to the mother's irregular eating patterns and lack of attention to the nutrition of the food consumed. When viewed from the income of the community in Terulung village, most of them are traders and fishermen. Based on the above, it can be concluded that the formulation of the problem is What interventions can be given to increase the knowledge of pregnant women and the community in overcoming the nutritional problems of pregnant women who experience KEK

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