

PREVALENCE OF WEIGHT GAIN IN PREGNANT WOMAN DURING SUPPLEMENTARY FEEDING

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Abstract

Backgrounds; Monitoring of maternal mortality and morbidity (MMR) shows results related to nutritional status in 2018, namely around 53% of pregnant women experience chronic energy deficiency. From the 2020 health profile data, it is known that the coverage of pregnant women with SEZ who have received supplementary food (MT) in 2019 is 90.52%. **Objectives;** assessing the prevalence of weight gain among pregnant women during supplementary feeding. **Methods;** The method used was pre-experimental design with a one-shoot case study approach, sampling technique with quota sampling which was carried out for three months at Patingalloang Health Center and Bara-barayya Health Center. Primary and secondary data collection using observation questionnaires measuring LILA after supplementary feeding.. **Results;** one sample statistic test shows a value of p value = 0.032. **Conclusions;** There are changes in nutritional status during supplementary food intake among pregnant women with SEZ at Bara-barayya Health Center and Patingalloang Health Center.

Keywords: *Weight gain pregnant women, supplementary feeding (MT), chronic energy deficiency (CHD)*

BACKGROUND

Chronic energy deficiency (SEZ) is one of the chronic nutritional problems where patients experience a lack of food intake in a long period of time (Dewi & Ulfa, 2021). According to the Ministry of Health, the indicator of SEZ in pregnant women can be seen from LiLa (upper arm circumference) which is less than 23.5 cm (Khoiriya, 2022). Conditions of SEZ are at risk of decreased muscle strength that helps the labor process, causing prolonged partus, labor bleeding and the risk of maternal death. The risk to the fetus can result in fetal death (miscarriage), premature, birth defects, low birth weight (LBW). can interfere with fetal growth and development, namely physical growth (stunting), brain and metabolism which causes non-communicable diseases in adulthood (Pritasari et al., 2017).

The magnitude of the impact of SEZ on pregnant women made the government take a policy by implementing a supplementary feeding program (MT), From the results of monitoring Nutritional Status (PSG) in 2018 shows that around 53% of pregnant women experience energy deficiency <70% of the energy adequacy rate (AKE) and <80% of the protein adequacy rate around 52.9% or half of pregnant women in Indonesia experience protein deficit (KEMENKES RI, 2018). According to the 2019 health department, insufficient energy and protein intake in pregnant women can cause Chronic Energy Deficiency (CHD). Based on the 2016 PSG, 53.9% of pregnant women experienced an energy deficit (<70% AKE) and 13.1% experienced a mild deficit (70-90% AKE). For protein adequacy, 51.9% of pregnant women experienced protein deficit (<80% AKP) and 18.8% experienced mild deficit (80-99% AKP). One of the identification of pregnant women with SEZ is having an upper arm circumference (LILA) <23.5cm (Health Profile of the Health Office in 2019, 2020).

One of the efforts made to improve nutrition in pregnant women with SEZ is by providing additional food. According to Minister of Health Regulation No. 51/2016 on Nutritional Supplementation Product Standards, supplementary food for women with SEVERE pregnancies are biscuits containing protein, linoleic acid, carbohydrates, and enriched with 11 vitamins and 7 minerals. Nationally, the coverage of pregnant women with SEZ receiving PMT in 2019 was 90.52%. However, this figure has not met the 2019 Strategic Plan target of 95%. The provinces with the highest percentage of pregnant women receiving PMT are West Kalimantan, South Sumatra, and Gorontalo, while the lowest percentage is West Nusa Tenggara (71.36%). Fourteen provinces have not met the 2019 Renstra target (Health Office Health Profile 2019, 2020).

Data from the 2020 health profile shows that the coverage of pregnant women who received PMT in 2019 was 90.52%. The prevalence of SEZ in South Sulawesi province is still above the national average of 34.59% with a prevalence of SEZ in pregnant women of 16.87% and 17.72% in women who are not pregnant. Whereas in Bulukumba District, the prevalence of SEZ in non-pregnant women is still above the national average of 17.46%. (Badan Penelitian dan Pengembangan Kesehatan (Litbangkes Agency), 2018). The government is still trying to overcome SEZ in pregnant women, this effort does not seem optimal because there are fluctuations in data so that it is still far from the expected target. This can be seen through data from the Makassar Central Statistics Agency which shows a decrease in the incidence of women with SEZ in Makassar city from 2020 of 2,330 people down to 2,221 people in 2021, but an increase in 2022 to 2,495 people (Makassar, 2020).

Based on the background of the problems that have been stated, the researcher is interested in conducting a study with the title "Prevalence of weight gain in pregnant women with SEZ problems who receive MT".

METHODS

The type of research that will be conducted is a pre-experimental design with a one-shoot case study approach, which is a study where there is a group given treatment (treatment) and then observed the results (treatment is as an independent variable and results are as a dependent variable) (Asdar, 2018). The treatment given is the provision of additional food according to the government program to assess the weight gain of pregnant women.

RESULTS AND DISCUSSION

This study was conducted by analyzing the data of 22 respondents at the Bara-barayya Health Center and Pattingalloang Health Center in Makassar city. Data collection was carried out from June to August 2023 with retrospective method of secondary data to assess the weight gain of pregnant women with SEZ who received additional food in the PMT program which was implemented from November 2022 to February 2023 with the following results:

1. Univariate Analysis

a. Age

Table 4.1 Frequency distribution of respondents based on age in pregnant women with SEZ who received PMT at Bara-barayya Health Center and Pattingalloang Health Center.

Age	Frequency	Percentage
At risk (<20/>35)	5	23%
Not Risk (20-35)	17	77%
Total	22	100%

Source of secondary data November 2022 - February 2023

Based on the results of the study obtained data as many as 17 (77%) respondents were categorized as not at risk more than respondents at risk. Furthermore, it can be seen in table 4.1.

b. Nutritional status

Table 4.2. Frequency distribution of respondents based on nutritional status according to LILA measurement in pregnant women with SEZ after receiving PMT for three months at Bara-barayya Health Center and Pattingalloang Health Center.

Nutritional status	Frequency	Percentage
Normal	14	63,64%
Deficient	8	36,36%
Total	22	100%

Based on the results of the study, 14 (68%) respondents were categorized as experiencing changes in nutritional status to normal more than respondents who still had a nutritional status of KEK after receiving PMT. Furthermore, it can be seen in table 4.2

2. Bivariat Analisis

Test Value = 23.5

	t	df	Sig. (2-tailed)	Mean Difference
Status Gizi	-2.292	21	.032	-.13636

From the assessment results, the distribution of research data is normally distributed so that it can be tested with the paired sample t test and it can be concluded that there are changes in nutritional status in women with SEZ after receiving PMT for three months with a value of $p = 0.032$.

Age is the length of time a person's life is calculated from birth to the latest time he lives, in pregnancy there is a term at risk at the age of <20 or >35 years which can cause various complications in pregnancy (Setiana, 2018). The results showed that there were 5 (23%) respondents who were at risk, and 17 (77%) respondents who were not at risk. Mothers who are at risk with age <20 years are 2 respondents and those aged >35 years are 3 respondents. According to the results of research by Evi Sulastris and Eka Afrika, there is an influence of age risk factors with the incidence of SEZ in pregnant women with a value of $p=0.034$ (Sulastris & Afrika, 2023).

Providing additional food to pregnant women with SEZ is a government program as an effort to improve nutrition and reduce stunting rates (KEMENKES RI, 2018). The results of the assessment showed data before the acquisition of additional food all respondents had a nutritional status of SEZ and after three months of receiving additional food, there were 14 (63.64%) respondents changed their nutritional status to normal and 8 (36.36%) respondents still had a nutritional status of SEZ. The results of the paired sample t test showed a change in nutritional status in women with SEZ after receiving PMT for three months with a value of $p = 0.032$. This result is in accordance with the statement of Fitri Julia Sari in her research entitled "Supplementary Feeding (PMT) with Weight Gain of Pregnant Women with SEZ" with the result of $p = 0.005$ which shows the effect of weight gain after supplementary feeding in pregnant women with SEZ (Juliasari & Ana, 2022).

After conducting an assessment, of the 8 respondents who did not show changes in nutritional status, 5 of them were caused by initial nutritional status that was too low reaching a LILA size of 21 cm, after three months there was a change and weight gain but had not yet reached normal nutritional status. While 2 other respondents had a close pregnancy distance and one respondent because they showed a culture of abstinence from food so that the PMT received was given to their children.

Various factors that cause SEZ nutritional status in pregnant women include age of pregnant women, parity, birth spacing, HB levels, nutritional fulfillment patterns, education, occupation, cultural taboos, economic status and income and frequency of ANC examinations. From the research conducted by Atikah Yusriani and Irawan Budiyono, it is known that the frequency of examination of pregnant women has a value of $p = 0.310$ and $p = 0.263$ for the mother's work which means that the mother's work and the frequency of ANC examinations have no effect on the incidence of SEZ while other variables have a significant influence with a value of $p = 0.023$ for the level of education and family income and $p = 0.012$ for the culture of abstinence from eating (Yusriyani & Budiono, 2023).

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