

## The Effect Of Giving Pregnant Women Milk And Supplementary Food on Weight Gain in Pregnant Women in Deli Tua District

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### ABSTRAK

Penelitian ini bertujuan untuk melihat pengaruh pemberian susu khusus ibu hamil dan makanan tambahan terhadap penambahan berat badan pada ibu hamil. Target utama adalah kenaikan berat badan pada ibu hamil di kecamatan Deli Tua. Penelitian ini menggunakan metode quasi eksperimen dimana rancangan penelitian yang digunakan adalah one grup tes dengan pembagian pre test dan post test desain tanpa adanya kelompok kontrol. Penelitian ini menggunakan sampel dengan jumlah 15 orang ibu hamil pada trisemester 1 yang terindikasi Penurunan berat badanurangan berat badan. Hasil Penelitian menunjukkan bahwa ada perbedaan yang signifikan pada berat badan ibu hamil pada kondisi sebelum dan sesudah diberikan susu ibu hamil dan makanan tambahan terhadap kelompok eksperimen (pada taraf  $p < 0.05$ ). Kesimpulan yang diperoleh adalah pemberian susu dan makanan tambahan tersebut berpengaruh terhadap kenaikan berat badan pada ibu hamil. Program ini dapat diaplikasikan di praktik selanjutnya untuk peneltian selanjutnya dan bahasan rujukan kegiatan kebidanan selanjutnya.

**Kata Kunci** : Ibu Hamil, Berat Badan, Susu Ibu Hamil, Makanan Tambahan

### ABSTRACT

This study aims to see the effect of giving special milk for pregnant women and additional food on weight gain in pregnant women. The main target is weight gain for pregnant women in the Deli Tua sub-district. This study used a quasi-experimental method in which the research design used was one group test with pre-test and post-test designs without a control group. This study used a sample of 15 pregnant women in the 1st trimester who were indicated to be underweight. The results of the study showed that there was a significant difference in the weight of pregnant women before and after being given milk and supplementary food to the experimental group (at the level of  $p < 0.05$ ). The conclusion obtained is that the provision of milk and additional food has an effect on weight gain in pregnant women. This program can be applied in further practice for further research and discussion of reference for further midwifery activities.

**Keywords**: Pregnant Women, Weight, Milk for Pregnant Women, Supplementary Foods

## **I. PENDAHULUAN**

### **1. Latar Belakang**

Achieving a good quality of life for families and communities is determined by the health of mothers and children. Pregnant women are one of the groups that are prone to nutritional problems. The World Health Organization (WHO) reports that the prevalence of weight loss in pregnancy globally is 35-75% which is significantly higher in the third trimester compared to the first and second trimesters of pregnancy. WHO also notes that 40% of maternal deaths in developing countries are related to chronic energy deficiency. Pregnant women who suffer from malnutrition such as chronic energy deficiency have a greater risk of morbidity, therefore malnutrition in pregnant women must be avoided so that pregnant women are a target group that needs special attention. The incidence of chronic energy deficiency weight loss in developing countries such as Bangladesh, India, Indonesia, Myanmar, Nepal, Srilangka and Thailand is 15-47%, namely with BMI <18.5. The country with the highest incidence of weight loss in pregnant women is Bangladesh, which is 47%, while Indonesia is the fourth largest after India with a prevalence of 35.5% and the lowest is Thailand with a prevalence of 15-25% (WHO, 2015). The performance report of the Directorate General of Public Health in 2017 reported that the percentage of pregnant women losing weight in Indonesia was 16.2% (Ministry of Health, 2018). The results of the 2018 nutrition monitoring (PSG) reported that Sumut Province is one of the provinces with a risk of weight loss (the number of pregnant women with upper arm circumference < 23.5 cm) of 18%, this figure is above the national average percentage of 16.2%. The highest percentage is Papua Province at 23.8% and the lowest is North Sumatra Province at 7.6% (Ministry of Health, 2017). Based on program evaluation data from the Deli Serdang District Health Office, there were 15,647 pregnant women during 2011 and 1308 pregnant women who experienced anemia. Meanwhile, based on the results of the survey, the data obtained that the number of pregnant women in the Deli Tua Health Center Deli Serdang District in 2011 was 569 people who experienced anemia 349 people (51%) experienced anemia. In order to reduce maternal mortality and infant mortality as well as maternal and child morbidity, anemia in pregnancy needs to be detected as early as possible, so that it can be treated properly. The management of pregnancy anemia has been established by the Ministry of Health with anemia management standards during antenatal care services. In addition, the behavior of pregnant women and their families in fulfilling nutritional intake has an impact on the prevention of anemia in pregnancy. The program to prevent in pregnant women at UPT Puskesmas Deli Tua has made efforts, among others, early detection of prevention and treatment of anemia through antenatal care services. Giving Fe tablets 90 tablets during pregnancy, health education about nutritious food consumption and prevention of anemia. While the provision of pregnant women's milk is still not given to pregnant women by the relevant Puskesmas, while the content of pregnant women's milk is a food source. Based on data on the number of pregnant women who received PMT in 2018, namely 25.2% of the number of pregnant women and it can be concluded that there are 25.2% of pregnant women who have LILA less than 23.5cm or are called pregnant women with weight loss, and of the 25.2% of pregnant women who experience weight loss and must get PMT (Supplementary Feeding) only 89.7% have received PMT programs from 25.2% of the number of pregnant women with weight loss and 10.3% of pregnant women with weight loss who have not received PMT (Ministry of Health Profile 2018). Based on data obtained from the research site, namely Puskesmas Curug Tangerang Regency, the number of pregnant women who lost weight in 2017 was 67 pregnant women and registered to get PMT (Supplementary Feeding). And in 2018 the number of pregnant women with weight loss has increased, namely the cumulative number

in November 2018, namely 78 pregnant women with LILA less than 23.5 cm or called pregnant women with weight loss. The problem above is the increasing data of pregnant women who lose weight every year, where we know that weight loss can cause bleeding in pregnant women during pregnancy and childbirth, while the highest cause of maternal mortality is still caused by bleeding, which is 30% of the number of maternal deaths each year, so researchers conducted a study with the title "The Effect of Giving Pregnant Women Milk and Additional Food on Weight Gain in Pregnant Women in Deli Tua District"

## **2. Perumusan Masalah**

Based on the description of the background of the problem above, the problem is how the effect of giving pregnant women milk and additional food on weight gain in pregnant women in Deli Tua District.

## **3. Tujuan Penelitian**

This study aims to obtain data on how the effect of giving pregnant women milk and additional food on weight gain in pregnant women in Deli Tua District.

## **4. Manfaat Penelitian**

The benefit of this research is to apply the research data from how the effect of giving pregnant women milk and additional food on weight gain in pregnant women in Deli Tua Subdistrict.

## **II. METODE**

The method used in this study is a Quasi Experiment research design (pseudo experiment) with the design used is One Group Pretest- Posttest Design without a control group but the first observation has been made (pretest) which may allow researchers to test changes in 1. the changes that occur after the experiment (posttest), (Notoatmodjo, 2010).

1. Changes that occur after the experiment (posttest), (Notoatmodjo, 2010).
2. Quasi Experiment design is research that is used to determine whether or not there is an effect of "something" that will be imposed on the subject to be studied by looking for the effect of certain treatments on others under controlled conditions, (Sugiyono, 2012). This means that experiments are experimental activities to examine an event or symptom that appears in certain conditions. One Group Pretest - Posttest is a technique to determine the effect before and after treatment, (Sugiyoni, 2012). This research was conducted from December 2018 to January 2019 in the Curug Health Center Working Area, Tangerang Regency.
3. The instruments used were observation sheets and control sheets, normality tests were carried out using Shapiro-Wilk, and bivariate tests were carried out to determine whether there was an effect of supplementary feeding and milk on weight gain in pregnant women with weight loss in the Curug Health Center working area, Tangerang Regency Banten 2018 using the Paired T test statistical test.

### III. HASIL PENELITIAN

**Table 1** Frequency Distribution Based on Upper Arm Circumference (LILA) in the Curug Health Center Working Area, Tangerang Regency in 2018

Lingkar lengan atas						
N	%	Mean	SD	Median	Min	Max
16	100	21,91	1.052	22.00	21	23

**Table 2** Frequency Distribution of Average Weight Before Treatment and After Providing Supplementary Food and Milk for Pregnant Women in Pregnant Women

Kelompok Perlakuan (n=16)	N	%	Mean	SD	Median	Nilai berat badan	
						Min	Max
Sebelum	16	100	44	3.198	44	39	58
Sesudah	16	100	46	2.941	46	41	60

From Table 2, the characteristics of respondents based on body weight before treatment were obtained the average weight of the mother was 44 kg. with a standard deviation of 3.198 while the minimum weight was 39 kg, and the maximum weight was 41 kg. from the table above, other results were obtained, namely the mother's weight after treatment, with an average weight of 46 kg, with a minimum value of 41 kg. and a maximum value of 60 kg. Normality test data obtained from the results before and after being given additional food and milk for pregnant women using the Shapiro - Wilk method, which is a nonparametric test to measure significant differences between 2 groups of paired data with ratio and interval scales but normally distributed. The significant level is 95% ( $\alpha=0.05$ ). Guidelines in accepting the hypothesis, if the p value  $<0.05$  then  $H_0$  fails to be rejected, that is, there is no effect, and if the p value  $>$  then  $H_0$  is rejected, that is, there is an effect (Sutanto, 2006).

Average Weight in Pregnant Women who experience weight loss before and after being given additional food and milk. The results of research conducted in the Curug Health Center Working Area, Tangerang Regency in 2018 obtained results based on body weight before treatment was given the average maternal weight of 44 kg. with a standard deviation of 3.198 while for the minimum weight of 39 kg. and maximum weight of 41 kg. from the table above, other results were obtained, namely the mother's weight after treatment, with an average weight of 46 kg. with a minimum value of 41 kg. and a maximum value of 60 kg. Weight gain during pregnancy varies for each pregnant woman. The recommended total weight gain during pregnancy is within 10-12 kg. However, mothers who were underweight before pregnancy should pursue weight loss, so it is recommended to gain 12.5-18 kg. While mothers who are somewhat overweight, it is recommended to gain only 7-11.5 kg during pregnancy. The results of the study are in accordance with Rahma's research (2016) Nurina The improvement in the nutritional status of pregnant women in the operational area of UPTD Puseksmas Pasirukem based on LILA occurred with better awareness, especially in the consumption of main food and PMT-P (milk and MT-Bumil biscuits) during pregnancy. The misconception of PMT-P consumption as the main food

has been conveyed by posyandu cadres through counseling activities carried out during cadre monitoring.

### **Effect of Supplementary Feeding and Milk on Weight Gain In Pregnant Women who have Weight Loss**

The results of research conducted on the effect of providing additional food and milk for pregnant women on weight gain in pregnant women with weight loss in the Curug Health Center working area of Tangerang Regency with the results of the average body weight before treatment of 44 kg with a standard deviation of 3.19 and after treatment the results were obtained with an average of 46 kg with a standard deviation of 2.94. There was also an increase in body weight with an average of 1.813 in addition to the P value = 0.000 <0.05, so there was an influence between before treatment and after treatment. Chronic Energy Deficiency weight loss (weight loss) is one of the conditions of malnutrition. Where the mother's condition suffers from weight loss food shortages that last for years (chronic) which results in the onset of health problems in the mother in relative or absolute one or more nutrients The state of weight loss occurs because the body weight loss is reduced by one or more types of nutrients needed. Some of the things that can cause weight loss to be deficient in nutrients include the amount of nutrients consumed being insufficient, the quality being low or both. The nutrients consumed may also fail to be absorbed and used for the body (Helena, 2013).

This agrees with research conducted by AASP. Chandradewi (2015) The results of the pair t test statistical test, obtained a sig value of 0.000 ( $p < 0.05$ ), which means that the provision of additional food has a significant effect on weight gain for pregnant women with chronic energy deficiency in Labuan Lombok, East Lombok Regency. Based on the results of the research and the description of the theory above, according to the researcher's analysis, the provision of additional food and milk for pregnant women is very effective in increasing the weight of pregnant women in overcoming weight loss. because it can be seen from the test results between before and after which are significant. The active role of the government in handling this is very important, and for the area studied at this time the pmt program has been carried out but in monitoring weight loss has not been maximized. So that with this research it becomes a source and suggestion for related agencies and health workers in the field.

### **IV. KESIMPULAN**

Based on the results of the study of the effect of supplementary feeding and mother's milk on weight gain of pregnant women with weight loss in the working area of the Curug Health Center, Tangerang Regency in 2018, it can be concluded that from the results of the study, the mean before treatment was 44 and after treatment was obtained the average result of 46 kg, the mean of both was 1.813 with a standard deviation of 750 besides that the P value = 0.00 <0.05, so there was an influence between before treatment and after treatment. To the Curug Health Center, Tangerang Regency, to continue the supplementary feeding program for pregnant women, especially pregnant women with weight loss and also to monitor and monitor the compliance of pregnant women in conducting pregnancy checks. In addition, the results of this study can be a source of information and a reference, so that it can provide knowledge for students, especially knowledge about the benefits of supplementary feeding and health education about nutrition in pregnant women, especially pregnant women who lose weight. The results of this study can be used as a reference or comparison for further research, and it is hoped that future researchers can conduct

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research with other variables that are more complex and with other methods. For pregnant women, weight loss is expected for pregnant women to meet their nutritional needs during pregnancy and regularly conduct pregnancy checks. So that it can prevent unwanted things in pregnancy and childbirth, such as the incidence of pregnancy anemia or low birth weight babies (LBW).

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