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The Relationship of Emotional Eating to Nutritional Adequacy Level in Women of Childbearing Age in Rimau Islands, Sumur Village, South Lampung

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ABSTRACT

The group of women of childbearing age is one phase to prepare the next generation of quality. Inadequate food intake can cause Chronic Energy Deficiency problems in women of childbearing age. In women, symptoms of depression worsen the relationship between emotional eating and food intake.The purpose of this study was to determine the relationship between emotional eating and the level of nutritional adequacy of women of childbearing age in the Rimau Islands, Sumur Village, South Lampung.This study used a cross sectional or cross-sectional design. Researchers used the Dutch Eating Behavior Questionnaire (DEBQ) which has been translated into Indonesian, specifically for Emotional Eating and Nutrisurvey to see the amount of food intake of respondents. This study included 20 respondents from 30 respondents who attended. The correlation test for emotional eating on the level of nutritional adequacy (Energy, Protein, Fat, and Carbohydrates) had no relationship with p-values (0.649; 0.700; 0.579; 0.675). The conclusion of this study is that there is no relationship between emotional eating and the level of nutritional adequacy (Energy, Protein, Fat and Carbohydrates).

KEYWORDS: Emotional Eating, Nutritional Adequacy Level, Women of Childbearing Age

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INTRODUCTION

The group of women of childbearing age is one phase to prepare the next generation of quality. One of the high incidences of stunting is due to the lack of attention of women of childbearing age to prepare their nutrition. Many factors affect food intake in the group of women of childbearing age, including eating habits or eating patterns, diet, disease history, body image, and emotional eating that can occur due to stress, emotions and others. Inadequate food intake can cause Chronic Energy Deficiency problems in women of childbearing age. Chronic Energy Deficiency is a condition in which young women/women experience malnutrition (calories and protein) that lasts for a long time or are chronic.[1]Other research by Yhona found Chi Square test results that food intake which includes energy, protein, fat, and carbohydrate intake has a significant relationship with nutritional status in women of childbearing age.[2]This is similar to a study by Melian explaining that energy intake has a significant relationship with the nutritional status of women of childbearing age.[3]Food intake is very important in influencing nutritional status in women of childbearing age, while intake itself is influenced by several factors that need to be studied more deeply.

The results of research by Vina in 2022, illustrates that the higher the stress level of the respondent, the more often the respondent consumes high-sugar foods and rarely eats high-fat foods.[4]In women, symptoms of depression worsen the relationship between emotional eating and food intake. On the other hand, men do not have much effect on the relationship between emotional eating and food intake. In this finding, it is necessary to consider the psychological state of the individual when reducing unhealthy dietary habits, especially in women or young women.[5] Gender or gender is very influential on the emotional condition of adolescents, one of which can affect emotional eating. From the results of a study of several articles or literature, it was found that young

women are more likely to be easily affected by emotional eating because they are more prone to anxiety.[6]

Research that has been done previously on the island of rimau found the phenomenon that young women have problems with the intake of protein sources. This is because there is no incoming electricity making it difficult to store wet food which incidentally is mostly a source of protein. So it affects the level of nutritional adequacy in adolescent girls.

Based on the above background, the authors are interested in conducting research on The Relationship of Emotional Eating on Nutritional Adequacy Levels in Women of Childbearing Age in the Rimau Islands, Sumur Village, South Lampung. The purpose of this study was to determine the relationship between emotional eating and the level of nutritional adequacy of women of childbearing age in the Rimau Islands, Sumur Village, South Lampung.

MATERIAL & METHOD

This study used a cross sectional or cross-sectional design. This is to find out from the relationship between emotional eating and the level of nutritional adequacy at one time. The study was conducted for 6 months starting from April to October 2022. The sample used the total population on Rimau Island. Respondents who came at the time of data collection at SD 5 Sumur will be used as research subjects.

The independent variable used in this study is Emotional Eating to determine emotional eating. The researcher uses the Dutch Eating Behavior Questionnaire (DEBQ) which has been translated into Indonesian, specifically for Emotional Eating, which consists of 13 questions, with an answer choice of 1 = no. . never, 2=sometimes, 3=sometimes, 4=often and. 5=always. The variable level of nutritional adequacy can be seen from food intake compared to the Nutrition Adequacy Rate (RDA). Other variables that were asked of the respondents were age, educational status, employment status, marital status, dietary history, history of allergies, appetite problems, and frequent missed meals. The variables of emotional eating and levels of nutritional adequacy were tested bivariately using the Pearson correlation statistic.

RESULTS

Data collection was carried out on July 24, 2022, which took place at SD Negeri 5 Sumur. Respondents who attended were used as subjects in this study. The subjects of this study were selected according to the inclusion and exclusion criteria, such as the age of the respondents. Subjects were excluded at the time of re-examination of the questionnaire which had been filled out by previously trained enumerators. The number of subjects in this study were 20 people. For descriptive data from research subjects can be seen in the following table:

Table 1. Characteristics of Research Subjects (N=20)

No	Variable	Value/ Amount
1	Average Age	30.9 years
2	Employment status	
	a. Doesn't work	19 People (95%)
	b. Working	1 Person (5%)
3	Married Status	
	a. Marry	17 People (85%)
	b. Not married	3 People (15%)
4	Educational status	
	a. Elementary School	16 People (80%)
	b. Junior High School	4 People (20%)
5	Diet History	
	a. Yes	2 Persons (10%)
	b. Not	18 People (90%)
6	Average Food Allergies	
	a. Yes	4 people (20%)
	b. Not	16 People (80%)
7	Appetite Problems	
	a. Yes	2 Persons (10%)
	b. Not	18 People (90%)
8	Missed meal time	
	a. Yes	14 People (70%)
	b. Not	6 People (30%)
9	Average Percentage of Nutritional Adequacy Level	

	a. Energy	35.31%
	b. Protein	43.4%
	c. Fat	34.9%
	d. Carbohydrate	33.9%
10	Average emotional eating score	10.75

This research uses a correlation test, but it is necessary to test for numerical data on the tested variables. The results of the normality test can be seen in table 2 below:

Table 2. Research Variable Normality Test

No	Variable	p value
1	Energy Adequacy Level	0.050
2	Protein Adequacy Level	0.575
3	Fat Adequacy Level	0.951
4	Carbohydrate Adequacy Level	0.057
5	Emotional Eating Score	0.127

Based on table 2, it can be seen that the distribution of data using Shapiro Wilk is normal so that it can be carried out in the next test, namely the correlation test between emotional eating scores and the level of nutritional adequacy. The results of the correlation test can be seen in table 3 below:

Table 3. Emotional Eating Correlation Test on Nutritional Adequacy Levels

No	Correlation Test	p value
1	*Emotional Eating*on Energy Adequacy Level	0.649
2	*Emotional Eating*on Protein Adequacy Level	0.700
3	*Emotional Eating*on Fat Adequacy Level	0.579
4	*Emotional Eating*on Carbohydrate Adequacy Level	0.675

Table 3 shows the results of the correlation test between emotional eating and the level of nutritional adequacy (Energy, Protein, Fat, and Carbohydrates). The results of the correlation test showed that there was no relationship between emotional eating and all levels of macronutrient adequacy by looking at the p value exceeding 0.005.

DISCUSSION

Characteristics of Respondents

This study included 20 respondents from 30 respondents who attended. Determination of respondents is done by looking at the criteria of the age of women of childbearing age. The average age of the respondents in this study was 30.9 years, with the youngest age being 14 years and the oldest being 44 years. This is not in accordance with previous research conducted by Braden in 2018 which included 189 respondents who were obese. The population in the Rimau Islands is very limited, so the researchers used the total sampling method in obtaining respondents.[7]

95% of respondents do not work and are only students and housewives. At the time of the research, many respondents of working age/other productive age worked outside the island, so it was not affordable to obtain data. The research is in accordance with research conducted in Saudi Arabia by Khaled in 2021, which explains that using respondents who are not working or civilians to find out the impact on emotional eating. For someone who does not work, it will have an impact on lack of income so that it can reduce accessibility in obtaining food and increase the risk of stress.[8]

The education level of the respondents is classified as lower middle, namely elementary and junior high school graduates. This is because the island community does not care about higher education to live their lives. This research is different from previous emotional eating studies in that most of the respondents are students or currently studying in college. Research conducted by Mantau 2019, regarding the determinants of emotional eating, included 179 participants from university students with an average age of 23.15 years.[9]Compared to this study, the study had a higher educational background of respondents and a younger average age of respondents. This is because the respondents in this study worked as housewives.

Most of the respondents did not have a history of diet, which was around 18 people (90%). Respondents did not understand enough about the diet and the purpose of the diet. Some who go on a diet (2 people) use the method of reducing the intake of carbohydrate sources, namely by not consuming rice.

Based on table 1, it can be seen that the number of respondents who skipped the main meal was quite a lot, namely 14 respondents (70%). Skipping meals, even if only once, can reduce a person's nutritional adequacy. This is related to the level of nutritional adequacy that is lacking in all types of macronutrients, namely Energy, Protein, Fat and Carbohydrates.

The Relationship of Emotional Eating to Nutritional Adequacy Levels

The correlation test for emotional eating on the level of nutritional adequacy (Energy, Protein, Fat, and Carbohydrates) had no relationship with p-values (0.649; 0.700; 0.579; 0.675). This is because the average score for emotional eating is very low, 10.75 points out of a total score of 65 points, and inversely proportional to the level of nutritional adequacy. The low level of nutritional adequacy is more due to the habit of skipping meals. This eating habit is in accordance with a statement by Lenka in 2020, which explains that lifestyle habits, including eating behavior, continue to be formed into early adulthood, it is very important for us to develop a better understanding of the factors that influence emotional eating.[10]This study is not in accordance with previous research conducted by Dressler (2015), which explains that depressed women are more prone to food insecurity, consume more calories and consume more servings of additional food.[11]Other studies have also shown different results where uncontrolled eating is associated with increased carbohydrate intake for women, and fat-free mass content is associated with emotional eating. The difference from the results of this study is due to the limitations of food availability and low emotional eating emotional eating scores.

The respondent's food habits are mostly snacks, such as wafers, biscuits and others. This is in accordance with research conducted by Nadine (2018) on 1442 respondents, who explained that in general depression and related food habits contribute to poor eating patterns such as high intake of sweet foods and snacks.[12]So that individuals must have their own eating arrangements to control the intake of snacks, sweets such as candy which is the impact of perceived emotional eating.[13]

Calculation of nutritional needs using the basis of the Nutrition Adequacy Rate (RDA) which divides women of childbearing age into 4 groups, namely, 13-15 years, 16-18 years, 19-29 years, and 30-49 years[14]. This can affect the difference in the level of nutritional needs in each age group. So that it can produce biased data to represent the results of the study. For further studies, more specific age categorization of women of childbearing age is needed.

CONCLUSION

This study included 20 respondents from 30 respondents who attended. Determination of respondents is done by looking at the criteria of the age of women of childbearing age. The correlation test for emotional eating on the level of nutritional adequacy (Energy, Protein, Fat, and Carbohydrates) has no relationship. This is because the average score of emotional eating is very low, 10.75 points out of a total score of 65 points. The difference from the results of this study is due to the limitations of food availability and low emotional eating scores. For further studies, more specific age categorization of women of childbearing age is needed.

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