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DESCRIPTION OF CHARACTERISTICS OF CHRONIC ENERGY DEFICIENCY (CED) IN PREGNANT WOMEN IN KAWAY XVI DISTRICT, ACEH BARAT REGENCY

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Abstract

Nutrition is one of the main determinants of the quality of human resources. Chronic Energy Deficiency (CED) is one of the four main nutritional problems in Indonesia. Chronic Energy Deficiency (CED) and anemia have a greater risk of illness, especially in the third trimester of pregnancy compared to normal pregnant women. As a result, pregnant women have a greater risk of giving birth to babies with low birth weight, death during childbirth, bleeding, difficult delivery because they are weak and easy to experience health problems. This research uses a survey method with a descriptive approach . The research was carried out in Kaway XVI District, Aceh Barat Regency spread over 4 villages, namely Keude Tanjung Village, Puuk Village, Tanjong Bungong Village and Pungkie Village, from August 7 to December 15, 2021. The population in this study was CED pregnant women as many as 21 people. The results showed that there were more respondents in the status of not working as many as 18 people (85.7%), Mothers who had never had children as many as 11 people (52.4%), Mothers who consumed 15 people (71.4%). , good ANC as many as 15 people (71.4%), income < UMP as many as 19 people (90.5%), age group 20-35 years as many as 16 people (76.2%) and no history of CED as many as 15 people (71.4%).

Keywords**: *Chronic Energy Deficiency (CED), Economic Status, Characteristics of Pregnant Women.***

1. INTRODUCTION

Nutrition is one of the main determinants of the quality of human resources. The nutritional status of the mother before and during pregnancy can affect the growth of the fetus being conceived. If the nutritional status of the mother before and during pregnancy is normal, it is likely that she will give birth to a healthy, full-term baby with a normal weight. So it can be concluded that the quality of babies born is very dependent on the nutritional state of the mother before and during pregnancy (Andriani, 2016).

The Infant Mortality Rate (IMR) of LBW is 5 to 9 times greater than the IMR of infants with a birth weight of 2,500-2,999 grams. Furthermore, the IMR of LBW when compared to the IMR of babies with a birth weight of 3,000-3,499 grams is 7-13 times greater. To overcome and reduce the birth of babies with low birth weight need earlier steps. One way is to detect early women of childbearing age (WUS) at risk of Chronic Energy Deficiency (CED) (Depkes, 2013).

The four main nutritional problems in Indonesia are Chronic Energy Deficiency (CED), Disorders Due to Iodine Deficiency (IDD), Vitamin A Deficiency (KVA), and Iron Nutrient Anemia (AGB). One of the nutritional vulnerable groups targeted by the program is adolescents and pregnant women. Problems that often occur in adolescents and pregnant women are anemia, iron deficiency, and being overweight or underweight (Sulistyoningsih, 2011).

The main factor in the occurrence of Chronic Energy Deficiency (CED) in pregnant women is that since before pregnancy the mother has experienced a lack of energy, because the needs of pregnant people are higher than mothers who are not pregnant. Pregnancy causes an increase in

energy metabolism, therefore the need for energy and other nutrients increases during pregnancy. (Ribut, et al, 2015)

Upper arm circumference is an indicator of nutritional status that is used primarily to detect protein energy deficiency in children and is a good tool for detecting women of childbearing age and pregnant women at risk of giving birth to babies with low birth weight. Measurement of MUAC in the group of women of childbearing age is one way of early detection that is easy and can be carried out by the general public, to identify groups at risk of Chronic Energy Deficiency (CED). MUAC measurement cannot be used to monitor changes in nutritional status in the short term. MUAC measurement is used because the measurement is very easy and fast. The results of the MUAC measurement have two possibilities, namely less than 23.5 cm and above or equal to 23.5 cm. If the measurement result < 23.5 cm means the risk of CED and 23.5 cm means that there is no risk of CED.

Based on Elisa's research (2018) that the effects experienced by pregnant women with chronic energy deficiency include giving birth to low birth weight babies (LBW) with a percentage (20.0%) in pregnant women with CED, and 8.1 in mothers with anemia, 14.6% with mothers with anemia and CED, 11.6% mothers with normal nutrition. Pregnant women who experience CED if the Mid-Upper Arm Circumference (MUAC) < 23.5 cm.

The increase in energy and nutrients is needed for fetal growth and development, the increase in the size of the uterine organs, the mother's preparation for breastfeeding, changes in the composition and metabolism of the mother's body, so that a lack of certain nutrients needed during pregnancy can cause the fetus to grow imperfectly (Kevin et al. 2017).

The groups most vulnerable to malnutrition are infants, toddlers, and pregnant women. Pregnant women who suffer from Chronic Energy Deficiency (CED) and anemia have a greater risk of illness, especially in the third trimester of pregnancy compared to normal pregnant women. As a result, pregnant women have a greater risk of giving birth to babies with low birth weight, death during childbirth, bleeding, difficult delivery because they are weak and easy to experience health problems (DepKes RI, 2009).

Based on the data obtained about the presence of pregnant women who suffer from Chronic Energy Deficiency (CED) and its relation to the factors that cause its occurrence, the researchers are interested in conducting research on the characteristics of Chronic Energy Deficiency (CED) in pregnant women in Kaway XVI District, Aceh Barat Regency.

2. IMPLEMENTATION METHOD

The type of research used is a survey with a descriptive approach, namely a research design in which an overview or description of the object of research is obtained (Arikunto, 2006). The population in this study were 21 pregnant women with CED in Kaway XVI District, West Aceh Regency spread over 4 villages, namely Keude Tanjung Village, Puuk Village, Tanjong Bungong Village and Pungkie Village. This research was conducted on August 7 to December 15, 2021. The sampling technique was exhaustive sampling, where the entire population was sampled. The instrument used in this study was a questionnaire with univariate analysis using SPSS Version 25.

3. RESULTS AND DISCUSSION

3.1 Distribution of Respondents by Work

Table 1 Distribution of CED Pregnant Women by Work in Kaway XVI District, West Aceh Regency in 2021

Work	F	%
Work	3	14.3
Does not work	18	85.7
Total	**21**	**100**

Source: *Primary Data 2021*

Table 1 shows that of the 21 pregnant women with CED by occupation, the highest was 18 people (85.7%) not working and the lowest was 3 (14.3%). This is in line with the research of Anna Y. Poalingo, et al (2018) where pregnant women with CED suffer more from housewives (IRT) or do not work as many as 15 people (83.3%). The research of Elsa Swandini, et al (2020) shows a similar thing where the CED of Pregnant Women in Pregnant Women Who Do not Work is more than 47 people (67.1%).

3.2 Distribution of Respondents by Parity

Table 2 Distribution of CED Pregnant Women by Parity in Kaway XVI District, West Aceh Regency in 2021

Parity	F	%
There is not any yet	11	52.4
Primipara	5	23.8
Multipara	5	23.8
Total	**21**	**100**

Source: *Primary Data 2021*

Table 2 shows that of the 21 pregnant women with CED based on parity, the highest was in mothers who had never had children as many as 11 people (52.4%) and the lowest was in Primipara mothers (having 1 child) and Multipara (having more than 1 child).) with 5 people each (23.8%). This is in line with the research of Anna Y. Poalingo, et al (2018) where pregnant women with CED suffer more from mothers who do not have children as many as 13 people (72.2%).

3.3 Distribution of Respondents by Consumption of Fe Tablets

Table 3 Distribution of CED Pregnant Women by Consumption of Fe Tablets in Kaway XVI District, West Aceh Regency in 2021

Consumption of Fe Tablets	F	%
Yes	15	71.4
Not	6	28.6
Total	**21**	**100**

Source: *Primary Data 2021*

Table 3 shows that of the 21 pregnant women with CED based on the consumption of Fe tablets, the highest were mothers who consumed 15 people (71.4%) and the lowest was found in mothers who did not consume Fe tablets as many as 6 people (28.6%).

3.4 Distribution of Respondents According to ANC

Table 4 Distribution of CED Pregnant Women by ANC in Kaway XVI District, West Aceh Regency in 2021

ANC	F	%
Good	15	71.4
Not good	6	28.6
Total	**21**	**100**

Source: *Primary Data 2021*

Table 4 shows that of the 21 pregnant women with CED based on ANC, the highest was good ANC as many as 15 people (71.4%) and the lowest was found in poor ANC as many as 6 people (28.6%). This is in line with research by Anna Y. Poalingo, et al (2018) where pregnant women with CED suffer more from mothers with good ANC, this is because mothers think that having a good ANC examination is sufficient, even though there are many other factors. which still must be considered such as the intake of nutritious food.

3.5 Distribution of Respondents by Income

Table 5 Distribution of CED Pregnant Women by Income in Kaway XVI District, West Aceh Regency in 2021

Income	F	%
< Provincial Minimum Wage	19	90.5
=> Provincial Minimum Wage	2	9.5
Total	**21**	**100**

Source: *Primary Data 2021*

Table 5 shows that of the 21 CED pregnant women based on income, the highest income was < Provincial Minimum Wage, which was 19 people (90.5%) and the lowest was income => Provincial Minimum Wage as many as 2 people (9.5%).

3.6 Distribution of Respondents by Age

Table 6 Distribution of CED Pregnant Women by Age in Kaway XVI District, West Aceh Regency in 2021

Age	F	%
< 20 Years	2	9.5
20-35 Years	16	76.2
> 35 Years	3	14.3
Total	**21**	**100**

Source: *Primary Data 2021*

Table 6 shows that of the 21 pregnant women with CED based on age, the highest was in the age group of 20-35 years as many as 16 people (76.2%) and the lowest was in the age group <20 years as many as 2 people (9.5%). This is in line with the research of Anna Y. Poalingo, et al (2018) where pregnant women with CED suffer more from the age group of 20-35 years as many as 11 people (61.1%) because in that age group, mothers tend to have a lot of activities without paying attention to nutritional intake needed during pregnancy.

3.7 Distribution of Respondents by History of CED

Table 7 Distribution of CED Pregnant Women by History of CED in Kaway XVI District, West Aceh Regency in 2021

CED history	F	%
There is	6	28.6
There is not any	15	71.4
Total	**21**	**100**

Source: *Primary Data 2021*

Table 7 shows that of the 21 pregnant women with CED based on the history of CED, the highest was in mothers who had no history of KEK as many as 15 people (71.4%) and the lowest was found in mothers who had a history of CED as many as 6 people (28.6%)**.**

4. CONCLUSION

Based on the results of the study, it can be concluded that the description of the most respondents is as follows:

1. Based on the highest work, 18 people did not work (85.7%).
2. Based on parity, the highest is in mothers who have never had children as many as 11 people (52.4%).
3. Based on the consumption of Fe tablets, the highest were mothers who consumed 15 people (71.4%).
4. Based on ANC, the highest is good ANC as many as 15 people (71.4%).
5. Based on income, the highest income is < Provincial Minimum Wage, which is 19 people (90.5%).
6. Based on age, the highest is in the age group of 20-35 years as many as 16 people (76.2%).
7. Based on history of CED, the highest was in mothers with no history of CED as many as 15 people (71.4%).

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