Description of Mother's Age and Parity with The Incident of Chronic Energy Deficiency in The 1st Trimester at Kramatwatu Health Center for The Period of October-December

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Abstract
The most common nutritional intake disorder in pregnant women in the first trimester is Chronic Energy Deficiency (CED). CED in pregnant women is a condition where the mother lacks energy and protein intake during pregnancy which can result in health problems for the mother and fetus. A preliminary survey conducted by researchers at the Kramatwatu Community Health Center for the October-December 2022 period included 106 pregnant women in the first trimester. The aim of this research is to determine the description of maternal age and parity with the incidence of chronic energy deficiency in the first trimester at the Kramatwatu Community Health Center for the period October-December 2022. The research method used is descriptive research. The study population was all 106 first trimester pregnant women. Sample on this study included all 106 pregnant women in the first trimester. The sampling technique used in this research was a total sampling technique (non-probability sampling). The data source for this research is secondary data. The results of the research on the incidence of chronic energy deficiency in pregnant women in the first trimester were 35 people (33%). In the age category, a higher proportion was found in the <20 years and >35 years age group, namely 40 people (38%). For parity in the primipara and grandemultipara groups there were 35 people (33%). The incidence of chronic energy deficiency in the first trimester occurred in a higher proportion in the group of mothers aged <20 years and >35 years at 18 (45%). The incidence of chronic energy deficiency in the first trimester was higher in the primipara and grandemultipara groups at 19 people (54.3%). Research Suggestions Health workers at the Kramatwatu Community Health Center can maintain quality health services and provide counseling education to all pregnant women who experience Chronic Energy Deficiency.

Keywords: Chronic Energy Deficiency, Maternal Age, Parity, Trimester

Introduction
The pregnancy process plays an important role in fetal growth. Based on
the National Medium Term Development Plan (RPJMN) 2015. In 2019, one of the main targets is to improve the nutritional health status of mothers and children. Maternal nutritional status plays an important role in the continuity and success of a pregnancy. The role of adequate nutrition is very vital, starting from the first trimester of pregnancy to the first thousand days of life. Disturbances in nutritional intake during this period are associated with the risk of developing chronic diseases in adulthood (1).

The most common nutritional disorder in pregnant women in the first trimester is Chronic Energy Deficiency (CED). CED in pregnant women is a condition where the mother lacks protein and energy intake during pregnancy which can result in health problems for the mother and fetus (2).

According to research from (3), it shows that the factors associated with Chronic Energy Deficiency at Simpang Limbur Community Health Center in 2018 are maternal age and parity. To identify factors that influence the incidence of Chronic Energy Deficiency in pregnancy through effective counseling and improving ANC services.

Baliwati is of the opinion that one of the factors that influences the occurrence of Chronic Energy Deficiency (CED) is the mother’s age, giving birth to a child at a young or too old maternal age will result in low quality of the fetus or child and will also be detrimental to the mother’s health (4). Supriasa also believes that in mothers who are too young (less than 20 years) there can be competition for food between the fetus and the mother, who is still in her infancy. Maternal age during pregnancy can be measured as ≤ 20 years, 21-35 years, and > 35 years (5).

According to Asria, one of the factors causing Chronic Energy Deficiency (KEK) is the number of parities, because the number of parities is one of the factors that influences the nutritional status of pregnant women. It is necessary to be aware that mothers who are pregnant or have given birth to 4 or more children are likely to encounter 2 conditions, namely health problems such as anemia and malnutrition as well as looseness in the abdominal wall and part of the uterus (6).

Chronic Energy Deficiency (CED) in pregnant women can cause the risk of anemia, bleeding, the mother not gaining weight normally, contracting infectious diseases, and being an indirect cause of maternal death. Meanwhile, the influence of CED on the birth process can result in difficult and long labor, imminent premature labor (PPI), post partum bleeding. as well as an increase in caesarean section procedures. CED in pregnant women can also cause intrauterine growth retardation (IUGR) or even intrauterine fetal death (IUFD), congenital abnormalities, anemia, and birth with low birth weight (LBW) (7).

Based on Riskesdas 2018, it is stated that in Indonesia 17.3% of pregnant women experience KEK. The younger the gestational age, the greater the chance that pregnant women will experience CED. Chronic Energy Deficiency (CED) in pregnant women is one of the determining factors for the
risk of nutritional and health problems in babies born (8).

In 2020, the percentage of KEK pregnant women in Banten Province is 9.02% with a target of 16%. Chronic Energy Deficiency (CED) pregnant women are pregnant women at risk of Chronic Energy Deficiency (CED) which is characterized by an upper arm circumference of less than 23.5 cm. By calculating the percentage based on the number of pregnant women with KEK divided by the number of pregnant women examined by LILA (8).

Based on data at the Kramatwatu Community Health Center, the number of pregnant women who made maternity visits in the October-December 2022 period was 796 people. Meanwhile, there were 106 pregnant women in the first trimester during that period, and 35 pregnant women who experienced CED in the first trimester during that period, or 33%.

Several studies show that the age of pregnant women is related to the incidence of CED in pregnant women, one of which is according to Maryam, S who believes that the younger and older the age of a pregnant mother will affect the nutritional needs required. Young people need a lot of additional nutrition because apart from being used for their own growth and development, they also have to share it with the fetus they are carrying. Meanwhile, old age requires a lot of energy because organ function is weakened and required to work optimally, so it requires sufficient additional energy to support the ongoing pregnancy. So the best age is more than 20 years and less than 35 years, with the hope that the nutrition of pregnant women will be better (Maryam S, 2018). Surasih also believes that the mother’s parity number is also related to the incidence of CED in pregnant women, because mothers with a parity number of more than 3 times will have less nutritional status because the nutritional reserves in the mother’s body have been depleted (Surasih, 2018).

**Method**

The research design used is analytical survey research, namely research designed to obtain information about the status of a symptom at the time the research was conducted. The population of this study was all 106 first trimester pregnant women visiting the period October-December 2022. This research sample used a total sampling technique. The method used for data collection was using a checklist to determine the variables of maternal age and parity.

**Result**

Table 1 Frequency Distribution of Descriptions of Pregnant Women in the First Trimester with Chronic Energy Deficiency at the Kramatwatu Community Health Center for the Period October-December 2022

<table>
<thead>
<tr>
<th>No</th>
<th>Chronic Energy Deficiency (CED)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CED</td>
<td>35</td>
<td>33%</td>
</tr>
<tr>
<td>2</td>
<td>Not ED</td>
<td>71</td>
<td>67%</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>106</td>
<td>100%</td>
</tr>
</tbody>
</table>

The results in table 1 show that almost half of pregnant women 35 people (33%) experienced chronic lack of energy.

Table 2 Frequency Distribution of Descriptions of First Trimester Pregnant Women Based on Mother’s Age at the Kramatwatu Health Center
The results in table 2 show that almost half of the pregnant women were <20 years old and >35 years old, 40 people (38%).

Table 3 Frequency Distribution of Chronic Energy Deficiency Events in First Trimester Maternal Pregnancy Based on Parity at Kramatwatu Community Health Center for the Period October-December 2022

<table>
<thead>
<tr>
<th>No</th>
<th>Chronic Energy Deficiency Events</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;20 years and &gt;35 years</td>
<td>40</td>
<td>38%</td>
</tr>
<tr>
<td>2</td>
<td>20-35 years</td>
<td>66</td>
<td>62%</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>106</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4 Frequency Distribution of Chronic Energy Deficiency in Pregnancy in the First Trimester Based on Mother’s Age at the Kramatwatu Community Health Center for the Period October-December 2022

<table>
<thead>
<tr>
<th>Mother’s Age</th>
<th>Incident</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CED</td>
<td>Not CED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>&lt;20 years and &gt;35 years</td>
<td>18</td>
<td>45</td>
<td>22</td>
</tr>
<tr>
<td>20 years-35 years</td>
<td>17</td>
<td>25.7</td>
<td>49</td>
</tr>
<tr>
<td>Amount</td>
<td>35</td>
<td>33%</td>
<td>71</td>
</tr>
</tbody>
</table>

The results in table 4 show that the incidence of CED in the first trimester of pregnancy is a higher proportion in the group of mothers aged <20 years and >35 years at 18 (45%) compared to the group aged 20 - 35 years at 17 (25.7%).

Table 5 Frequency Distribution of Chronic Energy Deficiency in Pregnancy in the First Trimester Based on Maternal Parity at the Kramatwatu Health Center for the Period October-December 2022

<table>
<thead>
<tr>
<th>Maternal Parity</th>
<th>Incident</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CED</td>
<td>Not CED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>Primipara and Grandmultipara</td>
<td>19</td>
<td>54.3</td>
<td>16</td>
</tr>
<tr>
<td>Multiparous</td>
<td>16</td>
<td>22.5</td>
<td>55</td>
</tr>
<tr>
<td>Amount</td>
<td>35</td>
<td>33%</td>
<td>71</td>
</tr>
</tbody>
</table>

The results in table 5 show that the incidence of CED in pregnancy is a higher proportion in the group of primiparous and grandmultiparous mothers at 19 (54.3%) compared to the group of multiparous mothers of 16 (22.5%).

Discussion
1. Frequency Distribution of Descriptions of First Trimester Pregnant Women with Chronic Description of Mother’s Age and Parity with The Incident of Chronic Energy Deficiency
Energy Deficiency at the Kramatwatu Community Health Center for the Period October-December 2022

The research results in table 1 of pregnant women who experienced chronic energy deficiency were 35 people (33%). According to the results of the author's research, it was found that pregnant women experienced Chronic Energy Deficiency in the first trimester with a Lila value of less than 23.5 cm and many pregnant women still weighed <40 kg. This can occur due to several factors, in the research conducted by the author when collecting data secondarily through the patient register book, one of the factors in the occurrence of Chronic Energy Deficiency in mothers was the mother's age and parity.

This is in line with the results of Diana Irdayani's research at the West Lingkar Community Health Center, Bengkulu City in 2018. In her research, it was found that of the 44 respondents who experienced KEK with a Lila value <23.5 cm, 23 respondents (52.3%) had a mother's age <20 years and > 35 years old, and of the 44 respondents who did not experience CED with Lila values >23.5 cm, 20 respondents (45.5%) were 20-35 years old. The statistical test results showed that p-value = 0.0016, meaning that maternal age was one of the factors in the incidence of CED in TM I pregnant women at the West Lingkar Community Health Center, Bengkulu City in 2018.

This is also in line with the results of Priska Muliyani Putri Gulo's research at the Moro'o Non-Inpatient Health Center, West Nias Regency in 2019, in her research it was found that the parity with Chronic Energy Deficiency (KEK) in TM I pregnant women was obtained by respondents with grandemultiparous parity as many as 17 people (43.6%) with a Lila value of >23.5 cm, the number of primiparous parities was 6 people (15.4%) with a Lila value of >23.5 cm, and the number of multiparous parities was 11 people (28.2%) with a Lila value >23.5 cm. The number of respondents with primiparous parity was 21 people (56.4%) with a Lila value of >23.5 cm, the number of grandemultiparous parity was 13 people (33.3%) with a Lila value of <23.5 cm, and the number of multiparous parity was 9 people (23.1%) with Lila values <23.5 cm. Based on the results of the chi-square statistical test, it was found that the p-value was 0.250 > sig α 0.05, which means that poverty is one of the factors in the occurrence of Chronic Energy Deficiency (CED) in TM I pregnant women.

Therefore, to identify the factors that influence the incidence of Chronic Energy Deficiency in pregnancy through effective counseling and improving ANC services.

2. Frequency Distribution of Descriptions of First Trimester Pregnant Women Based on Mother's Age at Kramatwatu Community Health Center for the Period October-December 2022

The research results in table 2 show that the incidence of CED in the first trimester of pregnancy is a higher proportion in the group of mothers aged <20 years and >35 years at 18 (45%) compared to the group aged 20 - 35 years at 17 (25%).
According to the results of the author's research, the younger and older the mother's age will influence the nutritional needs of the mother and fetus. Apart from that, when conducting research the author found several factors in the occurrence of CED that occurred in pregnant women aged <20 years and >35 years, namely the mother's lack of knowledge about nutritional needs, preparation for pregnancy and reproductive health.

According to the Indonesian Ministry of Health, the age of mothers at risk of giving birth to a baby is less than 20 years and above 35 years. Pregnant women who are too young are not only at risk of CED but also have an impact on the health of other mothers ((9). This is also in accordance with research by Simanjuntak, E. who believes that pregnant women under 20 years of age can experience food (nutritional) competence between the mother and fetus during the growth period, so that there are still hormonal changes that occur during pregnancy. Meanwhile, at the age of more than 35 years, the mother's body's ability to absorb the nutrients needed by the mother's body and fetus decreases. However, in women over 35 years of age, the maternal risk increases as the risk of death and birth defects is higher compared to those aged 20-35 years (10).

Apart from that, Surasih's research stated that pregnant women aged between 20-35 years would be better prepared both physically and spiritually for pregnancy. Because at that age a mother's nutritional condition is better than at the age of less than 20 years and more than 35 years (11).

This is also supported by several previous studies, one of which is the results of Numbi Akhmadi Teguh's research which explains the incidence of CED by maternal age. It can be seen that there were 8 respondents (66.7%) of pregnant women with CED conditions with an age at risk of <20 years. or > 35 years, while there were 5 respondents (20.8%) who were not CED with a risk age of < 20 years or > 35 years. Of pregnant women with CED conditions, there were 4 respondents (33.3%) in the no-risk age category with an age range of between 20 - 35 years, while in pregnant women without CEDs they fell into the no-risk age category with an age range of between 20 - 35 years. year there were 19 respondents (79.2%).

In the research results, Uli Rosita (2019) also explained that of the 14 respondents who were at risk (<20 years and >35 years), most of them experienced chronic energy deficiency, namely 9 respondents (64.3%). Meanwhile, of the 21 respondents who were not at risk (20-35 years), the majority did not experience chronic energy deficiency, namely 14 respondents (82.4%) in Simpang Limbur Village, Simpang Limbur Health Center Working Area in 2018. Therefore, women under 20 years of age or over 35 years of age are less likely to conceive at this age and have a high risk of miscarriage or failure to give birth, which can even cause death.

According to Nugraha RN, et al, parity which is included in the high risk factors in pregnancy is grade multiparous, where this can lead to conditions affecting the optimization of the mother
and fetus in the pregnancy at hand. It can be concluded that a parity of no more than 4 is not at risk of experiencing problems. Apart from that, it was also found that a small number of primiparous mothers experienced CED and were very thin. It is known that low parity can also experience CED if the mother’s age is under 20 years or above 35 years (12).

This is in accordance with Irianto’s research which states that the more frequently a woman experiences pregnancy and childbirth, the more iron she will lose (13). Apart from that, Asria’s research stated that parity is one of the factors that influences the nutritional status of pregnant women. Mothers who have been pregnant or given birth to children 4 times or more need to be wary of the possibility that they will encounter two conditions, namely health problems such as anemia and malnutrition as well as looseness in the abdominal wall and uterus (6).

This is also supported by several studies, one of which was research conducted by Uli Rosita in 2019 with the title The Relationship between Parity and Age of Pregnant Women and Chronic Energy Deficiency which was conducted in Simpang Limbur Village, Simpang Limbur Health Center Working Area in 2018, explaining 10 parities that are at risk, the majority experienced chronic lack of energy, namely 7 respondents (70%). Meanwhile, of the 21 respondents who had no risk parity, the majority did not experience chronic energy deficiency, namely 16 respondents (76.2%).

In research, Diana Irdayani (2018) also explained that of the 44 respondents who experienced CED, 26 respondents (59.1%) had primi parity and grande multipara. Of the 44 respondents who did not experience KEK, 29 respondents (65.9%) had multi parity at the West Lingkar Health Center, Bengkulu City.

Therefore, parity helps increase the need for nutrients because too frequent pregnancies can deplete the mother’s body’s nutritional reserves. Chronic Energy Deficiency can be experienced by women of childbearing age (WUS) 15-35 years since adolescence and occurs during pregnancy and breastfeeding due to low energy and nutrient reserves.

Conclusion
1. Frequency distribution of chronic energy deficiency events in the first trimester at the Kramatwatu Community Health Center for the period October-December 2022, as many as 35 people (33%).
2. Age frequency distribution of pregnant women at the Kramatwatu Community Health Center for the period October-December 2022 with Maternal age <20 and >35 years was 40 people (38%).
3. Frequency distribution of maternal parity at the Kramatwatu Community Health Center for the period October-December 2022 found primipara and grandemultipara, namely 35 people (33%).
4. The frequency distribution of chronic energy deficiency events in pregnancy is higher in the proportion of mothers aged <20 years and >35 years at 18 (45%), compared to the group aged 20 - 35 years at 17 (25.7%).
5. Frequency distribution of chronic energy deficiency events in pregnancy was a higher proportion in the group...
of primiparous and grandemultiparous mothers at 19 (54.3%).

Suggestion

Kramatwatu Community Health Center is expected to further increase efforts to prevent Chronic Energy Deficiency by monitoring Body Mass Index (BMI) and providing knowledge about the importance of physical and mental preparation in pregnancy for both pregnant women, prospective brides and young girls by maintaining the performance that has been carried out, and maintaining quality. services in accordance with midwifery service standards.

References