Education on Supplementary Feeding and Types of Local Food for Pregnant Women with Chronic Energy Deficiency in Makassar City

Edukasi Pemberian Makanan Tambahan Dan Jenis Pangan Lokal Pada Ibu Hamil Kekurangan Energi Kronis Di Kota Makassar

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Abstract: Pregnant women are a group that is vulnerable to health problems including Chronic Energy Deficiency (CED). Knowledge of pregnant women about the provision of supplementary food and types of local food is very important for pregnant women to know so that their nutritional intake is adequate. This study aims to determine the education of supplementary feeding and local food sources for pregnant women with chronic energy deficiency in the working area of the Paccerak Health Center Makassar City. This research is a descriptive research with group extension method. Data collection begins in June-July 2021. The sample in this study uses a total sampling of 31 respondents. The results of this study indicate that from the group of respondents with knowledge of CED after the pre-test, there are 22.6% and after the post-test there are 90.3% with good knowledge. The group of respondents with knowledge of supplementary feeding, after the pre-test there were 64.5% and after the post-test there were 90.3% with good knowledge. The group of respondents with knowledge of local food types after the pre-test was 19.4% and after the post-test there were 90.3% with good knowledge. After education about CED, supplementary feeding and types of local food for pregnant women, there was an increase in knowledge.

Keywords: Pregnant Women, CED, Supplementary Feeding, Types of Local Food

1. INTRODUCTION

Health development in the 2020 - 2024 period is the Healthy Indonesia Program with the aim of improving the health status and nutritional status of the community through health efforts and community empowerment. To ensure the success and continuity of health development, a 2005-2025 Long-Term Development Plan for Health Sector (RPJP-K) has been prepared as an elaboration of the 2005-2025 National Long-Term Development Plan (RPJPN). Certainly, this is an integral part that cannot be separated from the National Health System (SKN). Law Number 25 of 2004 concerning the National Development Planning System (SPPN) stipulates that each ministry needs to prepare a Strategic Plan (Renstra) in accordance with their main duties and functions based on the National Medium-Term Development Plan (RPJMN). The 2020-2024 period is the last stage of the 2005-2025 National Long-Term Development Plan (RPJPN), so it is a very important and strategic medium-term development period.

In order for the policy direction of actors in the development of the health sector to be in line with the goals of National Development, a Strategic Plan for the Ministry of Health for 2020-2024 has been prepared, which is a planning document that contains
various health development programs that will be implemented directly by the Ministry of Health (12).

One of the nutritional problems that still occur today is malnutrition. The definition of malnutrition according to WHO is a medical condition caused by the intake or provision of nutrients that are incorrect or insufficient. Malnutrition is more often associated with inadequate nutrient intake or often called undernutrition which can be caused by poor absorption or excessive loss of nutrients. However, the term malnutrition also includes overnutrition. The impact of a lack of nutritional intake on quite serious health problems such as malnutrition and stunting in children (24).

Based on “The Conceptual Framework of the Determinants of Child Undernutrition”, “The Underlying Drivers of Malnutrition”, and “Factors Causing Nutrition Problems in the Indonesian Context”, causes of nutritional problems are factors related to food security, especially access to nutritious food, the social environment associated with the practice of feeding infants and children (care), access to health services for prevention and treatment (health), and environmental health including the availability of clean water and sanitation (environmental) facilities. These four factors indirectly affect nutritional intake and the health status of mothers and children. Intervention in these four factors is expected to prevent malnutrition, both deficiency and excess nutrition.

Pregnancy requires special attention because it is an important period of 1000 days of life. Pregnant women are one of the nutritionally vulnerable groups. The nutritional intake of pregnant women greatly affects the growth of the fetus. Good nutritional status in pregnant women can prevent Low Birth Weight (LBW) and stunting (short) (11).

Insufficient energy and protein intake in pregnant women can cause Chronic Energy Deficiency (CED). Based on assessment of nutritional status in 2016, 53.9% of pregnant women experienced an energy deficit (<70% Energy Adequacy Rate) and 13.1% experienced a mild deficit (70-90% Energy Adequacy Rate). Furthermore, for protein adequacy, 51.9% of pregnant women experienced a protein deficit (<80% Protein Adequacy Rate) and 18.8% experienced a mild deficit (80-99% Protein Adequacy Rate). One of the identifications of pregnant women with CED is having an Upper Arm Circumference (UAC) <23.5cm (11).

One of the efforts made to improve nutrition in CED pregnant women is by providing supplementary food. The form of supplementary food for pregnant women with chronic energy deficiency (CED) according to Minister of Health Regulation Number 51 of 2016 concerning Standards for Nutritional Supplementation Products is biscuits that contain protein, linoleic acid, carbohydrates, and are enriched with 11 vitamins and 7 minerals (11).

Supplementary food with a protein-energy balance is the right choice. Supplementary food products that will be provided have taken into account the aspects of taste, practicality, shelf life, convenience in serving and easy-to-get ingredients in the community because people already know them (4).

In order to reduce the incidence of chronic energy deficiency (CED) a comprehensive, integrated and plenary solution is needed. One solution that can be tried is through mobilizing and empowering residents evenly into a community health service program to overcome CED. Efforts to overcome the problem of CED can be carried out with the
Supplementary Feeding Program (SFP) in the form of biscuits which are distributed to all eligible women and pregnant women who experience CED, giving Fe tablets or blood boosters to prevent anemia from occurring in pregnant women, and carrying out counseling programs for eligible women regarding reproductive health issues, readiness before pregnancy, childbirth, postpartum and counseling on the selection of contraceptives for family planning. In addition to the supplementary feeding program, there is also a national program, namely the week of 1000 Days of Life program, which is a program to save the lives of mothers and toddlers starting from 1000 Days of Life, namely once a month in each Public Health Center. All pregnant women, childbirth, postpartum, toddlers, and infants must be served by weighing their body weight and looking at their nutritional status.

Data from South Sulawesi Basicline Health Research for 2018 shows that the proportion of pregnant women receiving supplementary food and the average age at first pregnancy receiving supplementary food according to characteristics was 24.84%, the proportion of obtaining supplementary feeding program among pregnant women according to characteristics was 88.48% (20, 10).

Several factors that affect CED in pregnant women are socio-economic factors, education, employment, income, birth spacing factors, and parity factors. In addition, the factors that affect the nutrition of pregnant women are age, activity, environmental temperature, health status, as well as women's habits and views on food. An unbalanced diet that is not in accordance with individual nutritional needs causes an imbalance in the intake of nutrients that enter the body so that malnutrition can occur in women of childbearing age during their pregnancy. Eating habits that do not meet the standards, if it lasts a long time, eligible women will be at risk of developing CED compared to individuals with a good diet. If there are eligible women with a good diet but experience CED, it can be indicated that the food intake consumed by eligible is inadequate.

The results of data from the Paccerakankang Health Center shows that the number of pregnant women experiencing chronic energy deficiency (CED) in 2018 was 43 out of 191 pregnant women. In 2019 there were 63 pregnant women with CED out of 291 the total number of pregnant women, then in 2020 there were 37 pregnant women from CED 308 pregnant women. In 2021, the number of pregnant women up to April 18 is 40 people, and 12 of them are experiencing CED. Therefore, researchers are interested in conducting research "Education on Providing Supplementary Feeding and Local Food Types on the Knowledge Level of Pregnant Women with Chronic Energy Deficiency (CED) In the Working Area of the Paccerakankang Community Health Center, Makassar City".

2. METHODS

This research is a group counseling research using the lecture method with pre and post tests to determine the success of the education carried out. This research was conducted in June-July 2021. The location of the research was in the working area of the Paccerakankang Community Health Center, Makassar City. The population in this study were all pregnant women recorded at the Paccerakankang Community Health Center in Makassar City as many as 31 people. The sampling technique used was total sampling covering all 31 pregnant women who were recorded at the Paccerakankang Community Health Center, Makassar City.
3. RESULTS

a. Pregnant Women's Knowledge about Chronic Energy Deficiency (CED)

Table 1. Distribution of Respondents based on Pregnant Women’s Knowledge about CED in the Working Area of the Paccerakang Health Center Makassar City in 2021

<table>
<thead>
<tr>
<th>Pregnant Women's Knowledge about CED</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Good</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>Less</td>
<td>24</td>
<td>77.4</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data, 2021

Table 1 shows that the majority of pregnant women at the Paccerakang health center have good knowledge about CED, namely 7 respondents (22.6%) and 24 respondents (77.4%) have less knowledge about CED. After the post test was carried out, it was found that 28 pregnant women (90.3%) had good knowledge about CED and 3 respondents (9.7%) had less knowledge.

b. Pregnant Women's Knowledge about Supplementary Feeding

Table 2. Distribution of Respondents based on Pregnant Women’s Knowledge about Supplementary Feeding in the Work Area of the Paccerakang Health Center Makassar City in 2021

<table>
<thead>
<tr>
<th>Pregnant Women’s Knowledge about Supplementary Feeding</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Good</td>
<td>20</td>
<td>64.5</td>
</tr>
<tr>
<td>Less</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
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</tr>
</tbody>
</table>

Source: Primary Data, 2021

Table 2 shows that the majority of pregnant women at the Paccerakang Health Center at the time of the pre-test had good knowledge about supplementary feeding, namely 20 respondents (64.5%) and 11 respondents (35.3%) had less knowledge about supplementary feeding. After the post-test was carried out, it was found that 28 pregnant women (90.3%) had good knowledge about supplementary feeding and 3 respondents (9.7%) had less knowledge about supplementary feeding from the 31 samples studied.
Table 3. Distribution of Respondents based on Pregnant Women's Knowledge about Local Food Types in the Work Area of the Paccerakang Health Center Makassar City in 2021

<table>
<thead>
<tr>
<th>Pregnant Women's Knowledge about Local Food Types</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Less</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Primary Data, 2021

Table 3 shows that pregnant women at the Paccerakang Health Center at the time of the pre-test had good knowledge about local supplementary food, namely 6 respondents (19.4%) and 25 respondents (80.6%) had less knowledge about local supplementary food. After the post-test was carried out it was found that pregnant women who had good knowledge about local supplementary food were 28 (90.3%) and 3 respondents (9.7%) had less knowledge about local supplementary food from the 31 samples studied.

4. DISCUSSION

a. Pregnant Women's Knowledge about Chronic Energy Deficiency (CED)

Based on research conducted at the Paccerakkang Health Center by using counseling methods and distributing questionnaires, it showed that there was a significant increase in pregnant women's knowledge about CED as seen from the results of the pre-test and post-test that had been carried out. This happened due to the acceptance of the respondents to the information or knowledge about the CED provided. Information about CED in pregnant women is very important so that pregnant women know what kind of food should be consumed during pregnancy. Several things that affect knowledge are age, education, and occupation.

The results of good knowledge about CED are also due to the fact that the majority of pregnant women's education level in this study is high school. Mothers with higher education will find it easier to receive and digest information so that their knowledge increases the knowledge they have and this knowledge underlies one's behavior. The knowledge possessed by a mother influences decision-making. Mothers with good nutrition are likely to achieve good nutritional needs for their babies.

This research is related with research conducted by Dafiu (2017) in Yogyakarta which states that there is a relationship between knowledge about pregnancy nutrition and the incidence of CED in pregnant women (p 0.001). This is because knowledge of maternal nutrition during pregnancy is one of the factors causing mothers to experience CED. The nutritional needs of pregnant women are not only for themselves but for the fetus in the womb. In the relationship between knowledge of food diversity and micro-nutrient intake to CED in working pregnant women (8) stated that maternal nutritional knowledge during pregnancy is one of the factors that affect the level of health and nutritional knowledge of mothers can be known during pregnancy. This is
because the higher a person's education, the higher the level of knowledge they get with higher education, so a person will tend to get information from both other people and the media.

b. Pregnant Women's Knowledge about Supplementary Feeding

Based on research conducted at the Paccerakang Health Center by using counseling methods and distributing questionnaires, it showed that there was a significant increase in the respondents' knowledge about supplementary feeding for pregnant women, as seen from the results of the pre and post-tests that had been carried out. This happened because of the respondent's acceptance of the information carried out during counseling. Respondents are aware of the importance of supplementary food during pregnancy. They are able to understand the explanations well, including understanding the types of supplementary food given to pregnant women such as milk for pregnant women according to the amount of additional nutritional needs of pregnant women, especially calories and protein.

This research is related with research conducted by Febriantika (2017) with the title "The Influence of Health Promotion on Mother's Knowledge of the Nutrition of Pregnant Women at the Pasir District Health Center, Ciampea Regency," significant based on the difference in the average score of pregnant women's knowledge before and after counseling. Therefore, health workers at the Paccerakang Health Center are expected to be able to optimize programs to improve the health status of pregnant women at the Paccerakang Health Center, Biringkanaya District, Makassar City by carrying out health promotion efforts. One of the efforts is by conducting health education and efforts to prevent Chronic Energy Deficiency (CED) events through health counseling to pregnant women both individually (counseling) and community groups.

c. Pregnant Women's Knowledge about Local Food Sources

Based on research conducted at the Paccerakang Health Center using counseling methods and distributing questionnaires, it showed that there was a significant increase in the respondents' knowledge about supplementary feeding for pregnant women, as seen from the results of the pre and post-tests that had been carried out. This happened because of the respondents' acceptance of the information carried out during counseling.

Nutrition is a very important factor for pregnant women and the fetus they contain. The nutrients needed vary varied, a deficiency of one or several nutrients during pregnancy and after birth will result in disturbances to the level of intelligence and intellectual development of the child.

Respondents were able to understand things that were explained well, such as understanding the types of additional food given to pregnant women such as tubers. Respondents are aware of the importance of local food sources.
5. CONCLUSION

The results of this study indicate that of the group of respondents with knowledge about CED after the pre-test there were 22.6% and after the post-test there were 90.3% with good knowledge. In the group of respondents with knowledge about supplementary feeding, after the pre-test there were 64.5% and after the post-test there were 90.3% with good knowledge. The group of respondents with knowledge of local food types after the pre-test was 19.4% and after the post-test there were 90.3% with good knowledge. There was an increase in knowledge after education about CED, supplementary feeding and types of local food for pregnant women.

This research is expected to be able to optimize programs to improve the health status of pregnant women at the Paccerakang Health Center, Biringkanaya District, Makassar City by carrying out health promotion efforts, one of the efforts is to conduct health education and efforts to prevent Chronic Energy Deficiency (CED) events through health education to mothers, pregnant both individually (counseling) and groups or communities.

REFERENCES


