

Nutritional Education for Mothers of Toddlers below the Red Line in Batoh Banda Aceh

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ABSTRACT

A mother's knowledge of nutrition affects their behavior in rearing their children. A factor that influences the nutritional status of children is a mother's behavior in choosing and providing food. A mother's behavior affects her ability to meet the family's food supply, consume food based on the right nutritional rules, choose the type of food, and prioritize the food for her family. Mother's poor behavior can be caused by her insufficient level of knowledge about nutrition and insufficient ability to apply it in daily life. This research aims to determine the effect of pocketbooks on the nutritional knowledge of mothers of toddlers whose nutritional condition is below the red line. This research employed a pre-experimental design, namely one group pretest-posttest. The research subjects were mothers of children whose nutritional condition is below the red line. Moreover, this study employed a total sampling technique with inclusion criteria, and the number of samples was 28 people. The statistical test using the independent T-test has obtained a p-value = 0.000 (< 0.05). Meanwhile, the measurement results show that the question of "how to deal with children without appetite" gets the fewest answers. This result shows that the mothers still do not understand how to deal with children without appetite. However, one mother has the most correct answers stating that "sample food for children should adjust their age." This answer means that the mothers already understand sample food for children according to their age.

Keywords: below red lines, education, nutrition pocketbooks

Introduction

Toddlerhood is a crucial stage in a child's growth and development, and this is known as the second golden age. Children's growth in this stage is slower than theirs in the baby stage. Therefore, toddlers' nutritional intake must be maintained. Children's growth and development require proper dietary intake. Nutritional intake significantly impacts a child's immune system; the child's poor nutritional intake will make her prone to infectious infections (Meikawati, 2020).

Toddlers with inadequate dietary intake will have negative consequences, such as malnutrition, a condition caused by a lack of essential nutrients for growth. Therefore, it is necessary to conduct simple child growth tracking by comparing the toddler's weight to the growth curve or graph on health cards (KMS). If the toddler's weight is below the red line, he or she should have nutritional issues and requires more attention (Salam et al., 2015).

According to the 2018 Basic Health Research (Riskesdas) of the Ministry of Health, 17.7% of infants under five years old (toddlers) still have dietary issues. This

figure includes 3.9% of malnourished toddlers and 13.8% malnourished toddlers. Meanwhile, the proportion of underweight or very thin toddlers in Aceh reached 16% in 2013 and fell to 12% in 2018. (Kemenkes RI, 2019).

Ulfah (2019) reports the data of Banda Aceh City Health Service in 2018. The data denote that 40 children in Jaya sub-district, 57 children in Baiturrahman sub-district, 23 children in Kuta Raja sub-district, 59 children in Syiah Kuala sub-district, 88 children in Banda Raya sub-district, and 39 children in Lueng Bata sub-district show nutritional conditions below the red line.

The number of babies born below the red line in Banda Aceh increased from 475 in 2017 to 575 in 2018. Toddlers below the red line indicate that they are malnourished or stunted. If such a condition is not managed quickly, they will be underweight and stunted (Ulfah, 2019).

Mothers' awareness of nutrition, eating patterns, food security levels in the family, clean and healthy living behavior, and the occurrence of infection in toddlers are factors that affect nutritional status. According to Agus (2008) in Susanti et al. (2014), one of the elements that influence the nutritional status of children is mothers' behavior in choosing and delivering food. It is clear that mothers' behavior impacts their household's ability to satisfy individual family food needs, provide food according to nutritional guidelines, choose food types, and prioritize food among the family. Mothers' low level of behavior can be attributed to their lack of nutrition knowledge and capacity to apply it in daily situations.

A study by Zulfahmi and Eva (2018) has discovered that 51.2% of toddlers below the red line weight are from families with low education. This demonstrates that mothers' knowledge impacts the children's nutritional status. The educational process is a method to increase dietary knowledge. Formal or non-formal education applies to the educational processes. Seminars, counseling, consultations, and other health promotion initiatives are examples of non-formal education. Tools or media are needed in the health promotion process so that the ideas are delivered in more entertaining and easier ways. Finally, it is expected that the target can learn and assimilate knowledge from the media more easily.

One print media that can be utilized to promote health is a pocketbook, a type of printed book containing information in words and pictures to enhance nutrition awareness and deliver health information to the general population. A nutrition pocketbook can address multiple issues with more in-depth explanations and terminology that anyone can comprehend. Moreover, A nutrition pocketbook is handy due to its small size. However, because pocketbooks' manufacturing process is time-consuming and more expensive than leaflets, only a few people employ them as a health promotion tool. This finding is also supported by (Sanaky, 2013).

Hadisuyitno and Riyadi (2017) denote that the use of nutrition pocketbooks effectively increases mothers' knowledge of energy and protein consumption for their toddlers. This finding is confirmed because the knowledge level of mothers of children under five increases from 57.1% before the treatment to 100% after the treatment or from the sufficient to poor categories. Before the therapy, toddlers consume 100% of their energy (the less group), but after treatment, they consumed 68% of their energy (the poor category) and 32% (the good category). This study has revealed that giving pocketbooks to mothers of toddlers with poor nutritional status can improve the mothers' knowledge levels and develop their toddlers' energy intake.

Based on the aforementioned background, this research investigates nutrition education for mothers with toddlers whose nutritional conditions are below the red line in Batoh Health Center, Banda Aceh.

Methods

This research employed a pre-experimental design with a one-group pretest-posttest. This study was conducted at the Batoh Health Center in Banda Aceh in October 2021. The research participants were all mothers who are members of the Integrated Healthcare Center in Batoh Health Center, Banda Aceh. This study employed a total sampling technique with inclusion criteria. Data were collected using the pretest-posttest questionnaires. Moreover, the data were collected by delivering pocketbooks to mothers with toddlers whose nutritional conditions were below the red line. This study included all mothers who were members of the Integrated Healthcare Center in Batoh Health Center Banda Aceh. The sample of this study was 28 respondents. Meanwhile, data were analyzed using the dependent t-test with a 95% confidence level and a limit of the meaning of $p = 0.05$.

Results

This study has revealed that before receiving nutrition education using pocketbooks, the mothers' average levels of knowledge about toddlers' nutritional conditions below the red line is 74.82 with a standard deviation of 9.764. In contrast, after receiving nutrition education using pocketbooks, the mothers' average level of knowledge is 85.54 with a standard deviation of 10.031. The knowledge variable of $P = 0.000$ displays the results of this statistical test.

Before receiving a pocketbook, most of the mothers mostly correctly answered the questions about "what is the cause of children experiencing nutritional conditions below the red line?" and "how to cope with children without appetite?" Nine mothers (32.1%) can correctly respond to these questions. Meanwhile, the majority of the mothers (92.9%) could correctly answer the questions "what are the sample meal for children aged 12-23 months?" and "what nutrients should be satisfied in the complementary feeding?"

Furthermore, this study has discovered that the question with the fewest correct answers is "how to deal with toddlers without appetite?" because only 16 mothers (57.1%) can correctly answer this question. In contrast, the majority of the mothers (27 people) could correctly answer the questions about "what are sample foods for children aged 12-23 months?" "what nutrients should be met in the complementary feeding?" "what are types of complementary food for children aged 12-23 months?" "what foods should children aged 0-6 months consume?" "what is the meaning of a child's weight in the green ribbon in the health card chart?" "what is a term for children who do not gain weight?" and "what is the function of bringing children to the Integrated Healthcare Center".

Discussion

The statistical test has revealed that before receiving the nutrition education using a pocketbook, only 12 people (42.9%) has good knowledge of nutrition. In contrast, after receiving the nutrition education using a pocketbook. 24 people (85.7 percent) have good knowledge of nutrition. Before 15 people (53.6%), after 4 people (14.3%), and before 1 person (3.6%), after none for the sufficient category.

This study has discovered that after receiving the nutrition education using a pocketbook, the mothers' average value of knowledge increases from 74.82 to 85.54. Thus, the increase is 10.72.

Knowledge is the result of knowing after someone has sensed an object (Notoatmojo, 2012). Hearing, seeing, feeling, smelling, and touching are the five senses. Meanwhile, counseling, training, education, seminars, and reading are strategies to gain knowledge.

The statistical test has revealed a P-value = 0.000 ($p < 0.5$). This score indicates that H_0 is rejected while H_a is accepted at a 95% confidence interval. This result concludes that the nutrition education using the pocketbook media influences the knowledge of mothers with toddlers in Batoh Health Center, in Banda Aceh. This influence has a significant level of 95%.

Conclusion

The majority of the mothers (96.4%) could correctly answer the questions about "what are meal samples for children aged 12-23 months?" and "what nutrients should be satisfied in the complementary feeding?" In contrast, only a few mothers (57.1%) could correctly answer the question about "how to deal with toddlers without appetite?". The mothers' knowledge was measured before and after receiving the education with an increase from 42.9% to 85.7 percent%. It is expected that public health centers use diverse media, such as a pocketbook, to increase the nutritional conditions of children below the red line health promotion. Moreover, it is expected that the use of diverse media will enable mothers to apply and share the nutritional information they have learned. As a result, the nutritional conditions of their children and toddlers can be improved. Finally, it is expected that the findings of this study could provide insights for mothers to improve their toddlers' nutritional conditions which are below the red line.

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