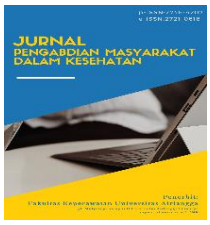

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IMPROVING MOTHERS' ABILITY TO CARE FOR TODDLERS WITH AVOIDANT RESTRICTIVE FOOD INTAKE DISORDER (ARFID)

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ABSTRACT

Introduction: Avoidant Restrictive Food Intake Disorder (ARFID) is one of the causes of nutritional disorders among children. These conditions may interfere with nutritional intake in children, which calls for community health nursing care. This community service aims to provide community nursing care for mothers who have toddlers with ARFID problems in a rural area in Aceh Province.

Methods: This community service involved eight mothers with toddlers suffering from ARFID. The health education sessions, with a booklet, were performed to improve mothers' ability to care for toddlers with ARFID. The family's ability to manage eating disorders was measured using a self-reported questionnaire before and after the health education session.

Results: All mothers' abilities increased after being given health education, as indicated by the mean pre-test (31.63) and the mean post-test (37.25) measuring by a questionnaire of the family's ability to manage eating disorders. The result emphasized that health education interventions can improve mothers' ability to deal with eating problems in children.

Conclusion: Health education using booklets as media, as part of community health nursing care, positively impacts mothers' ability to care for toddlers with ARFID. Therefore, the sustainability of such intervention should be considered to prevent stunting among children, especially toddlers with ARFID.

KEYWORDS

eating disorders; health education; mothers' ability.

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1. INTRODUCTION

Child malnutrition is a global health problem that hampers the growth process in children. Children who experience growth problems will have a level of intelligence that is not maximized, are more vulnerable to disease, and are at risk of reduced productivity in the future, which will hamper the economic growth of a country. Therefore, the government must pay more attention to overcoming the nutritional problems (World Health Organization, 2018).

The United Nations Children's Fund (UNICEF) states that one-third of the world's toddlers are still malnourished. Ninety-two million (13.5%) under-fives worldwide are malnourished (UNICEF, 2019). According to the Ministry of Health (2022), the prevalence of underweight in Indonesia was 17.1%. Meanwhile, in Aceh province, the percentage of malnutrition among children under five years of age

0-59 months was 8.4%. The region with the highest malnutrition rate among under-fives was Simeulue District at 84%, followed by Bener Meriah at 31% and Gayo Lues at 21% (Aceh Provincial Health Office, 2019). This high prevalence is a public health problem that affects morbidity and mortality, development and growth, intellectual development, and productivity, so the incidence rate must be reduced.

The causes of malnutrition in toddlers are very complex, namely lack of breast milk intake during infancy, irregular diet, digestive disorders, lack of activity, lack of food intake, and poor basic service facilities (WHO, 2021). Lack of food intake in toddlers can occur due to difficulty eating. In the new term, it is referred to as Avoidant Restrictive Food Intake Disorder (ARFID). Children with ARFID are characterized by children who refuse to eat due to food sensory factors such as smell, taste, and appearance of food (Prasetyo et al., 2019). They tend to consume fewer food variants. This condition interferes with nutritional intake. Lack of food variety and children's difficulty adapting to new foods is caused by poor diet (Jansen et al., 2018).

Based on data from a monthly health post (*Posyandu*) in a rural area of Aceh Besar District in December 2021, among 83 toddlers, 15 were categorized as poor-nourished, and ten were malnourished. According to the community health nursing assessment, eating difficulties were identified among toddlers, which may contribute to those nutrition problems. During the interviews of five mothers, it was found that all had difficulty feeding their children. The child always refuses the food given by their mothers. Three mothers said they routinely weighed their children. However, their children's weight had decreased from the previous month. Five mothers also said their children were always picky about food, sometimes vomiting their food. One mother said her child had experienced eating trauma due to choking. Five mothers said that to overcome children who are difficult to eat, they have made more varied food, but their children still refuse it.

Several efforts have been made to overcome nutritional problems in toddlers by the village health volunteers and the public health center, such as providing additional food and referring toddlers with nutritional problems to the Public Health Center. However, the results have not been optimal. Health education about balanced nutrition has also been performed. However, health education on how to overcome toddler eating difficulties has never been given.

The role of parents, especially mothers, is vital to keep toddlers away from malnutrition. One of the efforts made to improve maternal knowledge is to provide health education using the theory of The Health Belief Model. The Health Belief Model explains and predicts preventive health behavior and the role of individual illness and disease behavior. This model consists of four primary constructs that influence health behavior, namely perceived susceptibility (a person's perception of the risk of contracting a disease), perceived severity (a person's opinion about the seriousness of their disease condition and its consequences), perceived benefits (an individual's belief in the effect of recommended actions to reduce the risk or seriousness of the impact), and perceived barriers (a person's feelings on the obstacles experienced while taking health actions that have been suggested) (Bayat et al., 2013).

Mothers of children with ARFID often feel hopeless about their child's condition. Mothers become less confident in solving problems because they do not have a good plan and tend to be apathetic. Finally, the mother's inability to introduce new foods demonstrates healthy eating patterns, and self-efficacy will significantly affect the child's nutritional status (Ulfiana et al., 2019). Providing health education on overcoming ARFID can be an effective alternative to implementing nutritional problems in toddlers. Prasetyo et al. (2019) conducted a nutrition

education program for mothers focusing on how to overcome children's eating difficulties using a practical program module to improve mothers' ability to practice healthy eating patterns, adjust new foods to their children, and increase mothers' self-efficacy in caring for ARFID children.

Based on the description above, health education using booklet media is considered adequate to provide education related to problems in toddlers to improve the mother's ability to care for children with eating disorders. In addition, it aims to achieve promotive and preventive actions against nutritional problems experienced by toddlers due to the further impact of eating disorders.

2. MATERIAL AND METHODS

This study implemented a community health nursing process to provide community service for mothers with toddlers suffering from ARFID. The mothers were selected based on the community health nursing assessment by interviewing 12 mothers with underweight and malnourished toddlers; 8 out of 12 mothers did not know how to deal with children who refused food, and five of 12 mothers said the village health volunteer had recommended modifying the food. However, the child still refused to eat and did not gain weight.

After analyzing the assessment results, the author identified that mothers had difficulty with their children who refused to eat, so the author took additional data on this matter by interviewing five mothers who said their children still often refused to eat. During the interview, three mothers said they routinely weighed their children, but their children's weight had decreased from the previous month. Five mothers also said their children were always picky about food, sometimes vomiting their food. One mother said her child had experienced eating trauma due to choking. Five mothers said that to overcome children who are difficult to eat, they have made more varied food, but their children still refuse it.

Secondary data was obtained from the monthly health post (*posyandu*) to identify the number of visits and the number of toddlers who experienced malnutrition and malnutrition. Based on data on *posyandu* visits in December 2021, it was found that 15 toddlers had poor nutrition problems, and ten toddlers were malnourished from 83 toddler visits.

The nursing diagnosis obtained in the aggregate of toddlers with avoidant restrictive food intake disorder (ARFID) problems is ineffective health maintenance. This diagnosis aims to improve the effectiveness of health maintenance in the aggregate of toddlers with ARFID problems in Lambro Bileu Village. The specific objective of this diagnosis is to increase the knowledge and ability of the community, especially mothers with toddlers who have ARFID problems, on how to care for children who have difficulty eating, such as being able to involve the role of husbands and cooperate reasonably in providing care for children who have difficulty eating, being able to adapt new foods to children, being able to provide an excellent diet to children, being able to increase self-confidence, and being able to manage eating disorders.

A health education session was developed to achieve these goals. The sessions delivered topics on how to overcome children's eating difficulties. Planning in the therapeutic category is to provide health education materials and media, schedule health education with the community, and provide a discussion room during the event. The author developed learning media as a booklet containing information that will be conveyed to parents. Booklets were chosen as media because they would give an impression to readers if they were presented with attractive images, so they were not formal and stiff. Apart from that, the advantage of booklets is that learning material can be presented in a unique, attractive, and flexible physical form to be stored for a relatively long time and studied independently (Raodah et al., 2023). In compiling booklet media, the

author considers things that need to be considered or included in a booklet, such as content, letters or images, background, and layout, so that it looks neat and good (Listyarini et al., 2020). A booklet about overcoming children's eating difficulties was also developed, including how to care for children who have difficulty eating, such as being able to involve the role of husbands and cooperate reasonably in providing care, being able to adapt to the needs of children who have difficulty eating, able to adapt new foods to children, able to provide an excellent diet to children, able to increase self-confidence, and able to manage eating disorders.

The health education sessions were carried out for two days. The family's ability to manage eating disorders was measured using a self-reported questionnaire developed by Prasetyo et al. (2019) before health education sessions and two days after. The questionnaire comprised ten items assessing mothers' perceived practices in dealing with their toddlers' eating disorders.

3. RESULTS

The mothers participating in this community service were mainly in their 30s (62.5%). The percentage of mothers with 1-2 children is the same as those with>2 children (50%). Their educational background was mainly high school education level. Table 1 below presents the detailed demographic data.

The analysis results on the pre-test on mothers' ability to care for their toddlers' eating disorders show a mean value of 31.63, with only 75% of mothers achieving a good level of ability. After the health education sessions using booklets, the mean value increased to 37.25, with 100% of them achieving a good level of ability. The table below shows the frequency distribution of pre-test and post-test results.

4. DISCUSSION

Based on the frequency distribution, 62.5% of mothers under or equal to 30 can cope with eating disorders better than mothers over 30. Younger mothers will learn to recognize themselves and be responsible for their children if they experience ARFID. Responsible learning is shown through compassion, responsiveness, and responsibility in caring for their children (Dlamini, 2016). Relatively younger mothers who live in extended families, such as where grandparents are present, will get full support from their families (financial, emotional, and care support). Family support is needed in childcare

Table 1. Demographic Characteristics (n=8)

Characteristics	N	%
Age		
≤ 30 years old	3	37,5
> 30 years old	5	62,5
Educational background		
Elementary school	1	12,5
Junior high school	2	25
Senior high school	5	62,5
Income		
< Rp. 100.000	1	12,5
Rp. 100.000-Rp. 300.000	6	75
> Rp. 300.000	1	12,5
Number of Children		
1 – 2	4	50
> 2	4	50

Table 2. Result of Pre-Test and Post-Test of Mothers' Ability to Care for Their Toddlers' Eating Disorders (n=8)

	Level of Mothers' Ability			
	Good	%	Poor	%
Pre-Test	6	75	2	25
Post-Test	8	100	0	0

to provide protection and direction (Cismaru & Le Pioufle, 2016).

Having fewer children, between 1-2 children, correlates with a better ability to manage eating disorders and better rm health promotion behaviors compared to families with 3 to 4 children. Mothers with fewer children will be able to maintain warmer mother-child interactions. This is due to the availability of sufficient time to interact. This warm interaction will affect the child's health. Mothers who interact well with their children will be able to provide good care, as shown by managing their children's health and health promotion practices (Panico et al., 2019).

Five out of eight mothers (62.5%) took the last education level, namely the high school education level. The mother's education determines the mother's ability to take health promotion actions. Maternal education is directly proportional to the ability of maternal health promotion behavior. Maternal education determines the success of existing parenting patterns when feeding children (Do et al., 2015)—conversely, low maternal education results in poor health promotion behavior (Mulyani, 2016).

From the pre-test results, 25% of mothers show poor ability to care for children who experience eating disorders. The mothers might still not understand the importance of having the ability to involve the family, especially husbands, and health teams such as nutritionists in dealing with children with eating difficulties, teaching children to adapt to new foods, paying attention to eating patterns in children, and increasing maternal self-efficacy in caring for children who refuse to eat (Prasetyo et al., 2019). After health education, all mothers experienced an increase in their ability to care for children with eating disorders, as indicated by the pre-test mean value (31.63) and post-test mean value (37.25).

The mothers, as caregivers in caring for ARFID children and helping them to consume new foods, play essential roles in encouraging children to participate in social activities, serving new foods, demonstrating new foods in front of them, involving children in choosing food independently, eating with the family, letting them eat any food, and avoiding offering new foods simultaneously. Parents' readiness to offer new foods based on children's age is considered necessary (Gomes et al., 2018). Presenting examples of new foods, engaging the child to choose the food, and allowing the new food to the child is essential for the child to adapt to the new food. Children recognize food by its appearance, texture, and smell (Moding et al., 2020).

Parents should pay attention to food presentation because the attractive appearance of food will stimulate children's senses and motivation to try (Prasetyo et al., 2019). Parents' awareness to adjust to their children increases children's control to respect themselves and others. This is in line with Hassan et al. (2019), who mention that improving children's adaptability means improving children's social skills. This can increase children's awareness of sharing and their ability to respect themselves and others.

Mother's ability to care for ARFID children and improve self-efficacy also improved. This is shown by the mother's behavior in identifying her weaknesses and strengths, increasing her ability to set goals, doing affirmations, and relaxing. Confidence in a mother's ability to overcome ARFID problems in children is essential in solving ARFID problems in the family. Strong self-efficacy will encourage mothers to take good care of their children. Self-efficacy is the belief to succeed in performing behaviors that lead to desired outcomes. High self-efficacy will achieve better performance because the individual has strong motivation, clear goals, stable emotions, and the ability to perform an activity or behavior successfully (Colditz et al., 2015).

5. CONCLUSION

Providing health education on overcoming children's eating difficulties to mothers who care for children with ARFID can be used by community health nurses to address nutritional problems and improve quality health services.

Mothers as caregivers of toddlers need to understand the importance of having the ability to involve the family, especially husbands, and health teams such as nutritionists in dealing with children who have difficulty eating, teaching children to adapt to new foods, paying attention to eating behaviors in children, and increasing maternal self-efficacy in caring for children who refuse to eat.

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