On overview of family knowledge on fish consumption in avoiding stunting in Meuraxa Sub-District of Banda Aceh municipality

Neti Hartaty¹, Rini Mastura²

¹Division of Family Nursing Science, Faculty of Nursing, Syiah Kuala University, Banda Aceh
²Nursing Study Program, Faculty of Nursing, Syiah Kuala University, Banda Aceh
*Corresponding author address: E-mail: netihartaty@unsyiah.ac.id

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ABSTRACT Approximately 37% or 9 million Indonesian children under five suffer from stunting. Although the prevalence of stunting under five tended to decline in 2013-2018 from 37.2% to 30.8%, stunting remains a top priority in the problem of improving Indonesia's nutrition for 2018-2024. The research objective was to describe the family's knowledge of fish consumption in preventing stunting in Meuraxa District, Banda Aceh City. The descriptive exploratory nature of this type of research is evident. The research design was cross-sectional, with frequency distribution data being analyzed. The population for this study was made up of families with children ranging in age from one to five years. With 101 respondents, the sampling technique used was nonprobability sampling with a purposive sampling method. The data collection technique was carried out using a questionnaire, with guided interviews conducted via telephone. The results showed that as many as 51 (50.50%) respondents were categorized as having good knowledge, 35 (36.65%) respondents were categorized as having sufficient knowledge, and as many as 15 (14.85%) were classified as having less knowledge. It is recommended that health workers conduct and provide education about the importance of eating fish to prevent stunting for increased knowledge and application in the family.

KEYWORDS: Fish consumption, Family knowledge, Stunting

INTRODUCTION

Stunting short children is one of the nutritional problems faced in the world, especially in poor and developing countries.¹ According to the Institute for Research and Community Service, stunting is a problem because it is associated with an increased risk of morbidity and mortality, suboptimal brain development so that motor development is delayed, and mental growth is inhibited.² Based on Riskesdas 2018, around 37% or 9 million Indonesian children under five suffer from stunting. Stunting is still a top priority in improving Indonesia's nutrition for 2018-2024.³ This is because Indonesia's stunting rate is still far from WHO's stunting tolerance rate, which is a maximum of 20% or one-fifth of the total number of children under five (Ramadhan and Ramadhan, 2018). In 2017, based on a survey report on nutritional status monitoring, the stunting rate was still 35.7%. Aceh is in the third-highest national ranking for the number of children under five with stunting, behind East Nusa Tenggara (NTT) and West Sulawesi (SULBAR).³

Another study conducted by (Ramadhan and Ramadhan, 2018) shows that the City of Subulussalam is the city with the highest stunting rate reaching 47.3%, followed by South Aceh, Pidie East Aceh, and other provinces. Referring to the WHO tolerance limit for stunting at a maximum of 20% and from the data presented, all districts/cities in Aceh province show a stunting rate above 20%, including Banda Aceh City.

Fish is strategic for handling stunting because of its higher nutritional advantages compared to other animal proteins. The content of omega 3 in fish reaches 728 compared to 128 beef, 47 poultry, and 143 lambs.⁵ In the report of The State of the World's Children The most preferred place to eat is Eat At Home with 59%, while By Myself is 28% and outside

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with friends 13%. Eating with the family is also considered healthier. Namely, 67% than eating alone 23% and eating out with friends 9%. Out of 3 believe eating at home with family to be more meaningful and healthy. The family has an essential role because as the person closest to children under five and in control of the food expenditure sector for the nutritional intake of toddlers, thus affecting the nutritional status of children under five.

The Meuraxa is one of the districts in Banda Aceh City with a strategic geographical location because it is located in a coastal area. It can be a big advantage if the community and family know the importance of fish in preventing stunting. Besides that, in July 2019, the Meuraxa Community Health Center won an award as the National Health Center with the best child-friendly service (PRA). The number of Stunting children in the Meuraxa Subdistrict was 46 children. From interviews with the head of the Nutrition section of the Meuraxa Community Health Center, Mrs. Fithria, S.ST, information was obtained that there had never been any education about family knowledge about fish consumption in preventing stunting in Meuraxa District, Banda Aceh City. This study aimed to describe family knowledge about fish consumption in preventing stunting in the Meuraxa sub-district, Banda Aceh city.

MATERIALS AND METHODS

This type of research is descriptive exploratory. The research design was cross-sectional with frequency distribution data analysis. The population in this study were families with children aged 1-5 years. The sampling technique was nonprobability sampling using the purposive sampling method, calculated using the Slovin formula to obtain 101 respondents. The data collection technique was carried out using a questionnaire that the researcher himself explicitly developed with guided interviews conducted via telephone.

The questionnaire consists of part A and part B. Part A contains data demographics include name, age, role in family, occupation, education, and attitudes. Part B contains a list of 30 questions presented on a Guttman scale. This research was conducted in the sub-district of Meuraxa, Banda Aceh City, and received approval from the committee ethics faculty of nursing Syiah Kuala University.

RESULTS

Based on Table.1 on demographic data, it shows that the age frequency of the most respondents is the range 26-35 years, which is 63 respondents (62.38%), the majority of respondents' occupations are housewives (IRT) with a total of 43 respondents (42.57 %). The most recent respondent education was secondary education with a total of 55 respondents (54.46%) and the most respondents' income was <Rp. 3,165,031, amounting to 82 respondents (81.19%).

Based on Table.2, The results of data collection for the Description of Family Knowledge about Fish Consumption in Stunting Prevention which was carried out on 101 respondents in Meuraxa District, Banda Aceh City, showed that respondents were said to have good knowledge if they answered correctly as many as 23-30 questions, knowledge was sufficient if they answered correctly as many as 17-22 questions and lack of knowledge if you can only answer with 17 questions.

Table.3 concludes that 32 (31.68%) respondents have good knowledge, 51 (50.50%) respondents have sufficient knowledge, and 18 (17.82) respondents have insufficient knowledge about habits of consuming fish in preventing stunting in Meuraxa District, Banda Aceh City.

Table.4 concludes that 35 (34.65%) respondents have good knowledge, 47 (46.53%) respondents have sufficient knowledge and 19 (18.81) respondents have insufficient knowledge of the nutritional content of fish in stunting prevention in Meuraxa District, Banda Aceh City.

Table.5 concludes that 58 (57.43%) respondents have good knowledge, 40 (39.60%) respondents have sufficient knowledge and 3 (2.97) respondents have less knowledge about the benefits of fish in preventing stunting in Meuraxa District, Banda Aceh City.

Table.6 concluded that as many as 50 (49.50%) respondents had good knowledge, 44 (43.56%) respondents had sufficient knowledge, and 7 (7.93) respondents had insufficient knowledge about fish selection in stunting prevention in Meuraxa District, Banda Aceh City.
Table 1. Frequency Distribution of Respondents’ Demographic Data in Meuraxa District, Banda Aceh City, 2020 (n = 101)

| No | Demographic Data        | Total Frequency (n) | Percentage (%) |
|----|-------------------------|---------------------|----------------|
| 1  | Age                     |                     |                |
|    | 17-25 Years             | 27                  | 26.73          |
|    | 26-35 Years             | 63                  | 62.38          |
|    | 36-45 years             | 11                  | 10.89          |
|    | Total                   | 101                 | 100.00         |
| 2  | Profession              |                     |                |
|    | PNS / TNI               | 26                  | 25.74          |
|    | Traders                 | 14                  | 13.86          |
|    | entrepreneur             | 18                  | 17.82          |
|    | Retired                 | 0                   | 0              |
|    | College student         | 0                   | 0              |
|    | IRT                     | 43                  | 42.57          |
|    | Fisherman               | 0                   | 0              |
|    | Total                   | 101                 | 100.00         |
| 3  | Last education          |                     |                |
|    | basic education         | 15                  | 14.84          |
|    | Middle education        | 55                  | 54.46          |
|    | higher education        | 31                  | 30.69          |
| 5  | Income                  |                     |                |
|    | > Rp. 3,165,031         | 0                   | 0              |
|    | = Rp. 3,165,031         | 19                  | 18.81          |
|    | <Rp. 3,165,031          | 82                  | 81.19          |

Table 2
Distribution of frequency of description of family knowledge about fish consumption in preventing stunting in Meuraxa sub-district, Banda Aceh City

| No | Category | Frequency | Percentage |
|----|----------|-----------|------------|
| 1  | Well     | 51        | 50.50      |
| 2  | Enough   | 35        | 34.65      |
| 3  | Less     | 15        | 14.85      |
|    | Total (n) | 101       | 100.00     |

Table 3
Frequency distribution of description of family knowledge about fish consumption habits in preventing stunting in Meuraxa sub-district, Banda Aceh City

| No | Category | Frequency | Percentage |
|----|----------|-----------|------------|
| 1  | Well     | 32        | 31.68      |
| 2  | Enough   | 51        | 50.50      |
| 3  | Less     | 18        | 17.82      |
|    | Total (n) | 101       | 100.00     |

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Table. 4
Frequency distribution of description of family knowledge about nutritional content in fish in preventing stunting in Meuraxa sub-district, Banda Aceh City

| No. | Category | Frequency | Percentage |
|-----|----------|-----------|------------|
| 1   | Well     | 35        | 34.65      |
| 2   | Enough   | 47        | 46.53      |
| 3   | Less     | 19        | 18.81      |
|     | Total (n)| 101       | 100.0      |

Table. 5
Distribution of frequency of description of family knowledge about the benefits of fish in preventing stunting in Meuraxa sub-district, Banda Aceh City

| No. | Category | Frequency | Percentage |
|-----|----------|-----------|------------|
| 1   | Well     | 58        | 57.43      |
| 2   | Enough   | 40        | 39.60      |
| 3   | Less     | 3         | 2.97       |
|     | Total (n)| 101       | 100.0      |

Table. 6
Distribution of frequency of description of family knowledge about fish selection in preventing stunting in Meuraxa sub-district, Banda Aceh City

| No. | Category | Frequency | Percentage |
|-----|----------|-----------|------------|
| 1   | Well     | 50        | 49.50      |
| 2   | Enough   | 44        | 43.56      |
| 3   | Less     | 7         | 6.93       |
|     | Total (n)| 101       | 100.00     |

DISCUSSION

Based on the research results on the description of family knowledge about fish consumption in preventing stunting in Meuraxa sub-district, Banda Aceh City, 51 respondents (50.50%) were in the excellent category. It is due to the superb level of education of the respondents. The majority of respondents are at the secondary and tertiary education levels. In many factors that affect knowledge, one of the most important is education. The higher a person's education level, the easier it is to receive information about an object, including knowledge about fish consumption.

The previous research shown a positive and significant relationship between education level and knowledge related to health status. Ross and Mirowsky, in their research, concluded that the positive effect of years of education on health was consistent, with the argument that school years could develop an adequate life capacity.

Most parents think that children aged one year are not allowed to eat fish, plus parents still believe that consuming too much fish can cause worms in children. The wrong assumption about fish consumption results in inappropriate behavior in the family too. It is in line with Waysima’s research which states that perceptions affect behavior in providing marine fish in the family menu.

The results showed a significant difference between respondents who were categorized as good and respondents who were classified as sufficient. Unfortunately, fish-eating habits in the family play an essential role in preventing stunting. It is in line with which states that children from families who consume fish in low amounts tend to have a 2.216 times risk of developing developmental problems.

The results showed that the category of knowledge was still superior to the variety of good understanding, which was a little disappointing...
because knowledge about the nutritional content of fish in the family could certainly affect whether the family likes to consume fish. It is in line with research\(^6\), which states that the level of knowledge of the tau related to the nutritional content and benefits of fish can also affect fish consumption and the choice of fish food for children and families.

The results showed that respondents with the Good knowledge category were superior to sufficient and less knowledge. Family knowledge about the benefits of fish will attract families to consume the fish. It is in line with research\(^8\), which says that if we want and want our family to adopt eating fish, it is necessary to increase knowledge so that the family knows the positive benefits of consuming fish for health.

The way a family chooses fish is undoubtedly a critical thing to know, considering that not all fish sold in the market are fresh fish. The content and benefits of fish are the same, but the condition of the fish, length, texture, and color can also affect the necessity and advantages of the fish. It is in line with research\(^12\) which explains that to get the actual benefits of fish. We must be able to choose fish that are still fresh with quality that is still maintained. Maintaining the quality of the fish must maintain its freshness because fish quickly undergo physical changes or chemicals when it is dead.

**CONCLUSION**

Family knowledge about fish consumption in preventing stunting in Meuraxa District, Banda Aceh City as many as 51 (50.50%) respondents were categorized as good knowledge, as many as 35 (36.65%) respondents were classified as having sufficient knowledge, and as many as 15 (14.85%) were categorized lack of knowledge. It is recommended that health workers conduct and provide education about the importance of eating fish in preventing stunting for increased understanding and application in the family.

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