ABSTRACT

**Background:** Diarrhea is still the main cause of death in the world, accounting for 5-10 million deaths per year. The magnitude of the problem can be seen from the high morbidity and mortality due to diarrhea. The World Health Organization (WHO) estimates that 4 billion cases occur in the world and 2.2 million of them die and most of them are children under the age of 5 years. According to data in America, each child experiences 7-15 episodes of diarrhea with an average age of 5 years. **Purpose:** This study aims to develop processed nutmeg products, namely Sukade and nutmeg juice and to determine the acceptance of these products based on organoleptic tests. **Method:** This type of research is descriptive research. Used a descriptive approach to obtain a description of the family's knowledge of providing first aid to children with diarrhea with dehydration. **Results:** The results showed that the profession of parents affects the knowledge of first aid for children with diarrhea and dehydration. **Conclusion:** It is concluded that parents with entrepreneurial professions and/or family members who as students have more knowledge about first aid for children with diarrhea with dehydration compared to parents with professions as farmers, casual laborers and domestic work.

INTRODUCTION

Diarrhea is still the main cause of death in the world, accounting for 5-10 million deaths per year. The magnitude of the problem can be seen from the high morbidity and mortality due to diarrhea (Troeger et al., 2018). The World Health Organization (WHO) estimates that 4 billion cases occur in the world and 2.2 million of them die and most of them are children under the age of 5 years. According to data in America, each child experiences 7-15 episodes of diarrhea with an average age of 5 years. According to data in developing countries, on average, each child under the age of 5 years experiences diarrhea episodes 3-4 times per year (Febrianti, 2018).

Diarrhea is a disease that often occurs in the territory of Indonesia and is one of the diseases that are often assigned the status of an Extraordinary Event (KLB) or outbreak (Andiarsa et al., 2022). This is due to the rapid transmission of diarrheal disease, resulting in complications of other diseases and can lead to death. In 2017 there have been 21
outbreaks of diarrhea spread across 12 provinces and 17 districts. In Polewali Mandar, Pohuwato, Central Lampung and Merauke districts, there were two outbreaks during 2017. The number of people with diarrhea was 1,725 people and the number of deaths was 34 people (Nadia & Kusumaningtiar, 2020). In the Sustainable Development Goals (SDG's), environmental health problems are the target in reducing diarrhea or even death in children and ensuring the availability of clean water (Indonesian Health Profile) (Odagiri et al., 2020).

The diarrhea morbidity rate in Indonesia is based on the results of the diarrhea morbidity survey conducted by the Ministry of Health every 3 years since 2006, the diarrhea morbidity rate increased from 2006 then decreased in 2010. In 2018, the diarrhea morbidity rate was 120-360 per 1,000 population. This figure has decreased slightly compared to the previous year (Soleimani, Delghandi, Moallem, & Karimi, 2019). The number of diarrhea sufferers in children in Indonesia according to the characteristics in 2018 was recorded as 18,225 (9%) children with age group <1 year, 73,188 people (11.5%), children with age group 1-4 years 182,338 people (6.2 %), diarrhea children with age group 5-14 years 168,664 people (6.7%) (Kemenkes).

Diarrhea is caused by abnormal transport of water and electrolytes in the intestines. Worldwide there are approximately 500 million children who suffer from diarrhea each year, and 20% of all deaths in children living in developing countries are related to diarrhea and dehydration. Diarrheal disorders can involve the stomach and intestines (Gastroenteritis), small intestine (Enteritis), colon (Colitis) or the colon and intestines (Enterocolitis) (Walker, Potter, & Talley, 2018).

One of the causes of the high morbidity and mortality of these patients is the lack of anticipation in the management of diarrhea patients before falling into a state of dehydration (Santillanes & Rose, 2018). Lack of knowledge, attitudes and lack of awareness of the patient's parents on the treatment and prevention of diarrheal disease in children. Children are easily infected with diseases or other health problems. One of the habits of children is to put their fingers in their mouths, so that children are easily infected with viruses or bacteria that can cause diseases such as diarrhea which are transmitted through faecal-oral route. Therefore, children's health must receive attention from the family so that children grow and develop optimally (Baker, Morawska, & Mitchell, 2019).

A family is a collection of 2 or more people who live together with emotional and regulatory ties to individuals who have their respective roles as part of the family. One of the family's tasks in the health sector is making decisions to take appropriate action for the family, this task is the main family effort to seek appropriate help according to the family's circumstances so that health problems can be reduced or even resolved. One of the diseases that require prompt and appropriate help by the family is diarrhea (Friedman in Setiadi and Suprajitno).

Diarrhea is a condition of abnormal or unusual stool expenditure, it is more fluid and can occur 3-4 times a day, if diarrhea is not treated immediately, the child will lose a lot of fluid (dehydration) which can cause death. Therefore, the role of the family in providing first aid to children with diarrhea is very important, namely by giving more fluids than usual, such as household fluids or oral rehydration fluids. Provide adequate nutrition for both normal and soft diets and immediately take the child to a health facility if diarrhea occurs more frequently, vomits repeatedly or has bloody stools (Baharen).

The mortality rate due to diarrhea in Bengkulu Province shows that diarrhea cases have increased, as many as 50,622 cases in 2016 and 53,348 cases in 2017. The increase in the clinical incidence of diarrhea can be caused by several causes, such as bacterial
infection, parasite infection, viral infection, malabsorption, allergies, poisoning, immunodeficiency and other causes. One of the causes that are often found in cases of diarrhea are bacterial infections of S. typhi and S. dysenteriae. In handling, cases of diarrhea require fast and appropriate treatment. One of them is to use antibiotics, especially in cases of diarrhea caused by bacterial infections. Antibiotics that are often used are fluoroquinolones such as ciprofloxacin. The use of antibiotics in treatment should be considered.

Cases of diarrhea sufferers in Lebong Regency are increasing. It is proven that the number of diarrhea sufferers in October 2019 reached 485 cases and 2 of them died. This number is in stark contrast to the September cases which were only 49 cases. The head of the Lebong District Health Office (Kadinkes) Rachman SKM, MSi confirmed in October 2019. From the results of field checks, it was suspected that the cause of the large number of people suffering from diarrhea was due to the large number of flies in the residential area. It is possible that flies that carry disease germs contaminate people's food. In addition, due to changes in weather, unsanitary environmental conditions, decreased body resistance and the water consumed is contaminated with E.coli bacteria (Manyi-Loh, Mamphweli, Meyer, & Okoh, 2018).

Public knowledge is very influential in the occurrence of diarrhea in children. If the knowledge possessed by the community is good, they will know how to do first aid for children who have diarrhea. Knowledge is a factor that influences a person's behavior in carrying out first aid actions for children with diarrhea, either directly or indirectly, through attitude intermediaries (Tampah-Naah, 2019). A person's practice is shaped by the individual's interaction with the environment, especially regarding knowledge and attitudes towards objects.

The results of an interview with one of the families in RT 003 Desa Kota Bani that many families, especially mothers, already understand giving salt water or sugar water if a child has diarrhea but they do not understand that if a child has diarrhea, he excretes too much fluid but the intake is not balanced it will suffer from dehydration and if dehydration is not treated properly it will result in death in children. A child dies due to the mother's lack of knowledge about the dangers of diarrhea with dehydration, so the mother is careless and thinks her child is just ordinary diarrhea which will be cured if he drinks salt or sugar solution.

RESEARCH METHODS

This study uses quantitative methods where data collection is done by distributed questionnaires to 40 respondents with 15 questions so that they could dig deeper into the description of family knowledge of providing first aid to children with diarrhea with dehydration.

RESULTS AND DISCUSSION

Overview of Research Locations
1. Identity of Rt 003 Village City Bani

This research was conducted in RT 003, Kota Bani Village, Putri Hijau Subdistrict, North Bengkulu Regency, which has 38 families. The geographic coordinates of North Bengkulu are in position 2°15'-4° LS and 102° 32' - 102° 8 east longitude with an area of 4,424.60 km². The coastline of North Bengkulu Regency with a length of 262.63 km has the potential for coastal, coastal and marine resources, both biological and non-biological,
which is quite large and has the opportunity to be developed and managed as a source of regional economy.

Table 1.
Demographic Data of Putri Hijau Subdistrict, North Bengkulu Regency in 2020

<table>
<thead>
<tr>
<th>No</th>
<th>Village/village</th>
<th>An area</th>
<th>Number of KK</th>
<th>Man</th>
<th>girl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Petai water</td>
<td>35.0</td>
<td>2800</td>
<td>1200</td>
<td>1600</td>
</tr>
<tr>
<td>2</td>
<td>island coral</td>
<td>20.00</td>
<td>3000</td>
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<td>3</td>
<td>low water</td>
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<td>4</td>
<td>Seblat market</td>
<td>271.73</td>
<td>12000</td>
<td>4500</td>
<td>5500</td>
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<td>5</td>
<td>Create glory</td>
<td>10,11</td>
<td>2593</td>
<td>1093</td>
<td>1500</td>
</tr>
<tr>
<td></td>
<td>amount</td>
<td>356.73</td>
<td>26,593</td>
<td>11,193</td>
<td>14,200</td>
</tr>
</tbody>
</table>

Demographic Data of Suffering Children’s Families

Based on the results of the study, many people are more aware of the steps that will be taken to provide first aid to children with diarrhea with dehydration, because parents with professions have knowledge of first aid for children with diarrhea and dehydration compared to parents with professions of farmers and laborers. Parents who are farmers and laborers tend not to know the steps that should be taken in dealing with diarrhea with dehydration, because they have never received counseling and consider diarrhea with dehydration not a dangerous threat.

Table 2.
Categories of Family Knowledge on First Aid for Children with Diarrhea with Dehydration in RT 003 Desa Kota Bani, Putri Hijau District, North Bengkulu, 2020

<table>
<thead>
<tr>
<th>No</th>
<th>Knowledge Criteria</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>16</td>
<td>40%</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>11</td>
<td>27.5%</td>
</tr>
<tr>
<td>3</td>
<td>Less</td>
<td>13</td>
<td>32.5%</td>
</tr>
<tr>
<td></td>
<td>amount</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on the results of the study in table 5.3 it is explained that the level of family knowledge on first aid for children with diarrhea with dehydration in RT 003 Desa Kota Bani, Putri Hijau Subdistrict, North Bengkulu in 2021 who have knowledge with good criteria with a frequency of 16 people with a total percentage rate of 40% of a total sample of 40 people. For the value of knowledge with sufficient criteria with a frequency value of 11 people with a percentage value of 27.5%.

The level of family knowledge on first aid for children with diarrhea with less criteria with a frequency level of 13 people with a total percentage level of 32.5% of the total sample of 40 people. Based on the results of the study, it was concluded that the respondent's level of knowledge about first aid knowledge for children with diarrhea with dehydration in RT 003, Kota Bani Village, Putri Hijau District, North Bengkulu. The results showed that the level of knowledge of parents with good criteria with a knowledge frequency value of 40% with a sample of 16 people. This is certainly influenced by the level of parental education, the age of the parents, and the type of parental profession. Because with a good level of parental education, a mature age and a profession that is close to knowledge, they will have good knowledge as well (Jemberia et al., 2018).
On the criterion of sufficient knowledge, the frequency score is smaller, namely 11 people, this is because the level of education, age and profession of parents with a level of knowledge is quite less than the other criteria (Qi, Li, Liu, Li, & Huang, 2020). While the knowledge of parents with less criteria has a value frequency level of 13 people from a total sample of 40 parents. This is due to the low level of parental education, young age and professions that are far from knowledge about the importance of first aid for diarrhea with dehydration (Kumar, Abbas, Mahmood, & Somrongthong, 2019). Parents with low education do not get basic knowledge in education that has been taken regarding the knowledge of the importance of basic aid in first aid for diarrhea with dehydration in children.

From the results of the study, it was found that the criteria for parental knowledge on the importance of first aid for children with diarrhea with dehydration found that the knowledge of parents with good criteria with a frequency of 16 parents with a percentage level of 40% (Benninghoff, Pereira, & Vetter, 2020). In the sufficient criteria, the number of frequencies is 11 people with a percentage level of 27.5%. In knowledge with less criteria, the number of frequencies is 13 parents with a percentage of 32.5%. This is because the number of parents with higher education, a better type of profession and older parents certainly have more experience and knowledge about the importance of first aid for children with diarrhea and dehydration. Compared to the number of parents with low levels of education.

CONCLUSION

Based on the results of research that has been carried out on families about the description of family knowledge on first aid for children with diarrhea with dehydration in RT 003, Kota Bani Village, Putri Hijau District, North Bengkulu, it can be concluded that having knowledge with good criteria with a frequency of 16 people with a total percentage rate of 40% of the total sample of 40 people. For the value of knowledge with less criteria with a frequency level of 13 people with a total percentage level of 32.5% of the total sample of 40 people.

REFERENCES


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