OVERVIEW OF RISK FACTORS AFFECTING THE OCCURRENCE OF DIARRHEA IN BATU AJI HEALTH CENTER IN 2022

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Abstract

The current prevalence of high cases of diarrhea is caused by several factors including age, sex, immunity, gastrointestinal infections, allergies, malabsorption, poisoning, nutritional status. The aim of the study was to describe the risk factors that influence the occurrence of diarrhea at the Batu Aji Health Center in 2022. The research design is descriptive by describing and interpreting objects according to what is there. The sample is diarrhea patients at the Batu Aji Health Center. The sampling technique used medical records with a total of 121 diarrhea patients. The research location was carried out at the Batu Aji Health Center which was conducted on October 20-October 25 2022. The data collection tool used medical record sheets. The results of medical records were analyzed using a check list sheet. The results obtained from 121 diarrhea patients had risk factors, namely 116 patients who experienced good nutrition, 2 patients with malnutrition and 3 patients with malnutrition. A total of 115 patients had acute diarrhea, 6 patients had dysentery diarrhea and none had chronic diarrhea. A total of 64 patients were male and 57 female, meaning that the sex factor had nothing to do with diarrhea.

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Abstrak

Kejadian prevalensi saat ini terhadap tingginya kasus diare disebabkan oleh beberapa faktor diantaranya adalah umur, jenis kelamin, kekebalan tubuh, infeksi saluran pencernaan, alergi, malabsorbsi, keracunan, status gizi. Tujuan penelitian untuk mengetahui gambaran faktor- faktor resiko yang mempengaruhi terjadinya diare di Puskesmas Batu Aji Tahun 2022. Desain penelitian ini deskriptif dengan menggambarkan dan menginterpretasi objek sesuai dengan apa yang ada. Sampel adalah pasien diare di Puskesmas Batu Aji. Teknik pengambilan sampel dengan menggunakan Rekam Medik dengan berjumlah 121 pasien diare. Lokasi penelitian di lakukan di Puskesmas Batu Aji yang dilakukan pada 20 Oktober- 25 Oktober 2022. Alat pengumpulan data dengan menggunakan lembar rekam medik. Hasil rekam medik dianalisa dengan menggunakan lembar *check list*. Hasil yang didapat dari 121 pasien diare memiliki faktor-faktor resiko yaitu sebanya 116 pasien yang mengalami gizi baik,gizi kurang sebanyak 2 pasien dan gizi kurang sebanyak 3 pasien. Sebanyak 115 pasien mengalami kejadian diare akut, sebanyak 6 pasien mengalami kejadian diare disentri dan tidak ada yang mengalami diare kronik. Sebanyak 64 pasien yang berjenis kelamin laki- laki dan 57 perempuan, artinya faktor jenis kelamin tidak ada hubungannya dengan diare.

Kata kunci   : Umur,Jenis Kelamin,Status Gizi, Kejadian Diare

INTRODUCTION

Diarrhea is one of the diseases that most often attacks children throughout the world. Diarrhea is the loss of fluids and electrolytes through defecation in the form of loose or liquid stools more than 3 times a day with or without blood or mucus (Prawati, 2019). The second biggest cause of death in children under five in the world after pneumonia is diarrhea. Data from the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), almost one in five deaths of children under five in the world is caused by diarrhea. The death rate for children under five caused by diarrhea reaches 1.5 million per year. The greatest incidence occurs in the first 2 years of life and decreases as the child grows (Andoko, 2021).

The World Health Organization (2018) stated that diarrhea is still a major problem for children from pre-school to school age which is still difficult to overcome. Year after year, diarrhea remains one of the diseases that causes mortality and malnutrition in children and has experienced a significant increase every year, where in 2017 it reached 48%, in 2018 it was 66.7% and in 2019 increased to 71.5% (Andoko, 2021).

Diarrhea can be said to be a digestive disorder with the sign of defecating 3 or more times in one day which results in a watery stool consistency. This watery stool can also be followed by the appearance of blood. If it is not treated immediately, this diarrheal disease can cause death, because if treated too late, diarrhea sufferers will lack body fluids. Children in Indonesia, including babies and toddlers, experience diarrhea at least 12 times a year or even more, and this is the cause of death at 1534% of other causes of death (Khairunnisa, 2020).

Based on data from the Ministry of Health of the Republic of Indonesia in 2013, the prevalence of diarrhea in that year, diarrheal disease in Indonesia is suffered by all age groups, but the highest prevalence of diarrheal disease is more suffered by toddlers, especially in the 0-1 year age range, at 7% and the range aged 1-4 years was 6.7%. By looking at this data, we must be wary of diarrheal disease, because diarrheal disease will have a bad impact and disrupt the health of toddlers. This diarrheal disease is more risky for babies and toddlers than for adults. In the world in 2012, deaths due to diarrheal disease reached a total of 2,195 children who died every day (Khairunnisa, 2020).

MATERIALS AND METHODS

This research was conducted in the Batu Aji Community Health Center Working Area, Batam City in 2022, using the total sampling method. The respondents for this research consisted of 121 people in the working area of the Batu Aji Community Health Center, Batam City. The research was conducted in October 2022. Data collection tools used checklist sheets and medical record data, with data analysis using univariate analysis to determine the distribution of each variable.

RESULTS AND DISCUSSION

1. Research Results

   Based on the results of research entitled "Overview of Risk Factors that Influence the Occurrence of Diarrhea at the Batu Aji Community Health Center, Batam City in 2022". Medical record data was obtained as follows:

   a. Univariate Analysis

      In this study, there are two characteristics of respondents, namely, husband's support and baby blues syndrome, as can be seen in the following table:

      1) Data Processing in the Form of Diagrams

No.	Month	Number of Respondents
1.	January	13
2.	February	17
3.	March	0
4.	April	15
5.	May	26
6.	June	29
7.	July	9
8.	August	12

Table 4.1 Monthly Data for Suffering from Diarrhea.

From the results of this data, it can be seen that the month with the most diarrhea is May, while the least is March. The highest percentage of respondents with diarrhea was in June because that month was the beginning of the rainy season. March is the least because that month is the beginning of the dry season.

Data on patients affected by diarrhea based on all ages at the Batu Aji Health Center

No.	Age of Respondents	Number of Respondent	Kode
1.	Baby	1	0
2.	Toddler	28	1
3.	Children	14	2
4.	Early Adolescence	7	3
5.	Late Teenagers	14	4
6.	Early Adulthood	19	5
7.	Late Adulthood	19	6
8.	Early Elderly	14	7
9.	Late Elderly	2	8
10.	Seniors	3	9

Table 4.2 Data of all ages suffering from diarrhea

From the results of this data, it can be seen that toddlers aged 1-5 years are most affected by diarrhea, while babies aged 0-11 months are least affected. The percentage of respondents with diarrhea is highest in toddlers because toddlers have more frequent interactions and more active activities so they are more quickly exposed to viruses and bacteria. In babies it is less because at the baby's age the mother still monitors everything she consumes and all her activities.

Data on patients affected by diarrhea based on gender at the Batu Aji Health Center

No.	Type Gender	Number of Respondent	Code
1.	Laki- Laki	57	0
2.	Perempuan	64	1

Table 4.3 Data on Gender Suffering from Diarrhea

From the results of these data, it can be seen that the gender that is most affected by diarrhea is men, whilethe least is women. The highest percentage of respondents with diarrhea are men because men are more active in playing outside the home so they are more easily exposed to diarrhea. The femalegender is the least because women are not very active in the environment outside the home.

Data on patients affected by diarrhea based on nutritional status at the Batu Aji Community Health Center

No.	Nutritional Status	Number of Respondent	Code
1.	Good Nutrition	116	0
2.	Malnutrition	2	1
3.	More Nutrition	3	2

Table 4.4 Data on Nutritional Status of Those Suffering from Diarrhea

From the results of this data, it can be seen that the highest nutritional status, namely good nutrition, was 116 respondents, while the least nutritional status was 2 respondents.

DISCUSSION

1. Factors causing the incidence of diarrhea based on age characteristics at Batu Aji Batam Community Health Center in 2022.

   Based on medical record data obtained, 28 respondentsexperienced diarrhea, mostly toddlers aged 1-5 years. Diarrhea is most common in toddlers because at the age of toddlers they have more frequent interactions and more active activities so they are more quickly exposed to viruses and bacteria. Age as one of the characteristics of people in epidemiological studies is quitean important variable becausequite a lot of diseases are found with various variations in frequency caused by age (Kemenkes RI, 2009).

   According to Mufidah (2012), the older the child, thesmaller the chance of getting diarrhea. Previous research wascarried out by Hardiyanti, et al (2019) who conducted research on the application of methods in handling diarrhea cases inIndonesia. This research shows that the majority of people who experience diarrhea are aged under five years old (TODDLER) really needs attention because toddlers are still in the process of growth and development and are vulnerable to disease, if left too

long they will experience dehydration and death.

2. Factors causing the incidence of diarrhea based on gender characteristics at Batu Aji Batam Community Health Center in 2022.

Based on the results of research conducted on 121 people, it can be seen that 57 men and 64 women experienced diarrhea at Batu Aji Health Center in 2022.

According to previous research conducted by Prawati (2019) who conducted research on factors that influence the incidence of diarrhea in Tambak Sari, Surabaya City. The research results obtained were p-value = 0.689 for 185 women with a = 0.05 (p>a) for 26 men. These results can be said that gender has no relationship with diarrheal disease. According to previous research further carried out by Suardewi (2019) who conducted research on factor analysis of the level of public knowledge about diarrhea self-medication measures. The research results obtained were that there was no significant relationship between gender and diarrhea, this was indicated by a ρ value > 0.05 (0.78). This research shows that the majority of people who experience diarrhea have nothing to do with gender.

3. Factors causing the incidence of diarrhea based on the characteristics of nutritional status at the Batu Aji Batam Community Health Center in 2022.

Based on the results of research conducted on 121 people, it was seen that 116 people had good nutrition, 3 people had over nutrition and 2 patients had less nutrition and experienced diarrhea. at the Batu Aji Community Health Center in 2022.

According to previous research conducted by Kurniawati (2016) who conducted research on the nutritional status and immune status of measles related to acute diarrhea, the incidence of diarrhea was related to nutritional status, as many as 112 people had good nutrition and 40 people were undernourished based on BW/U p=<0.000 (OR=4.304, CI95%:1.917- 9.663).

The results of further research were conducted by Fahmi (2012) who conducted research on the relationship between nutritional status and the incidence of diarrhea in toddlers aged 2-5 years in the work area of the Karanganyar District Health Center, Karanganyar Regency. The research results obtained were that nutritional status was divided into 2 groups, namely good and not good. A total of 72 people who had good nutrition, 58% who had good nutrition suffered from diarrhea, and 42% of these people did not have diarrhea. There were 28 people with poor nutrition, of which 36% suffered from diarrhea, and 64% did not have diarrhea. The

results of the analysis obtained a p value = 0.042.

This research shows that the majority of people who experience diarrhea have good nutritional status, numbering116 out of 121 people. Based onthese results, it is necessary to continue providing education to mothers of all groups about the importance of maintainingnutrition by paying attention to foods that are nutritious and contain balanced nutrients such as carbohydrates, protein, vitamins and minerals contained in rice, green vegetables, meat side dishes, fish.

4. Diarrhea Occurrence

Based on the results of research conducted, there were 115 people who experienced acute diarrhea and 6 people who experienced dysentery diarrheaat the Batu Aji Community Health Center in 2022.

Previous research was carried out by Bely (2016) who conducted research on the relationship between maternal knowledge, age and nutritional status with the incidence of diarrhea in toddlers in the Bintuhan Community Health Center working area in 2016. The research results showed thatmore than half of the respondents (55.3%) experienced diarrhea, while 44.7% did not experience diarrhea.

The results of another research conducted by Herliana (2014) who conducted research on factors related to the incidence of diarrhea in toddlers at the Jatidatar Community Health Center, Bandar Mataram District, Central Regency. The results of data processing on the proportion of diarrhea incidents in toddlers were 31.43%.

The results of this study show that more people are experiencing acute diarrhea, this situation is very unfortunate as it is known that diarrhea is caused by tract infections which are feared to have an impact on growth and if not treated immediately and well it could lead to death.

CONCLUSIONSAND RECOMMENDATIONS

1. Conclusion

Based on the results of research conducted regarding the description of the risk factors that influence the occurrence of diarrhea at the Batua Aji Community Health Center in 2022, it can be concluded as follows:

a. A total of 116 patients experienced good nutrition, 2 patients were malnourished and 3 patients were malnourished.

b. A total of 115 patients experienced acute diarrhea, 6 patients experienced dysentery diarrhea and 0 patients experienced chronicdiarrhea.

c. A total of 64 patients were male and 57 were female.

2. Recomendations

a. For Community Health Centers

It is hoped that it will be necessary to provide primary (promoter, preventive and secondary) measures, namely by increasing outreach efforts to the community regarding diarrheal diseases and providing education regarding the factors that cause diarrhea.

b. For Further Researchers

This research can be used by future researchers regarding factors that cause diarrhea, such as age, gender, immune system, digestive tract infections, allergies, malabsorption, poisoning,and nutritional status.

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