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Increased Frequency of Defecation (Acute Diarrhea) in Children Under Five Years of Age in the Antang Health Center Working Area

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ABSTRACT

Diarrhea is a condition in which the frequency of bowel movements becomes abnormal, which is usually 1 x a day, to more than 3 x a day with a liquid stool consistency and usually accompanied by mucus and blood. The purpose of this study was to determine the characteristics of toddlers with acute diarrhea at the Antang Health Center. This type of research is descriptive research using a cross-sectional approach, the results of which are only an illustration. Statistical analysis was conducted to describe the characteristics of each patient using descriptive frequency test. The results of the study prove that exclusive breastfeeding contains antibodies needed to defend against pathogens in toddlers suffering from acute diarrhea at the Antang Health Center, the majority of whom are female, aged 1-2 years, have a history of exclusive breastfeeding, with a last education of junior high school and low family income. It is hoped that this study will be a source of information for the local Health Office and Health Center to reduce the incidence of acute diarrhea.

Keyword : Increase, Frequency of Defecation (Acute Diarrhea), Children Under Five, Nurses, Antang Health Center Work Area

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1. Introduction

Acute diarrhea is a bowel movement with increased frequency and softer or more liquid stool consistency and is sudden in nature, and lasts for less than 2 weeks. Diarrhea can be transmitted through food and drink that has been previously contaminated by pathogenic agents that infect the intestines, including viruses, bacteria, and parasites, which are among the main causes of bowel movements in the community (WHO, 2018). Common bacteria found are Salmonella, Escherichia coli, Shigella, and Campylobacter. Parasites by Gardia lamblia, Entamoeba histolytica, and Cryptosporidium. Viral infections from rotavirus, and norovirus are the main causes of diarrhea in children and toddlers (Widdowson et al, 2005). Other factors that cause diarrhea are lactose malabsorption by the intestine, and food poisoning (WHO, 2018). Death in cases of diarrhea usually occurs due to severe dehydration with 70-80% of them being toddlers (Paramitha et al, 2012).

Data from the Indonesian Ministry of Health (2017) in the Basic Health Research (Riskedas) for 2018, the age group 1-4 years (12.8 %) and female gender (8.3%) are the groups with the most sufferers. Socio-economic conditions are also factors related to the incidence of diarrhea. The better the socio-economic conditions of a family, the lower the incidence of diarrhea (Oliveira et al, 2017, Sumampouw et al, 2019). The number of diarrhea cases is still high and tends to experience diarrhea in toddlers, especially at the Antang Health Center.

A. Symptoms of Diarrhea Disease

This disease, which involves the digestive tract, generally causes symptoms of nausea, vomiting, loose or watery stools several times/diarrhea, sometimes mild fever or chills and, more rarely, stomach cramps. Based on the condition of lack of fluids or dehydration, sufferers can be said to have diarrhea without dehydration, mild / moderate dehydration diarrhea, or severe dehydration diarrhea.

1) In cases without dehydration, at least 2 or more of the following signs must be met, namely the patient's general condition is good, the eyes do not appear

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sunken, they drink as usual, and the skin on the stomach returns quickly when pinched or squeezed (called a turgor test).

2) For mild/moderate dehydration, sufferers are usually restless or fussy, their eyes appear sunken, they are thirsty and want to drink a lot, and their turgor returns slowly.
3) If the patient is severely dehydrated, they will appear very lethargic to the point of being unconscious, their eyes will appear sunken, they will be lazy or unable to drink, and their turgor will return very slowly, taking more than 2 seconds.

It is also necessary to know whether or not there is blood in the vomit and stool. This determines further care and treatment measures. It is advisable for sufferers to consult a doctor if they experience nausea, vomiting, or diarrhea that persists for more than two days. Also be aware if the complaint worsens to vomiting and diarrhea accompanied by blood, high fever, and signs of dehydration. Other signs of dehydration that may be found are severe dizziness, dry lips, urine or pee looks dark yellow, infrequent urination, even to not urinating for a long time. In infants, a sunken fontanel can be seen.

B. Etiology of Diarrhea

The basic mechanisms that cause diarrhea are:

1. Infection Factors
    1) Enteral factors or digestive tract infections
        a) Infections: Vibrio, Escherichia coli, Salmonella, Shigella, Yersina.
        b) Viral infections: Enterovirus, Rotavirus.
        c) Infections: worms (Ascaris, Trichuris, Oxyuris, Strongyloides).
        d) Protozoan infections: Entamoeba histolytica, Giardia lambia, Thrichomonas hominis.
        e) Fungal infection : Candida albicans.
    2) Parenteral factors or infections outside the digestive tract
        a) Acute Otitis Media (AOM).
        b) Respiratory tract infection (Tonsilopharyngitis).

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2. Malabsorption Factors
    1) Malabsorption factors include:

       Malabsorption: disaccharides (lactose, maltose, sucrose intolerance), monosaccharides (glucose, fructose, galactose intolerance).
    2) Fat malabsorption.
    3) Protein malabsorption.
    4) Food Factors

       Food factors such as stale food, toxic food, or food allergies.
3. Psychological Factors

   Psychological factors such as fear and anxiety, although rare, can cause diarrhea, especially in older children.
4. Environmental Factors

   Two dominant factors are clean water facilities and feces disposal. These two factors will interact with human behavior. If the environmental factor is unhealthy because it is contaminated with diarrhea germs due to unhealthy human behavior, namely through food and drink.
5. Nutritional Factors

   Most malnourished babies and toddlers die from diarrhea. This is due to dehydration and malnutrition. Nutritional factors are seen based on nutritional status, namely good = 100-90, less = <90-70, bad = <70, with BB per TB.
6. Socio-Economic Factors of Society

   Socio-economics has a direct influence on the causes of diarrhea. Most people who are prone to diarrhea come from large families with low purchasing power, poor housing conditions, and do not have a clean water supply that meets health requirements.
7. Factors of Food and Drink Consumption

   Contact between source and host can occur through water, especially uncooked drinking water, can also occur when bathing or gargling. Contamination of eating

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utensils and kitchen. Contact with germs in feces can be transmitted to others if they stick to the hands and are then used to hold food.

C. Pathogenesis of Diarrhea

The mechanisms that cause diarrhea are osmotic disorders, secretion disorders, and intestinal motility disorders (Suratmaja, 2007).

In acute diarrhea, microorganisms enter the digestive tract, then the microorganisms multiply after successfully passing through stomach acid, the microorganisms form toxins (endotoxins), then there is stimulation of the intestinal mucosa which causes hyperperistalsis and secretion of body fluids which results in diarrhea.

1) Osmotic disorders

As a result of the presence of food or substances that cannot be absorbed during defecation, the osmotic pressure in the intestinal cavity increases, resulting in a shift of water and electrolytes into the intestinal cavity. In the intestinal cavity, this excess will stimulate the intestines to expel it, causing diarrhea.

2) Secretory disorders

As a result of certain stimuli (for example by toxins) on the intestinal wall, there will be an increase in the secretion of water and electrolytes into the intestinal cavity and then diarrhea will arise due to an increase in the contents of the intestinal cavity.

3) Intestinal motility disorders

Hyperperistalsis will result in reduced opportunity to absorb food, resulting in diarrhea. Conversely, if intestinal peristalsis decreases, it will cause excessive bacterial growth and then diarrhea can occur.

2. Research Methods

This type of research uses a descriptive method with a cross-sectional approach. The sampling technique in this study was non-probability sampling, namely only those who met the inclusion criteria could become research subjects. The inclusion criteria were toddler patients who came with complaints of acute diarrhea at the Antang Health Center.

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Acute diarrhea is defined as the passage of abnormal stools or more than 3 times in 24 hours.

The type of data in this study uses primary data obtained by interviewing each parent of the toddler. The data collected includes age, age, parental education, family income, history and provision of exclusive breastfeeding. Exclusive breastfeeding is defined as the provision of breast milk by the mother to the baby without any additional food and drink from birth to 6 months of age. Statistical analysis was performed to describe the characteristics of each patient using descriptive tests.

3. Results and Discussion

a. Results

Table 1.
Characteristics of Exclusive Breastfeeding History

Variables	n (%)
breast milk exclusive	
Yes	93 (80.2 %)
No	23 (19.8 %)

Table 1 show that majority toddler with history breast milk exclusive as many as 93 (80.2 %) people, while toddlers had no history of givingExclusive breastfeeding was given to 23 (19.8%) people. The immunity in the toddler's body is wrong. one is obtained from exclusive breastfeeding. Exclusive breastfeeding is recommended until the age of 6 months, followed by appropriate complementary foods until the age of two months. year or more (WHO, 2018). Study previously by Aldy *et a.* (2009), proves that breast milk exclusive contain antibody Which required for maintain themselves from pathogens.

Based on this study, the majority of toddlers at Antang Health Center have a history of exclusive breastfeeding. These results indicate that the coverage rate giving breast milk on study This Enough tall. Adish (2004) to argue on his research shows that 13% of toddlers who are given breast milk can have their deaths prevented Because disease. Toddler Which given breast milk exclusive tend get protection to complications

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from disease Which requires it treated in House Sick compared to with toddlers Which not breastfed exclusive (Aldy *et al*, 2009).

4. Conclusion

This assessment was conducted with services for one patient with Fibroadenoma mammae disease, the patient's pain decreased and no longer felt pain, the diagnosis was obtained from the patient's complaints and the author found a priority diagnosis, namely Fibroadenoma mammae, nursing planning based on data analysis that had been carried out where the nursing diagnosis was obtained, namely Fibroadenoma mammae, review the history of pain, deep breathing relaxation to reduce pain.

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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