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The Effectiveness of Honey Administration on Reducing the Frequency of Diarrhea in Children with Acute Gastroenteritis in the Carnation Room of Rsud Waled Cirebon District: Case Study

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ABSTRACT

One of the causes of death in children is diarrhea. Diarrhea is an increased frequency of bowel movements and occurs more than 3x and with a soft and watery consistency due to the water content in the stool >200 ml / 24 hours which lasts < than 14 days. The purpose of this study is to determine the effectiveness of giving honey to reduce the frequency of diarrhea in children. Method: The method uses a qualitative approach with case studies as the main method. Data collected through interviews, documentation, data analysis to the provision of intervention and evaluation. The research was conducted in the Carnation Room of Waled Hospital, Cirebon Regency in February 2024. The sample in this study was children treated with a diagnosis of acute gastroenteritis that focused on nursing problems, namely diarrhea. Honey intervention 3 times / day is given as much as 5 ml / 6 hours to children. Results: based on research that has been done researchers found that giving honey can reduce the frequency of diarrhea in children because of the content in honey

INTRODUCTION

One of the causes of death in children is diarrhea. According to WHO in Wiliyanarti, Wulandari and Gufron (2023) diarrhea is clinically defined as defecation with liquid or semi-liquid stools or without mucus and blood (Wiliyanarti, et al. 2023). One of the diseases characterized by the presence of diarrhea is acute gastroenteritis, gastroenteritis is an inflammation that occurs in the mucosa of the gastrointestinal tract characterized by diarrhea and vomiting. Diarrhea is an increased frequency of defecation that occurs more than 3x and with a mushy and watery consistency due to the water content in the stool> 200 ml/24 hours which lasts < 14 days (Fajrin, Ernawati, et al, 2022).

According to the WHO (World Health Organization), diarrheal disease is the second leading cause of death in children. WHO states that, nearly 1.7 billion cases of diarrhea occur with a mortality rate of about 525,000 in children under five each year. the highest incidence that triggers death in children is in India, Nigeria, Democratic Republic of the congo, and Angola. Indonesia itself is in 7th position (WHO, 2017). Diarrhea cases found in Indonesia in 2021 at all ages reached 7,350,708 people and in children under five reached 3,690,984 people, while diarrhea cases at all ages reached 2,473,081 people by 33.6% and in children under five reached 879,569 people by 23.8%. The highest case finding of diarrhea in 2021 was found in West Java Province.

Diarrhea disease in West Java is the 4th leading cause of death for children under five in Indonesia in 2021 with 22 people (Ministry of Health, 2022). Cirebon City / Regency is one of the cities in West Java with a high prevalence of diarrhea. Based on data from 2021, the number of diarrhea cases in Cirebon City was 8,563 people and Cirebon Regency was 30,706 people (West Java Health Office, 2021).

In addition to the use of pharmacological techniques in handling diarrhea, non-pharmacological techniques can be an alternative in handling diarrhea such as giving honey. The intervention was carried out by giving honey 3 times a day and given as much as 5 ml / 6 hours to children. Honey can inhibit 60 species of bacteria, fungi, and viruses that cause diarrhea. Honey can accelerate healing in diarrhea disease, the possibility of honey has microbial activity from several reactions in the form of low water activity in honey, lower pH and also hydrogen peroxide content. Hydrogen peroxide is an antiseptic compound, which makes this honey can be used as a substitute for antibiotics. (Andayani, 2020). Complementary nursing is increasingly used by patients and is becoming more accepted in Europe. A study showed that 24.6% of people in Belgium used complementary care including honey, hypnotherapy, acupressure (Syaripudin, A. 2023).

This study is in line with research conducted by Anwar, et al (2023) with the title of the effect of honey therapy on acute diarrhea in children aged 13-35 months at the delitua health center, deli Serdang sub-district in 2022 with a sample of 16 people, it was found that there was an effect between giving honey to acute diarrhea in children with a value in the treatment group p-value = 0.001 or < a 0.05 and a control group of p-value = 0.031 < a 0.05. Another study by Yunita, et al (2022) with the title of the effectiveness of honey therapy to reduce the frequency of diarrhea in South Lampung margorejo village with a case study obtained the results after the application of honey therapy there was a decrease in the frequency of diarrhea in children.

From the above background, researchers are interested in conducting research related to the effectiveness of giving honey to reduce the frequency of diarrhea in children with acute gastroenteritis at Waled Hospital, Cirebon Regency.

METHODS

The method uses a qualitative approach with case studies as the main method. Data collected through interviews, documentation, data analysis up to the provision of interventions and evaluation. The research was conducted in the Anyelir Room of Cirebon Regency Waled Hospital in February 2024. The sample in this study were children admitted with a diagnosis of acute gastroenteritis which focused on the nursing problem of diarrhea. Providing honey interventions 3 times / day is given as much as 5 ml / 6 hours in children.

RESULTS AND DISCUSSION

Based on the results of the examination of the patient through history and physical examination, the results showed that the patient had liquid stools with mucus 4x a day, fever up and down for 3 days, did not want to eat, the child liked spicy food, random snacks, nausea, vomiting, concentrated yellow urine,

temperature 37.5 oC, pulse 89 x/min, respiration 22x/min, oxygen saturation 98%. Face looked pale, skin turgor decreased, hyperactive bowel sounds.

After the researcher analyzes the data to establish a nursing diagnosis. Researchers apply interventions in accordance with evidence-based practice nursing (EBP), namely the provision of honey during patient care until discharge. This honey is given 3 times / day as much as 5 ml / 6 hours in children. Evaluation of the results obtained that after being given honey therapy, the frequency of bowel movements was reduced with the consistency of a little mucus and sandy stools.

Researchers conducted research in February 2024 in the carnation room of the Cirebon Regency Waled Hospital in patients with acute gastroenteritis characterized by diarrhea, nausea, vomiting, hyperactive bowel noise. In line with research conducted by Fajrin, et al (2022) One of the diseases characterized by diarrhea is acute gastroenteritis, which is an inflammation that occurs in the mucosa of the gastrointestinal tract characterized by diarrhea and vomiting. Diarrhea is an increased frequency of defecation and occurs more than 3x and with a mushy and watery consistency due to the water content in the stool> 200 ml/24 hours which lasts < than 14 days.

In this study, researchers provided honey therapy while the patient was being treated until the patient was discharged, giving honey 3x / day as much as 5 ml / 6 hours in children. The results of the intervention provided reduced frequency of defecation with a consistency of defecation slightly mucous and sandy. This is in line with the research of Tehrani et al., (2018) honey contains antibacterial compounds that can overcome the bacteria that cause diarrhea. Honey can minimize pathogen growth, and reduce the duration of diarrhea. Honey has a high sugar content so that it can increase osmotic pressure and can inhibit the growth and development of bacteria (Andayani, 2021).

Based on several studies, honey has been shown to have an inhibitory effect on the growth of various species of gram-positive and gram-negative, aerobic and anaerobic bacteria. These properties are utilized in apitherapy, a branch of unconventional medicine that uses bee products in the prevention and treatment of disease. The antimicrobial activity of honey is due to its physical properties (low acidity and high osmotic pressure) and enzymatic factors (glucose oxidase, lysozyme) as well as its chemical content (thermostable antibiotic substances: phenolic acids, flavonoids, benzoic acid, essential oils) and its components, millions (Ratajczak et al., 2021). From laboratory tests and clinical trials, pure honey has bactericidal activity against several enteropathogenic organisms, including Salmonella, Shigella and E. Coli species (Samarghandian et al., 2018).

CONCLUSION

In this study, patients with acute gastroenteritis had diarrhea. Then the intervention was given honey. After giving the intervention, the evaluation was continued. The results of the evaluation showed that honey was effective in reducing the frequency of diarrhea in children.

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