

The Description Of The Level Knowledge Of Health Professionals About The Disease Diarrhea And Hydration In Children Aged 1-5 Years, In The Emergency And Pediatric Room Of The Eduardo Ximenes Baucau Regional Hospital (2024).

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Received: 29 Aug 2024; Accepted: 02 Sep 2024; Published: 10 Sep 2024

Citation: Carlos Boavida Tilman. The Description Of The Level Knowledge Of Health Professionals About The Disease Diarrhea And Hydration In Children Aged 1-5 Years, In The Emergency And Pediatric Room Of The Eduardo Ximenes Baucau Regional Hospital (2024). AJMCRR 2024; 3(9): 1-7.

ABSTRACT

Introduction: Diarrhea is one of the causes of death of children under five years of age (babies) worldwide. That this diarrhea disease is caused by viruses, bacteria, and protozoa. According to WHO and the United Nations Children's Fund (WHO & UNICEF, 2023) reported that there are about two billion cases of diarrheal diseases in the world each year and 1.9 million children under the age of 5 die from diarrhea. Of all child deaths from diarrhea, 78% occur in South-East Africa and the Asian Region. In Timor-Leste, the cause of hospitalization of children due to diarrhea in hospitals in Timor-Leste also occupies the second place (18.7%) of the total number of hospitalized children.

Research Objective: To know the level of knowledge, understanding and application of health professionals in the care of children in diarrhea diseases with hydration for children aged 1-5 years at the Eduardo Ximenes Baucau Regional Hospital, 2024.

Research Methodology: This research uses a quantitative descriptive method, and the sample technique uses Non-Probability Sampling with the Accidental Sampling type in the definition of 36 study sampling.

Result and Discussion: Data Respondent characteristic about variable Knowing for the level knowledge of health professionals in the care of the disease diarrhea dehydration for children aged 1-5 years in the emergency room and pediatrics majority know well with the most acceptable category with a value of 80% and do not understand 20%, according to the research result.

Conclusion: *Through the distribution of the questionnaires to the respondents with a total of 36 people. With their results, which demonstrated that health professionals know how to care for diarrhea and dehydration diseases for children aged 1-5 years in the emergency and pediatric room of the Eduardo Ximenes Baucau Regional Hospital, the majority is more acceptable with a total of 69% and do not accept 31%, cited by (Tilman, CB, et al., 2024) site <https://www.ajmcrr.com>.*

Keywords: Knowledge, Diarrhea and Dehydration.

INTRODUCTION

According to the WHO and the United Nations Children's Fund (WHO & UNICEF, 2023) reported that there are about two billion cases of diarrheal diseases in the world each year and 1.9 million children under the age of 5 die from diarrhea. Of all child deaths from diarrhea, 78% occur in South-east Asia and the Africa Region. Based on the results of the Indonesian Health Profile (2020), it was known that diarrhea disease is an endemic disease in Indonesia and is also a disease often accompanied by death. According to Setiyaningrum (2018), the greatest danger for children with diarrhea is dehydration, that is, losing too much fluid from the body. This will increase the danger if it is accompanied by vomiting. Malnourished children have compromised immune systems and are at high risk of experiencing life-threatening complications. Whereas, in the long run, diarrhea can also cause stunted growth and development of children because, in children with diarrhea, there is a loss of nutrients in the body according to (Santi, 2016).

Diarrhea is defecation (defecation) that is characterized by defecating more than 3 times a day with the consistency of more liquid stools, except in neonates (babies < 1 month of age) who are breastfed, usually defecate more frequently (5-6 times a day, per day) with a good consistency considered normal. Diarrhea is a leading cause of morbidity and death in almost all geographical areas of the world and all age groups can suffer from diarrhea, includ-

ing children under the age of five. In addition, diarrhea in young children, if not treated properly, can cause death, (Nastia, 2014). Children who have diarrhea will have symptoms such as frequent bowel movements with the consistency of liquid or watery stools, and there will be signs and symptoms such as dehydration (decreased turgor of the skin, sunken crown and eyes, dry mucous membranes), fever, vomiting, weakness accompanied by pain. Therefore, diarrhea management must be carried out appropriately and accurately to overcome the impact of diarrhea (Bruner & Siddhartha, 2015).

On the other hand, the researcher finds and notes in the 2017 Surveillance of Systems and Epidemiology, shows that Timor-Leste diarrhea has the second to the incidence of 10 major diseases notified by health centers. According to the report, the cause of hospitalization of children with diarrhea in hospitals in Timor-Leste also occupies the second place (18.7%) of the total number of hospitalized children. The incidence rate of simple diarrhea in babies under 1 year of age is 345 per 1,000 and in children aged 1 to 4 years it is 180 per 1000 children. Thus, diarrhea also contributes to 15% of infant mortality among children admitted to hospitals in Timor-Leste. According to demographic and health data in Timor-Leste, infant mortality between the ages of 0-5 is 65 per 1,000 live births. The prevalence of diarrhea in children under 5 years of age, according to a study, shows that it is important to implement it carefully in the practice

of implementation and daily analysis of each family, with a percentage of 8.9% cited by (Tilman CB et al, 2021).

According to the Ministry of Health of Timor-Leste (MSTL, 2020) the Guido Valadares National Hospital (HNGV) registered, between January and August, 294 patients with symptoms of diarrhea and nine deaths under the age of five year. Of the total of 294 patients of children with symptoms of diarrhea, nine eventually died. Most of the children receiving treatment in the pediatric room of the HNGV were transferred from other municipalities. Meanwhile, of the nine deaths, five were children who had been hospitalized for suffering from severe malnutrition and four cases of diarrhea with other complications. We recorded 50 cases of diarrhea in January 2023. From February to June, there was a decision in the order of 10 to 40 cases. However, it would increase in June with 60 cases and in August another 70 new cases. There were 294 patients of children who, for eight months, underwent hospital treatment at the time of discharge, a number in the pediatric room. Based on primary and secondary data at the Eduardo Ximenes Regional Hospital, Baucau shows that there is a case of diarrhea for children, in the pediatric and emergency room in 2021 with a total of 11 cases, male with 6 children and female with 5 children. For the year 2022 with 8 cases, male 2 children and female 6 children. For the year 2023 with a total of 14 cases, male 8 children and female 6 children. Therefore, the total entered the year 2021-2023 with 33 cases of children diarrhea cited by (Tilman CB., et al, 2024).

Research Objectives:

- To identify the characteristics of health professionals (Age, Gender, Education Level, and

Service Experience in the Emergency and Paediatrics room at Eduardo Ximenes Baucau Regional Hospital, 2024).

- To know the level of knowledge of health professionals about the disease diarrhoea dehydration based on the characteristic at the Eduardo Ximenes Baucau Regional Hospital, 2024.

THEORETICAL FRAMEWORK

Human knowledge according to (Nursalam, 2022) is divided into 6 levels, such as:

1. Knowing is like remembering previously learned material. Included in this level of knowledge is the recollection of something specific from all the material studied or the stimuli received. So, knowing is the lowest level.
2. Comprehension is like an ability to correctly explain about what is already known and can interpret the material correctly.
3. Application can be interpreted as an ability to use material that has been studied in a real-world condition.
4. Analysis is an ability to describe a material or an object as a component, but still within the organizational structure and still related to each other.
5. Synthesis is an ability to compose or connect, plan, summarize, adapt something to existing theories or formulations.
6. Evaluation refers to the ability to make an evaluation of a material or object, this evaluation is based on self-determined criteria.

The knowledge scale is defined by Sri Lestari as follows: Good knowledge (76% - 100%), Adequate knowledge (56% - 75%) and Less knowledge (Nursalam, 2022) (< 55%). According to Rahayu (2018) there are seven (7) parts that the influence of knowledge is: education, experience, age,

information, socio-culture, service and environment.

Diarrhea is a condition where the consistency of the stool is softer or waterier than normal for a day or up to two weeks (Bizuneh et al, 2017). The World Health Organization (WHO, 2018) has revealed that there are several things that cause diarrhoea, including:

Infection usually occurs in inadequate sanitation and hygiene, clean water for drinking, cooking and cleaning. Rotavirus and Escherichia coli are two common causes of moderate to severe diarrheal illness in low-income countries. The causes of other pathogens are the Cryptosporidium and Shigella species.

Malnutrition makes children susceptible to diarrhoeal diseases, so the incidence of diarrhea worsens malnutrition.

Environment For example, water contaminated with human excrement, wastewater, septic tanks, and waterfalls is a particular concern. Animal waste contains microorganisms that can cause diarrhea.

Another cause of the disease diarrhea can also be transmitted from one person to another, due to poor personal hygiene, food prepared or stored in unhygienic conditions, unsafe handling of household water, fish and seafood from polluted waters can also cause diarrheal illnesses and not providing exclusive breastfeeding can cause diarrhea due to some substances that cannot be digested by the child's body.

According to Leksono (2015), the degree of dehydration is based on the percentage of water loss of body weight, namely:

- 1) Mild dehydration, that is, when there is a water loss of 5% of body weight.
- 2) Moderate dehydration, when there is a water loss of 10% of body weight.
- 3) Severe dehydration, particularly when there is a water loss of 15% of body weight.

On the other hand, the World Health Organization (WHO, 2018) classified diarrhea into the following categories:

Diarrhea without dehydration

The signs found in diarrhea without dehydration are well and conscious, the eyes are sunken, the desire to drink is normal and you do not feel thirsty, and the turgor of the skin is still normal or returns immediately.

Diarrhea due to mild (moderate) hydration

Mild hydration diarrhoea is characterised by two or more signs. As the child begins to become restless and agitated, sunken eyes, the desire to drink begins to appear and there is a sensation of thirst and the turgor of the skin gradually returns.

Severe/severe self-moisturizing diarrhea

Signs found in children with severe hydration diarrhea include children who appear lethargic, flabby, and even experience a loss of consciousness. Sunken eyes, decreased desire to drink, and skin turgor returns very slowly.

According to the World Health Organization (WHO, 2017) the treatment of diarrhea includes:

Oral rehydration

Rehydration is carried out in oral form (ORS). It is a mixture of water, sugar, and salt. The small intes-

tine absorbs ORS to replenish water and electrolytes lost in the stool.

Zinc Supplements

Zinc can reduce the duration of diarrhea by up to 25% and is associated with decreased stool volume by up to 30%.

Rehydrate with fluids

Rehydrate with intravenous fluids if severe hydration or shock is present

Nutrient-dense foods

Diarrhoea can be overcome by providing foods that contain many nutrients, including exclusive breastfeeding when sick or not sick.

Consult a healthcare professional

When diarrhea is persistent or there is blood in the stool and if there are signs of hydration. According to the (WHO, 2017) reveals that there are several ways to prevent diarrhea, namely: Access to drinking water; Use of adequate sanitation; Wash hands with soap Exclusive breastfeeding for the first six months of the baby's life; Personal hygiene and food hygiene; Health education on the spread of diarrhea; Take a vaccine against the disease is rotavirus.

According to Haryanto (2016), due to diarrhea, the sudden loss of fluids and electrolytes can result in several complications such as:

- Mild, moderate, severe, hypotonic, isotonic, or hypertonic dehydration).
- Hypovolemic shock.
- Hypokalaemia (symptoms of meteorism, weak muscle hypotonia, and bradycardia).
- Secondary intolerance due to damage to the villi of the intestinal mucosa and deficiency of the

enzyme lactose.

RESEARCH METHODOLOGY

We use the research method is quantitative, descriptive, non-probability sampling technique, Accidental sampling. The population in this study was the nurses in the emergency and pediatrics room of the Eduardo Ximenes Baucau Regional Hospital, with a total of 40 samples. Technical data collection is the questionnaire instrument. We used to collect from the questionnaire and analyze it in the computer program of the SPSS model (Statistical Package for the Social Sciences) version 24.

RESULTS AND DISCUSSION:

Table 1. The distribution frequency level of education.

Level of Education	Frequency (n)	Percentages (%)
Licencatura	27	75
Bachelorato	9	25
Total	36	100%

Table 2. Distribution frequency gender of study

Gender	Frequency (n)	Percentage (%)
Masculine	14	39
Feminine	22	61
Total	36	100%

Table 3. Distribution of frequency year in study

Year	Frequency (n)	Percentage (%)
25-39	29	80
40-45	6	17
46-68	1	3
Total	36	100%

Table 4. Distribution frequency of knowledge respondents the study

Knowledge	Frequency (n)	Percentage (%)
Plus Aceitable	29	80
Aceitable	5	14
Confusion	2	6
Inaceitable	0	0
Plus Inaceitable	0	0
Total	36	100

Table 4. shows the characteristics of the respondents in the level of education of the nurses who attended in the emergency room and pediatrics, with a majority of 75% education. Table 4, shows the characteristics of the respondents for the gender of the health professionals in the emergency room and pediatrics, with a female majority, with a value of 61%. Based on Table 4.3, the characteristics of the respondents regarding the age of the nurses worked in the emergency room and pediatrics, most of them aged 25-30 with a value of (80%). Based on Table 4 the characteristics of the respondents for the variable Knowledge about the knowledge of nurses who worked in the emergency and pediatric rooms with the majority with a more acceptable category with a value (80%) percentages in the research base.

Table 5. Distribution frequency of characteristics of respondents based on applications knowing that study.

Understand	Frequency (n)	Percentage (%)
Plus Aceitable	29	81
Aceitable	4	11
Confusions	3	8
Inaceitable	0	0
Mines aceitable	0	0
Total	36	100%

Based on Table 5. the characteristics of the respondents on the variable Length of the nurses' level of knowledge in the care of diarrhea diseases, hydration in the emergency room and pediatrics, most of them with the most acceptable category with value (81%). Based on table 5, the characteristics of the respondents on the variable Application of the level of knowledge of nurses in the care of the disease diarrhea and hydration in the emergency room and pediatrics, most with a more acceptable category with value (69%), on the result of analysis and interpretation cited by (Tilman CB., et al, 2024).

CONCLUSION

Level of Knowledge (Knowledge), which they have already captured in table 4.5, demonstrate that they are already doing in the investigation through the distribution of questionnaires to respondents with a total of 36 people. With the results, they demonstrated that nurses know how to care for diarrhea and dehydration for children aged 1-5 years in the emergency and pediatric room of the Eduardo Ximenes Baucau Regional Hospital, most of whom were better with 35 number percentage (97%).

Level Knowledge (Understanding) that some of them taken in table 3, shows that already doing the research through the distribution of the questionnaires to the respondents with a total of 36 people. Their results showed that nurses understand the care of diarrhea and dehydration for children aged 1-5 years in the emergency and pediatric room of the Eduardo Ximenes Baucau Regional Hospital, most of whom had a better category of 35 and percent (97%), compared to the two results equally.

Knowledge Level (Application). The final analysis of the questionnaires based on table 4.4 shows that the questionnaires were already being used in the research by distributing the questionnaires to the respondents with a total of 36 people. With the results, they demonstrated that nurses know how to apply diarrhea and dehydration to children aged 1-5 years in the emergency and pediatric room of the Eduardo Ximenes Baucau Regional Hospital, most of whom have a better category with a frequency of 36 and percent 100% cited by (Tilman, C.B., et al, 2024).

REFERENCES:

1. Community Health Centre of Becora. (2021). Statistics Report of Integrated Management Childhood Illness (IMCI). Access date on October 30th 2021.
2. National Directorate of Statistics (2015). Timor-Leste Demography Health Survey. ICF Macro Calverton, Maryland, U.S.A.
3. Darmadi, H. (2015). Metode penelitian Pendidikan. Bandung: Alfabet.
4. Ministry of Health Timor-Leste (2018). Annual Statistics Report. Office System Information and Surveillance Epidemiology.
5. Rudin, I. et al. (2015). Epidemiology and Aetiology of Childhood. WHO SEARO.
6. Rolim, J. et al. (2014). Permanent Education in the Context of Nursing and Health. Brazilian Nursing Nursery.
7. Sousa T. (2012) The relationship between Escherichia Coli at refill drinking water depots with the incidence of diarrhoea in children under five in Dom Aleixo District, Dili Regency. University of Indonesia, Jakarta.
8. Tilman, C.B et al. (2020). The Perception of Population and Health Professionals regarding the National immunization Program of Timor-Leste. Health Systems and Policy Research, ISSN 2254- 9137 Vol.7 No.1:2 2020. www.imedpub.com published date May 11, 2020.
9. Tilman CB et al, 2021. DIARRHEA IN CHILDREN 0-5 YEARS OLD AT THE COMMUNITY HEALTH CENTER OF BECORA: HEALTH PROMOTION AS A MEASURE OF INTERVENTION, <https://www.ajmcrr.com>
10. Tilman, C. B., Gaio, E. G., Noronha, H., Araújo, A. N., Guterres, A. P., & Deus, E. d. (2022). The Therapeutic Relationship Nurse/Client/Family In Nursing Care In a Surgery Service. American Journal of Medical and Clinical Research & Reviews, 1 (1), 1-9. In site <https://www.ajmcrr.com>
11. Gomes, M. D., Teixeira, L., & Ribeiro, J. (2021). Framing Occupational Therapy Practice: Mastery & Process (4th ed.).
12. Villar, V. C., Martins, M., & Rabello, E. T. (2023). Quality of care and patient safety: the role of patients and families. Health in Debate, 46(135), 1174-1186.
13. Tilman, C.B., Ximenes, J. D., de Carvalho, J. G., Fernandes M. C., Belo, O. S., Pinto, J. (2022). Dengue Fever Based on Epidemiological Situation: Current Outbreak in Timor-Leste on January 2020 Until February 2022. Nursing & Primary Care. 2022; 6 (5), 1-5. In site <https://www.scivision.pub.com>