
EVALUATION OF USE OF DIARRHEA DRUG IN PEDIATRIC PATIENTS AT DOLAT RAYAT HEALTH CENTER KARO DISTRICT

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Abstract

Diarrhea is a condition in which there is an imbalance in absorption, secretion of water and electrolytes, resulting in a frequency disorder of defecation more than 3 times a day with liquid or semi-solid stools, with or without mucus or blood. Diarrheal disease is still a global problem with a high degree of morbidity and mortality in various countries, especially in developing countries, and is one of the main causes of high child morbidity and mortality in the world. This study aims to determine the profile and rationality of using diarrhea drugs in pediatric patients at the Dolat Rayat Health Center, Karo Regency. This research was conducted using a retrospective descriptive method. The results of the study from the Dolat Rayat Health Center in Karo Regency showed that of the 235 patients who suffered from diarrhea the most were men (63-83%) and at the age of 2 years old infants (48.51%) with an average per patient of 1.28 drug items. The most widely used type of diarrhea drug was zinc (62.67%) in the form of syrup (54.67%). The rationality for using diarrhea medicines based on the 2011 Indonesian Ministry of Health guidelines includes the criteria for right indication (100%), right drug (100%), right patient (99.15%), and right dose (96.17%). Most of the use of diarrhea drugs in pediatric patients at the Dolat Rayat Health Center in Karo Regency is rational.

Keywords: Diarrhea, pediatric patients, evaluation of use of diarrhea medications

INTRODUCTION

Until now diarrhea or often also called Gastroenteritis, is still one of the main health problems of the Indonesian people. From the list of reasons for visits to the Puskesmas/Treatment Center, diarrheal diseases are almost always included in the 3 main causes for people visiting the Puskesmas. The morbidity rate is around 200-400 cases of diarrhea among 1,000 residents each year. Thus, in Indonesia, around 60 million incidents of diarrhea can be found each year, the majority (70-80%) of these sufferers are children under 5 years of age (40 million incidents). This group experiences more than one incident of diarrhea each year. Some of the sufferers (1-2%) will become dehydrated and if not immediately assisted 50-60% of them may die.

Five steps to resolve diarrhea according to the RI Ministry of Health (2011): 1. Give ORS, 2. Give Zinc for 10 consecutive days. 3. Continue to breastfeed and eat, 4. Give antibiotics selectively, 5. Give advice to mother/family. Giving zinc is highly recommended in the treatment of diarrhea, zinc is one of the micronutrients that is important for the health and growth of children. Zinc in the body will decrease in large quantities when the child has diarrhea. To replace zinc lost during diarrhea, children can be given zinc which will help cure diarrhea and keep children healthy.

Giving zinc at low doses can cause non-optimal therapy, while at higher doses it can cause vomiting, fever, anemia and reproductive disorders (Agustian et al, 2009). Other efforts to prevent diarrhea include breastfeeding, improving complementary foods, using clean water, washing hands, disposing of baby feces properly, washing milk bottles properly and providing measles immunization because giving measles immunization can

prevent more severe diarrhea (Ministry of Health, 2010). Management of diarrhea from year to year is known that the knowledge of health center staff in managing diarrhea is still low. ORS and zinc have not been fully given to sufferers of diarrhea (Agtini, 2011).

Formulation of the problem

Based on the things stated above, the formulation of the research problem is:

1. What type of diarrhea medicine is most often prescribed to pediatric patients at the Dolat Rayat Health Center in Karo Regency for the period January-July 2017?
2. Is the use of diarrhea drugs in pediatric patients at the Dolat Rayat Health Center in Karo Regency for the January-July 2017 period based on the accuracy of the indications, the accuracy of the patient, the accuracy of the drug, and the accuracy of the dosage?

METHODS

Types of research

This study uses a descriptive method, namely research that aims to obtain an objective description or description of a situation, data collection is carried out retrospectively, namely a study that examines information or retrieves past data (Budiarto, E, 2002)

Time and Location of Research

This research was conducted in January-July 2017. The location of this research was conducted at the Dolat Rayat Health Center in Karo Regency. The Puskesmas was chosen based on the consideration that there are more residents around the puskesmas and no research has been conducted on evaluating the use of diarrhea drugs in pediatric patients with diarrhea at the puskesmas and with the consideration that cases of diarrhea are included in the 10 biggest diseases in the puskesmas.

RESULTS AND DISCUSSION

Therapeutic Characteristics

Percentage of Use of Diarrhea Drugs in Patients with Diarrhea

The diarrhea drugs that were often prescribed and used were zinc as much as 188 with a percentage of 62.67%, followed by ORS as many as 68 drugs with 22.67%. And the least prescribed and used are loperamide as many as 2 drugs.

Distribution of Use of Diarrhea Drugs Based on Combination

This is in accordance with WHO and UNICEF recommendations regarding the management of diarrhea in children, namely by adding zinc supplements to oral rehydration therapy. Giving zinc is recommended for the treatment of diarrhea for 10-14 days because it is proven that giving zinc during and immediately after diarrhea can reduce the severity and duration of diarrhea, and reduce the likelihood of diarrhea reappearing 2-3 months later (Ulfa, 2012).

Percentage of Use of Diarrhea Drugs in Patients Based on Dosage Forms

Based on the results of research from the Dolat Rayat Health Center in Karo Regency in Table 5.4. the most widely used dosage forms were diarrhea drugs in the form of syrup with 164 percent with a percentage of 54.67%, followed by powder form with 82 with an order of 27.33%.

Evaluation of Diarrhea Drug Use

The rational use of diarrhea drugs in this study was based on 4 categories, namely the right indication, the right drug, the right patient and the right dose. Based on the research conducted, the following is evaluation data on the use of diarrhea drugs in pediatric patients at the Dolat Rayat Health Center, Karo Regency, from January 2017 to July 2017.

Precise Indication

Appropriate indication, namely the administration of drugs according to indications of disease (Ministry of Health, 2008). The use of a diarrhea drug is said to be an appropriate indication if the use of the drug for diarrhea is indicated for patients who have symptoms of diarrhea. Cases that are not properly indicated are patients who are given drugs that are not in accordance with the diagnosis.

Right Medicine

The selected drug must have a therapeutic effect according to the disease and is a drug of choice (Depkes RI, 2008). Selection of the right drug, namely a drug that is effective, safe, and in accordance with the patient's condition Drug use can be said to be inappropriate or irrational if it is at risk that may occur outweigh the benefits from the correct use of the drug.

Right Patient

Appropriate patient is drug therapy by considering safety and suitability for the patient's condition. Treatment is said to be appropriate for the patient if the drug given is in accordance with the physiological and pathological conditions of the patient or there are no contraindications to the patient's condition.

Correct Dosage

The right dose is the selection of drugs according to the dose, frequency, use and duration that are appropriate for the patient. Analysis of drug administration based on the parameters of the right dose was evaluated in patients who received the drug with the right criteria for the drug.

CLOSING

Conclusion

Based on the research that has been done, the conclusions of this study are:

1. Based on the results of research from the Puskesmas in Karo Regency, the male sex suffered more from diarrhea, 150 people (63.83%), the most commonly used diarrhea drug in pediatric patients was zinc, 188 drugs (100%) out of 300 drugs in the dosage form of sinup (54.67%).
2. The rationale for using diarrhea drugs in pediatric patients is based on the criteria for the right indication (100%), the right drug (100%), the right patient (99.15%), and the right dose (96.17%).

REFERENCES

- Agcini, DM (2011). Simasi Diarrhea in Indonesia., Window Bulletin of Health Data and Information, Vol 02, Quarter II, No. 08, 2011, Bakti Husada Indonesian Ministry of Health: Jakarta.
- Agustian, L., Sembiring, T., Ariani. (2009). The Role of Zinkum on Children's Growth. Retrieved from: <http://sariperdiatri idai.or.id/pdfile/11-4-4.pdf> Accessed, 21 January 2018.

- Anonymous (2014). ISO Specialist Information on Indonesian Drugs volume 50. Jakarta: Publisher PT. ISFI. Matter. 426.
- Budiarto, E., Anggraeni, D. (2002). Introduction to Epidemiology. Edition II: Jakarta: EGC. Matter. 123.
- Republic of Indonesia Ministry of Health. (2010). Guidelines for Eradicating Diarrheal Diseases. Jakarta: Directorate General of PPM and PL.
- Republic of Indonesia Ministry of Health. (2011). Diarrhea Cross Health Worker's Pocket Book (Five Steps to Overcome Diarrhea). Indonesian Ministry of Health. Matter. 13.
- Republic of Indonesia Ministry of Health. (2014). Indonesian Health Profile. Jakarta: Ministry of Health of the Republic of Indonesia. Matter. 25.
- Health Office (2014). Sumatra Province Health Profile. North in 2014. North Sumatra Provincial Health Office, page, 25.
- Indriani, R., and Asri, EK (2007). New ORS formulation and zinc supplementation in treating diarrhea in children. POM info. 8(3). Matter. 4-5.
- Jas, A., (2007), Regarding Recipes and Doses and Prescription Writing Exercises. Ed. 1. Medan: University of North Sumatra Press.
- Juffrie, M., Soenarto, SSY, Oswari, H., Arief, S., Rosalinal, Mulyani, NS (2015) Textbook of Indo-Hepatology Children's Gastroenterology. Jakarta: Publishing Agency of the Indonesian Pediatrician Association. Volume 1.
- Republic of Indonesia Ministry of Health. (2011). Guidelines for Socialization Management of Toddler Diarrhea. Jakarta: Directorate General of Disease Control and Environmental Health.
- Republic of Indonesia Ministry of Health. (2013). Basic Health Research (RISKESDAS) 2013. Health Research and Development Agency, Ministry of Health of the Republic of Indonesia. Jakarta: Ministry of Health of the Republic of Indonesia. Matter. 85.