

Conference Paper

Toddlers Diarrheal Cases in the UPTD Coastal Areas of the Wadiabero Public Health Center in the Years 2018-2020

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Abstract.

The toddler phase is a transition sequence from a baby to an infant. In this phase the toddler needs full support from parents regarding growth and development to prevent them from contracting a deadly disease like diarrhea. Diarrhea is an endemic disease in Indonesia and is referred to as an extraordinary disease which often causes death. One of the regency in Indonesia affected by diarrhea is the Central Buton Regency, especially at the Wadiabero Public Health Center. Diarrhea at the Wadiabero Public Health Center has increased year by year. The diarrhea cases mostly appear at the age of 0-1 years old. The annual survey of nutrition data showed that patients with diarrhea are predicted to not get enough of exclusive breastfeeding during the infant phase.

Keywords: *Diarrhea, Toddler, Malnutrition, Exclusive Breastfeeding*

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1. INTRODUCTION

Diarrhea is an endemic disease in Indonesia which potentially become of extraordinary disease which is often cause death. In 2000 the Incidence Rate (IR) of diarrheal disease was 301/1000 population and in the year 2003 it rise to 374/1000 population. In the year 2006 it was rise 423/1000 population and in 2010 became 411/1000 population. Diarrhea is rank 7th in the frequency of the most Extraordinary Disease after dengue fever, chikungunya, food poisoning, diphtheria and measles. This case is not much different from 2009. According to the 2009 Integrated Surveillance Data for Extraordinary Diseases, diarrheal disease outbreak is the 7th most that causes Extraordinary Disease. The habit of washing hands before eating and after defecating is connected to the cases of diarrhea.[1]

Toddlers are one of the population groups who are easily to get infected. The life of toddlers is depends on their parents. If parents neglect to carry out their responsibilities, toddlers will have various health problems such as diarrhea.[2]

Hazel (2013) states that the risk factors for diarrhea are: infants with low age or low birth weight (malnutrition infants or children and children with impaired immunity), a

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history of respiratory tract infections, young mothers with limited experience in caring for the baby, the level of education and knowledge of the mother regarding hygiene, health and nutrition. Those things regarding to the mother herself and the baby, knowledge, attitudes, and behavior in breastfeeding and complementary feeding, introduction of non-breast milk/bottle milk use and treatment of acute diarrhea caused by not finished. A low level of knowledge about diarrhea, a mother tends to find it difficult to protect and prevent her toddler from transmitting diarrhea. Poor knowledge causes people to have their own and different views on diarrheal disease. Poor knowledge towards diarrhea includes prevention knowledge and action when children have diarrhea are need to be improve. Personal hygiene is a person's efforts to maintain cleanliness and health to obtain physical and psychological well-being (Wahit Iqbal, 2008).

The working area of the Wadiabero Health Center is in the coastal are that mostly people work as fisherman. Diarrhea Casesin infants under five at the UPTD Wadiabero Health Center in 2018 reached 11 cases, in 2019 it increase dramatically to 27 cases and in 2020 it decreased to 9 cases.

2. METHODOLOGY OF THE STUDY

Wadiabero Public Health Center is one of the health centers located in the Gu District, Central Buton Regency. The working area of the Wadiabero Health Center is in the coastal area and the majority of the local people are fishermen.

This study used quantitative type of research which describes the diarrhea cases in toddlers with a comparison of data in 2018, 2019 and 2020. The data was obtained from annual data at the Wadiabero Health Center.

3. RESULT OF THE STUDY

Based on data obtained and published by the annual report of the Wadiabero Health Center in 2018 2019 and 2020 shown as presented in tabular form as follows:

3.1. Diarrhea spreads cases on toddlers under five

Diarrhea cases spreads in infants under five based on annual data at the UPTD Wadiabero Health Center which can be presented in the form of a bar chart below:

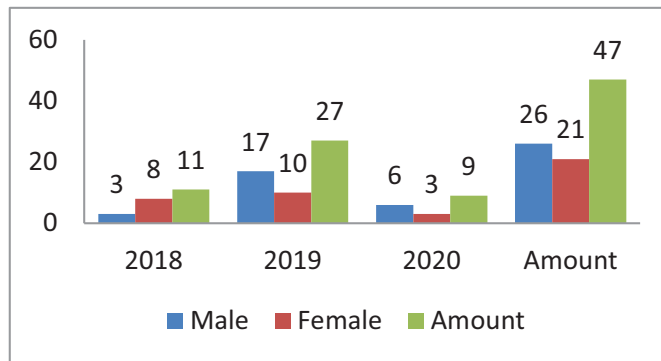


Figure 1: Sources: Annual report of diarrhea.

The UPTD Wadiabero Health Center annual datashow that thediarrhea cases of from year to year have increased. In 2019 there was a drastic increase with 17 male cases and 10 female cases with 27 cases.

Distribution of the diarrhea cases in infants under five by gender and age.

Based on diarrheal diseases spreads in children under five by gender and age obtained from the Wadiabero Public Health Center in 2018, 2019 and 2020 are as follows:

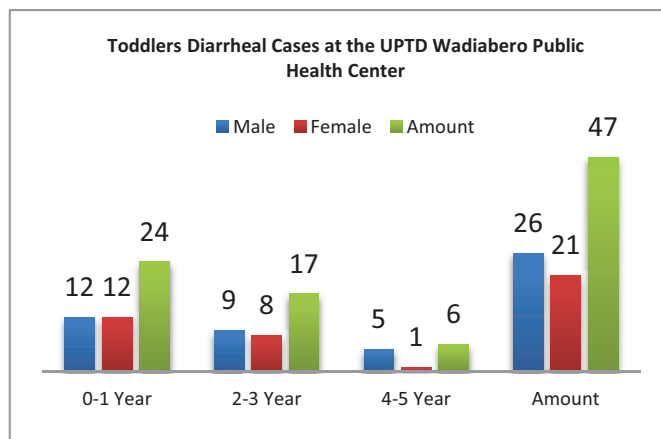


Figure 2: Sources: Annual report of diarrhea.

The results showed that based on the bar chart above, the spreads of diarrheal cases was more prevalent in males with a total of 26 cases than females with a total of 21 cases so that the total cases reached 47 cases in the last 3 years.

The most cases of diarrhea occurred in 2019 with a distribution of 19 cases for men and 7 cases for women with a total of 27 cases. Minimal cases occurred in 2018 and 2020 with a distribution of 5 cases for males and 4 cases for females with a total of 9 cases.

4. DISCUSSION

Toddler age is a golden period that every parent must be aware of. The growth and development of toddlers is monitored through routine activities at the Posyandu (Integrated Health Center) by measuring weight and height.

One of the diseases that are often found among toddlers who live in coastal areas is diarrhea. Mothers are needed to be responsive to respond to diarrhea because it can result in loss of a lot of fluids.

Diarrhea is one of the digestive tract diseases that are often found in the community, namely a disease characterized by watery bowel movements more than three times a day (WHO, 2009). Diarrhea in infants is generally caused by bacteria, viruses, parasites that are spread through contaminated food and drink or contact with the patient's feces. Diarrhea is a disease that is also related or based on the environment, the main factor of which is contamination of water by feces that accumulates with unhealthy human behavior.[4]

The relationship between the diarrhea cases and the history of exclusive breastfeeding

The diarrhea cases in the working area of the Wadiabero Health Center were more dominant at the age of 0-1 years with a total of 24 cases, based on the results of data from nutrition found infants aged 0-1 years were malnourished and had no history of exclusive breastfeeding.

Breastfed babies are healthier than formula-fed babies, because formula feeding babies can increase the risk of urinary tract, digestive tract, and ear infections. Babies can also get diarrhea, abdominal pain (colic), food allergies, asthma, diabetes and chronic gastrointestinal diseases. Conversely, babies who are breastfed will help optimize the development of the nervous system and the development of the baby's brain.

The results of the relationship test of this study showed that there was a significant relationship between exclusive breastfeeding and the incidence of diarrhea ($p = 0.000$), where mothers who did not exclusively breastfeed their babies had more than eight times greater risk of suffering from diarrhea in their babies, compared to those who did not exclusively breastfeed their babies. The results of the study are the same as the results of research conducted by Tamimi, Journalists and Sulastri (2016), namely there is a relationship between exclusive breastfeeding and the incidence of diarrhea in infants in the Nanggalo Padang Health Center area ($p = 0.014$).

The results of this study provide information that one of the efforts to prevent diarrhea in infants is to practice exclusive breastfeeding/breastfeeding behaviors for infants for at least six months and can be continued for up to two years.

Based on the results of research conducted by Gede Odi Bayu D. P., the calculation results obtained a negative relationship between exclusive breastfeeding and diarrhea with a correlation value of -0.646. This indicates that the increase of exclusive breastfeeding will decrease the incidence of diarrhea, and vice versa if exclusive breastfeeding decreases, the incidence of diarrhea will increase. It can be concluded that infants who were not exclusively breastfed had a 1.8 times risk of developing diarrhea compared to infants who were exclusively breastfed. Similarly, a study by Utami concluded that infants who received partial breast milk would be susceptible to diarrhea and upper respiratory tract infections (ARI). The risk of infants receiving partial breastfeeding for the incidence of death from diarrhea and ARI is 2.23 times higher when compared to infants who are exclusively breastfed.[5]

The nutritional status of children under five is one indicator of the nutritional status in the community. Nutritional status influences the growth and development of children under five. Disease severity is related to the nutritional status of children and mortality. The results of this study did not show a significant relationship between history of illness and nutritional status with the index of BW/U and BW/T.

Other factors that affect the nutritional status of children are nutrient intake and parenting. In contrast to previous studies, it was shown that there was a negative relationship between the frequency of diarrhea and ARI and the nutritional status of children under five years old based on BB/U, TB/U and BB/TB. Shows that the more often children experience diarrhea and ARI, the worse the nutritional status based on BB/U, TB/U and BB/TB. In addition, frequent and prolonged childhood illness can cause loss of appetite, absorption, metabolic disorders, and behavioral changes, which can further affect the nutritional status of a child. On the other hand, poor nutritional status can predispose children to illness or prolong the duration of recovery. Diseases such as malaria, diarrhea, vomiting, and fever have a negative effect on the nutritional status of children under five.

A mothers need to apply the principles of good feeding for sick children, such as giving smaller amounts of food with frequent duration and paying attention to the texture of food, can fulfill the child's nutritional intake during illness. The parents' actions are so that the child continues to experience a normal nutritional status.

5. CONCLUSION

Toddler diarrhea cases under five is dominantly on the ages 0-1 years old with a total of 24 cases. The results of the annual data survey turned out to be a significant relationship between the nutritional status of infants under five and a history of exclusive breastfeeding. A history of exclusive breastfeeding is the main factor in preventing diarrhea. Infants who are not exclusively breastfed have a 1.8 times infected compared to infants who are exclusively breastfed. The healthy and enough nutrients of children under five is one main nutrient to prevent the toddler. The children need to be prevented from infections so they can grow well.

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