

Factors related to the incidence of diarrhea in children 1-5 years in the work area of Ujung Padang Health center, Simalungun district

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ABSTRACT

Diarrhea is a condition where the frequency of defecation is more than 4 (four) times in infants and more than 3 (three) times in children, the consistency of watery stools, can be green in color or can also be mixed with mucus and blood. Diarrheal disease is a health problem in developing countries, especially in Indonesia, both in rural and urban areas. Diarrhea is an endemic disease that often appears as an Extraordinary Event (KLB). Diarrheal disease is still a public health problem in developing countries such as Indonesia, because of its high morbidity and mortality. The morbidity survey conducted by the Sub-Directorate for Diarrhea, Ministry of Health from 2000 to 2010 shows an increasing trend of incidence. In 2000 (Incidence Ratio) IR Diarrhea disease 301/1000 population, in 2003 increased to 3741/1000 population, in 2006 increased to 423/1000 population and in 2010 to 411/1000 population. Research Objectives To determine the Factors Associated with the Incidence of Diarrhea in Children Under Five Years Old in the Puskesmas Area of Ujung Padang District, Simalungun Regency in 2016. This type of research is analytic with a cross sectional approach. The population of this study is mothers who have toddlers 1-5 years. The sample of this study were mothers who had toddlers aged 1-5 years who visited the Ujung Padang Health Center. The results of the study based on the results of the Chi-Square statistical test obtained the relationship between age and the incidence of diarrhea p value - 0.02 < α (0.05), education with the incidence of diarrhea p value - 0.02 < α (0.05), knowledge of incidence of diarrhea p value 0.00 < α (0.05), attitude towards the incidence of diarrhea p value 0.00 < α (0.05), behavior towards the incidence of diarrhea p value - 0.00 < α (0.05). So that it is known that there is a relationship between age, education, knowledge, attitudes, behavior towards the incidence of diarrhea in toddlers 1-5 years. It is hoped that the results of the research can become input and suggestions for health workers at the Ujung Padang Health Center in maintaining and improving health services, especially preventing diarrhea.

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INTRODUCTION

Diarrhea is a condition where the frequency of defecation is more than 4 (four) times in infants and more than 3 (three) times in children, the consistency of watery stools, can be green in color or can also be mixed with mucus and blood. Diarrheal disease is a health problem in developing countries, especially in Indonesia, both in rural and urban areas. Diarrhea is an endemic disease that often appears as an Extraordinary Event (KLB). Diarrheal disease is still a public health problem in developing countries such as Indonesia, because of its high morbidity and mortality. The morbidity survey conducted by the Sub-Directorate for Diarrhea, Ministry of Health from 2000 to 2010 shows an increasing trend of incidence. In 2000 (Incidence Ratio) IR Diarrhea disease 301/1000 population, in 2003 increased to 3741/1000 population, in 2006 increased to 423/1000 population and in 2010 to 411/1000 population. Research Objectives To determine the Factors Associated with the Incidence of Diarrhea in Children Under Five Years Old in the Puskesmas Area of Ujung Padang District, Simalungun Regency in 2016. This type of research is analytic with a cross sectional approach.

The population of this study is mothers who have toddlers 1-5 years. The sample of this study were mothers who had toddlers aged 1-5 years who visited the Ujung Padang Health Center. The results of the study based on the results of the Chi-Square statistical test obtained the relationship between age and the incidence of diarrhea p value - 0.02 \times a (0.05), education with the incidence of diarrhea p value - 0.02 \ll a (0.05), knowledge of incidence of diarrhea p value 0.00 \times a (0.05), attitude towards the incidence of diarrhea p value 0.00 \ll a (0.05), behavior towards the incidence of diarrhea p value - 0.00 \ll a (0.05). So that it is known that there is a relationship between age, education, knowledge, attitudes, behavior towards the incidence of diarrhea in toddlers 1-5 years. It is hoped that the results of the research can become input and suggestions for health workers at the Ujung Padang Health Center in maintaining and improving health services, especially preventing diarrhea

Formulation of the problem, what factors are related to the incidence of diarrhea in toddlers in the working area of the Ujung Padang Health Center, Simalungun Regency in 2016?

RESEARCH METHOD

Researcher Design

This research method is quantitative which is analytic, with an observational design through a *cross-sectional approach* in which the independent and dependent variables are asked at the same time to respondents in the working area of the Ujung Padang Health Center, Simalungun Regency in 2016.

Place and time

The location of this research was all mothers who had toddlers aged 1-5 years who visited the Ujung Padang Health Center from January 2016 to June 2016 totaling 552 people.

Data analysis

Data analysis was carried out in stages which included univariate, bivariate,

a. Univariate analysis

Univariate analysis was performed to get an overview of each dependent variable and independent variable. The data will be presented in the form of a frequency distribution.

b. Bivaria analysis

Bivariate analysis is to determine whether there is a relationship between the independent variables (categorical) and the independent variables (categorical) by using the Kai Square Test or Chi Square.

To determine the significance of the results of statistical calculations, a significance limit of 0.05 was used. Thus if the p value < 0.05 then the calculation results are statistically significant and if p > 0.05 then the results of the statistical calculations are not significant.

RESULTS AND DISCUSSIONS

Data analysis

Based on the results of research conducted by researchers, the number of respondents was obtained as many as 71 mothers who have children under five years old and presented in the form of distribution as follows:

The distribution of independent variables in the quantitative analytic study of factors related to the incidence of diarrhea in children under five years old in the working area of the Ujung Padang Health Center, Simalungun Regency, in 2016 showed that out of 71 respondents, 47 young mothers (66.2 %), aged 24 respondents (33.8%), mothers with low education were 40 respondents (56.3%), higher education were 31 respondents (43.7%), mothers with less knowledge were 34 respondents (47, 9%), 12 respondents (16.9%) had good knowledge, 46 respondents (64.8%) had negative maternal attitudes, 25 respondents (35.2%) had positive attitudes, 38 respondents had poor maternal behavior (53.5%), and good behavior by 33 respondents (46.5%).

Bivariate Analysis

Bivariate analysis was conducted to see the relationship between the independent variables (age, education, knowledge, attitudes, behavior) and the dependent variable (diarrhea) and to analyze these data using the Chi-square test.

Based on Table 3-3: the distribution of the relationship between mother's age and the incidence of diarrhea in children under five years old in the working area of the Ujung Padang Community Health Center, Simalungun Regency, in 2016, the results obtained from 47 mothers who had toddlers 1-5 years old, there were 33 people (70, 2%) young mothers whose toddlers had diarrhea, and 14 people (29.8%) mothers whose toddlers did not have diarrhea. Of the 24 mothers who had toddlers aged 1-5 years, there were 10 mothers (41.7%) whose toddlers had diarrhea, and 14 mothers (58.3%) whose babies did not have diarrhea. It can be concluded that more young mothers experience diarrhea than older mothers.

Based on the results of the Chi-Square statistical test, a p value of $-0.02 < \alpha (0.05)$ was obtained. So that it is known that there is a relationship between the age of the mother and the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency in 2016.

The statistical test results obtained an OR (Odds Ratio) value of 3.300 with a 95% confidence level, it was believed that the OR value was between (1.185-9.129). This shows that young mothers have a 3.3 times chance that their babies will get diarrhea compared to older mothers.

Based-Table.5.5. The distribution of the relationship between mother's knowledge and the incidence of diarrhea in toddlers 1-5 years in the working area at the Ujung Padang Health Center, Simalungun Regency in 2016 showed that 34 mothers had less knowledge, including 28 mothers (82.4%) whose toddlers had diarrhea. and 6 (17.6) mothers whose toddlers did not experience diarrhea. Of the 25 mothers who had sufficient knowledge, 13 (52.0%) had diarrhea and 12 (48.0%) mothers had no diarrhea. Of the 12 mothers who had good knowledge, 2 of them (16.7 %) had diarrhea and 10 mothers (83.39%) had no diarrhea. It can be concluded that mothers who have less knowledge have more diarrhea than mothers who have sufficient knowledge and good knowledge. Based on the results of the Chi-Square statistical test, the p value is $-0.00 < \alpha (0.05)$. So

that it is known that there is a relationship between Mother's Knowledge and Diarrhea in Toddlers 1-5 Years in the Work Area at the Ujung Padang Health Center, Simalungun Regency in 2016 the results obtained from 46 mothers who had a negative attitude including 38 people (82.6%) mothers whose toddlers had diarrhea, and 8 people (17.4%) mothers whose toddlers did not experience diarrhea. Of the 25 mothers who had a positive attitude, 5 (20.00) mothers had diarrhea, and 20 (80.0%) mothers had no diarrhea. It can be concluded that mothers who have a negative attitude are more likely to have diarrhea than mothers who have a positive attitude.

CONCLUSION

There is a relationship between the age of the mother and the incidence of diarrhea in children aged 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency, in 2016, the results of the CAI-Square statistical test obtained a p value - 0.02 « a (0.05). So that it is known that there is a relationship between the age of the mother and the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency.

There is a Relationship between Mother's Education and the Incidence of Diarrhea in Toddlers 1-5 Years in the Working Area of the Ujung Padang Health Center, Simalungun Regency, in 2016 the results of the Chi-Square statistical test obtained a p value – 0.02 Sa (0.05). So that it is known that there is a relationship between mother's education and the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency.

There is a relationship between mother's knowledge of the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency, in 2016, the Chi-Square statistical test obtained a p value – 0.00 sa (0.05) . So that it is known that there is a relationship between mother's knowledge and the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency.

There is a relationship between the mother's attitude towards the incidence of diarrhea in toddlers 1-5 years in the Working Area of the Ujung Padang Health Center, Simalungun Regency, in 2016 the results of the Chi-Square statistical test obtained a p value of 0.00 ± (0.05). So that it is known that there is a relationship between the mother's attitude towards the incidence of diarrhea in toddlers 1-5 years in the working area of the Ujung Padang Health Center, Simalungun Regency.

There is a Relationship between Mother's Behavior and Diarrhea in Toddlers 1-5 Years in the Working Area of the Ujung Padang Health Center, Simalungun Regency in 2016, the results of the Chi-Square statistical test obtained a p value.

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