ANALYSIS OF FACTORS RELATED TO THE INCIDENT OF DIARRHEA IN TODDLERS AT THE AR RAHMAN CLINIC IN 2023

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Abstract

Background : Diarrhea is a disease that causes feces to come out more than 3 times with a liquid consistency that can contain blood or mucus and a frequency that occurs more often than normal (World Health Organization, 2019). Diarrhea is an endemic disease with the potential for Kejadian Luar Biasa (KLB). which is often accompanied by death in Indonesia. The eastern group with the highest prevalence of diarrhea (based on diagnosis from health workers) is in the 1-4 year age group at 11.5% and in infants at 9%. The coverage of diarrhea findings in toddlers in Bali province amounted to 37.3% in 2019. The prevalence of diarrhea in West Java province according to characteristics based on Riskesdas 2018 was recorded as 1,286 (10.40%) children with diarrhea in the age group < 1 year, 5,312 (13.43%) children with diarrhea aged 1-4 years, 12,806 (6.98%) na with diarrhea group. The number of diarrhea sufferers found and treated in Karawang in 2018 was 57,682 cases (29,869 male sufferers and 27,813 female sufferers) or 94.82%. The diarrhea rate in Karawang Regency is 48/1000 population. research purposes: This is a problem for the child's health level because the factors that trigger diarrhea in toddlers are the knowledge/agent, environment and behavior of the mother or family itself.Methods: This type of research is quantitative analytical descriptive using a descriptive correlation design with a cross-sectional approach where the research instrument uses a questionnaire. The sample for this study was mothers with toddlers aged 1-4 years who came for treatment at the Ar Rahman clinic. The sampling technique uses a questionnaire. Data analysis carried out was univariate analysis and bivariate analysis using the Chi-Square Test.Research Results: results with a total of 80 respondents that Knowledge/Agent on the incidence of Diarrhea, the P Value of respondents is 0.024 <0.05, while for Environmental Factors the P Value of respondents is 0.000 <0.05, and for Behavior factors the P Value is 0.000 <0.05. respondents is 0.000 <0.05. Conclusions and suggestions: the factors that can cause diarrhea are the environment, knowledge and behavior, for health facilities to carry out health education, socialization, and apply Health Care to families in order to increase knowledge, behavior and a healthy environment

Keywords: Factors Associated with Diarrhea

Introduction

Diarrhea is a disease that causes feces to come out more than 3 times with a liquid consistency that can include blood or mucus and a frequency that occurs more often than normal (Worth Health Organization, 2019). Diarrhea is an endemic disease with the potential for Extraordinary Events (KLB). which is often accompanied by death in Indonesia. The eastern group with the highest prevalence of diarrhea (based on diagnosis from health workers) is in the 1-4 year age group at 11.5% and in infants at 9%. The age group 75 years and over is also an age group with a high prevalence (7.2%). Lintas diarrhea (Five Steps to Solve Diarrhea) recommends that all diarrhea sufferers must receive ORS, so the target for ORS use is 100% of all diarrhea cases that receive services at community health centers and cadres. Apart from that, the public still does not know about the benefits of ORS as a fluid that must be given to every diarrhea sufferer to prevent dehydration (Indonesian Ministry of Health, 2020).

According to data (World Health Organization, 2019) diarrhea is an environmentally based disease and occurs in almost all geographical areas in the world. Every year there are around 1.7 billion cases of diarrhea with a death rate of 760,000 children under 5 years. In developing countries, children under 3 years of age experience an average of 3 episodes of diarrhea per year. Based on the 2019 Indonesian Health Profile, it shows that the number of diarrhea sufferers in Indonesia is 2,549 people and the Case Fatality Rate (CFR) is 1.14%. According to age characteristics, the highest incidence of diarrhea in Indonesia occurs in toddlers (7.0%). The largest proportion of diarrhea sufferers in toddlers with the highest incidence was in the 6-11 month age group, namely (21.65%). then the 12-17 month age group was (14.43%), the Ar Rahman Medika Clinic showed cases of diarrhea in the last five years, namely in 2019 there were 358 cases of which 158 were diarrhea in toddlers, in 2020 there were 392 cases, 207 of which were diarrhea in toddlers, In 2021 there were 482 cases, 198 of which were diarrhea in toddlers, in 2022 there were 554 cases, 277 of which were in toddlers, and in 2023 until the end of October there were 439 cases, 307 of which were diarrhea in toddlers (Ar Rahman Medika Clinic 2023). This data was taken by recapitulating medical record visits with each diagnosis, to find out the number of diarrhea occurrences in toddlers at the Ar Rahman Medika clinic. The treatment provided by the Ar Rahman Medika clinic is by providing health education to every toddler who experiences diarrhea, especially to parents to better maintain a clean environment. In cases of diarrhea at the Ar Rahman clinic, there are mortality rates in 2020, 2023 and 2024.

Resaerch and Methods

This type of research is descriptive quantitative analysis using a descriptive correlation design with a cross-sectional approach where the research instrument uses a questionnaire. where data collection regarding independent variables or risks and dependent variables or consequences will be carried out at the same time. The population in this study were mothers who had toddlers aged 1-4 years who came for treatment at the Ar Rahman clinic. The sample in this study was mothers who had toddlers aged 1-4 years who came for treatment at the Ar Rahman clinic, namely by selecting samples from among the population. that will be studied by researchers, so that the sample will represent the characteristics of the population. Sampling in this research was carried out for 7 days with a total of 80 respondents. This research was conducted in Kinik Ar Rahman in 2023.

Research Result

The data is processed and analyzed using Univariate and Bivariate Analysis. The results of the Univariate Analysis can be seen from table 1.1

Table 1.1 Frequency distribution of respondents based on Univariate Test at Ar Rahman Clinic Karawang in 2023 (n = 80)

No	Variable	Category	Frekuency	Precent
1	Employment	Doesn't work	18	22,5%
		IRT	37	46,3%
		Civil servants	4	5,0 %
		Self-employed	21	26,3 %
2	Education	Not completed in primary school	1	1,3 %
		Finished elementary school	16	20 %
		Finished middle school	32	40%
		Finished high school		
			31	38,8 %

From table 1.1 above, it is known that the distribution of work and education with a number of respondents of 80 people was found to be the highest with 37 respondents who had jobs as housewives, while respondents with education figures including junior high school were 32 respondents.

Table 1.2 Frequency distribution of respondents based on factors causing diarrhea at the Ar Rahman Clinic Karawang in 2023 (n = 80)

No	Variable	Category	Frekuency	Precent
1	Knowledge	Good	11	13,8 %
		Bad	69	86,3%
2	Environment	Good	56	70 %
		Bad	24	30%
3	Behavior	Good	42	52,5%
		Bad	38	47,5%

From table 1.2 above, it is known that the distribution with good data distribution was 11 people (13.8%) while the data distribution of respondents who were not good was 69 people (86.3%). Meanwhile, there were 56 people (70%) in a good environment, while the distribution of respondent data that was not good was 24 people (30%). the data distribution for good behavior was 42 people (52.5%) while the data distribution for respondents with poor behavior was 38 people (47.5%).

Table 1.3 Frequency distribution of respondents based on the incidence of diarrhea at the Ar Rahman Clinic Karawang in 2023 (n = 80)

Diarrhea	Frekuency	Precent (%)
Yes	22	27,5 %
No	58	72,5 %

Based on table 1.3 above, the incidence of diarrhea in respondents with toddlers who experienced diarrhea, the results of the data distribution were 22 people (27.5%) while the data distribution of respondents who did not experience diarrhea was 58 people (72.5%).

Table 1.4 Frequency distribution of respondents Analysis of knowledge/agent factors related to the incidence of diarrhea in toddlers at the Ar Rahman Clinic in 2023 (N = 80)

Knowledge	Diarrhea				Total		P Velue
	Yes		No				
	N	%	N	%	N	%	
Good	1	2,9	38	20,1	39	23	0,024
Bad	31	37,1	10	39,9	41	77	
Total	32	40%	48	60%	80	100	
Environment							
Good	8	25	48	60	56	25	0,000
Bad	24	75	0	0	24	75	
Total	32	40%	48	60%	80	100	
Behavior							
Good	3	9,3	39	42,2	42	51,5	0,000
Bad	29	30,7	9	18,8	38	48,5	
Total	32	40%	48	60%	80	100	

Based on the results of table 1.4, it shows that respondents with good knowledge and diarrhea were 1 respondent (2.9%) while respondents with good knowledge and no diarrhea were 38 respondents (20.1%). Then the respondents who lacked knowledge and experienced diarrhea were 31 people (37.1%) and the respondents who lacked knowledge and did not experience diarrhea were 10 people (39.9%). The Chi Square test results obtained a Chi-Square p value of 0.024 (p value < 0.05). Respondents with a good environment with diarrhea were 8 respondents (25%) while respondents with a good environment and no diarrhea were 48 respondents (60%). Then there were 24 respondents whose environment was poor and experienced diarrhea, and 0 respondents whose environment was poor and did not experience diarrhea were 0 people (0%). The Chi Square test results obtained a Chi-Square p value of 0.024 (p value < 0.05). Respondents with good behavior with diarrhea were 3 respondents (9.3%) while respondents with good behavior and no diarrhea were 39 respondents (42.2%). Then the respondents who behaved poorly and experienced diarrhea were 29 people (30.7%) and the respondents who behaved poorly and did not experience diarrhea were 9 people (18.8%). The Chi Square test results obtained a Chi-Square p value of 0.000 (p value < 0.05). This means that there is an influence between Knowledge, Environmental and Behavioral Factors on the incidence of diarrhea in toddlers at the Ar Rahman Clinic, Karawang. From this analysis, a value of 0.576 was also obtained, it can be concluded that behavior is one of the factors that can cause diarrhea rates.

Discussion

Based on the results of the distribution of job respondents, mothers who have toddlers aged 1-4 years who came for treatment at the Ar Rahman clinic, out of 80 respondents with data of not working, 18 people (22.5%), 37 people were housewives (46.3%), then there are 4 civil servants (5%) and 21 self-employed people (26.3%), this is in line with research presented by (Yuliana, 2014) that mothers' work is the cause of diarrhea in toddlers aged 1-4 years who come for treatment at the clinic Ar Rahman, due to busy work, mothers have less control over their children's health, as well as mothers' lack of time to maintain their children's health and screen them to detect causes of children's health, one of which is diarrhea.

The results of the distribution of respondents based on the number of educational levels did not complete elementary school amounted to 1 person (1.3%), completed elementary school amounted to 16 people (20%) while respondents who completed junior high school amounted to 32 people (40%) and those with completed high school totaled 31 people (38.8%) of the total population, this result is in line with research conducted by (Santosa, 2009) explaining that the higher the mother's education, the higher the behavior score obtained. The mother's education factor is very important because with education a person can receive more information, especially in maintaining the health of yourself and your family.

Analysis of maternal knowledge/agent factors regarding the incidence of diarrhea in toddlers 1-4 years old at the Ar Rahman Clinic from the results of statistical tests using the Chi square test shows that respondents with knowledge obtained the P value of respondents was $0.024 < 0.05$, so it can be concluded that Maternal knowledge/agent is one of the factors causing diarrhea in toddlers aged 1-4 at the Ar Rahman Karawang clinic in 2023. Maternal knowledge/agent has a very big influence on the incidence of diarrhea in toddlers aged 1-4 years. These results are in line with research carried out by (Reksodikuduno 1994) defines nutritional status as signs or appearances caused by a state of balance on the other hand which can be seen through certain variables called indicators, for example body weight and height, that the mother's knowledge/agent includes child nutrition, immunization or disease. Is one of the factors that influence the level of children's diarrhea. The results of the statistical data show a P value of 0.000, which means it is smaller than 0.05, indicating that there is a significant influence between maternal knowledge/agent and the incidence of diarrhea in toddlers aged 3 years. Analysis of environmental factors with the incidence of diarrhea in toddlers 1-4 years old. The results of statistical tests using the Chi Square test show that respondents and the environment obtained a P value for respondents of $0.000 < 0.05$, so it can be concluded that there is a relationship between the environment and the incidence of diarrhea. In toddlers aged 1-4 years. This is in line with research conducted by (Anne, 2008) that environmental factors which constitute the epidemiology of diarrhea or the spread of diarrhea are mostly caused by environmental factors, namely poor environmental sanitation and the socio-economic environment. If environmental factors are unhealthy because they are contaminated with diarrhea germs and accumulate with unhealthy human behavior, namely through food and drink, it will cause diarrheal disease.

Factor analysis of maternal behavior regarding the incidence of diarrhea in toddlers 1-4 years old. The results of the Chi Square test obtained a Chi-Square p value of 0.000 (p value < 0.05). So it can be concluded that there is an influence between maternal behavioral factors on the incidence of diarrhea in toddlers at the Ar Rahman Clinic, Karawang. This is in line with research conducted by (Fatmawati, 2016) Cleanliness for mothers and toddlers, especially in terms of hand washing behavior every time they eat, is something good. Most diarrheal infection germs are transmitted via the fecal-oral route. It can be transmitted by putting liquids or objects contaminated with feces into the mouth, for example drinking water and food. Hygiene habits are an important part in the transmission of diarrhea germs, changing the

habit of not washing your hands to washing your hands can stop transmission. Transmission of 14-18% of diarrhea is expected as a result of education about health and improved habits.

Conclusion

Based on research on the analysis of factors related to the incidence of diarrhea in toddlers at the Ar Rahman Clinic in 2023, the researcher/author can draw conclusions about the characteristics of respondents showing that the number of respondents whose mothers worked as housewives was 37 people (46.3%) There were 32 respondents (40%) who had completed junior high school (SMP). The number of respondents who experienced diarrhea during the study was 22 people (27.5%). The results of the analysis using the Knowledge/Agent Factor Chi Square test showed that the P value for respondents was $0.024 < 0.05$, so it can be concluded that there is a relationship between the mother's level of knowledge and the incidence of diarrhea in toddlers at the Ar Rahman Clinic in 2023. Results were obtained. Analysis using the Environmental Factor Chi Square test found that the P value for respondents was $0.000 < 0.05$, so it can be concluded that there is a relationship between the environment and the incidence of diarrhea in toddlers at the Ar Rahman Clinic in 2023. The results of the analysis used the Chi Square Factor test. The mother's behavior was found to be below the P value for respondents which was $0.024 < 0.05$, so it can be concluded that there is a relationship between the level of mother's behavior and the incidence of diarrhea in toddlers at the Ar Rahman Clinic in 2023.

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