CLEAN AND HEALTHY LIVING BEHAVIOR RELATIONSHIP WITH MOTHER'S ANXIETY IN CHILDREN WITH DIARRHEA AT PUSKESMAS KUNIR

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ABSTRACT

Diarrhea is a disease that is commonly found in children less than five years old. Hygiene behavior is very important and must be considered because it affects a person's health. This study aims to analyze the relationship between levels of clean and healthy behavior with maternal anxiety in children with diarrhea. This research was quantitative research with a cross-sectional approach. The population of this study amounted to 18 respondents with the Accidental Sampling sampling technique. Analyzed with SPSS using Spearman rank. The results from 18 respondents were obtained as many as 8 (44.45%) Clean and Healthy Life Behaviors were lacking, and 9 (50%) Clean and Healthy Life Behaviors were bad. While the mother's anxiety level was found to be 7 (38.88%) mild anxiety, 9 (50%) moderate anxiety 2 (11.12%) severe anxiety, an analysis of research results using spearman rank obtained a value = 0.000. The results showed 0.000 <0.05 so it can be concluded that there is a relationship between the level of clean and healthy behavior and maternal anxiety in children with diarrhea.

Keywords: Anxiety, Clean and Healthy Life Behavior, Diarrhea

ABSTRAK

Penyakit diare merupakan penyakit yang lazim ditemui pada anak-anak kurang dari lima tahun. Perilaku kebersihan hal yang sangat penting dan harus diperhatikan karena mempengaruhi kesehatan seseorang. Penelitian ini bertujuan untuk menganalisis Hubungan Tingkat Perilaku Hidup Bersih dan Sehat dengan Kecemasan Ibu Pada Anak Penderita Diare. Penelitian ini termasuk kedalam penelitian kuantitatif dengan pendekatan cross-sectional. Populasi penelitian ini berjumlah 18 responden dengan teknik pengambilan sampel Accidental Sampling. Analisis dengan SPSS menggunakan Spearman rank. Hasil dari 18 responden di dapatkan sebanyak 8 (44,45%) Perilaku Hidup Bersih dan Sehat baik, sebanyak 1 (5,55%) Perilaku Hidup Bersih dan Sehat kurang, sebanyak 9 (50%) Perilaku Hidup Bersih dan Sehat buruk. Sedangkan tingkat kecemasan ibu didapatkan 7(38,88%) kecemasan ringan, sebanyak 9 (50%) kecemasan sedang sebanyak 2 (11,12%) kecemasan berat dan analisis hasil penelitian menggunakan spearman rank di dapatkan p value = 0,000. Hasil yang dieroleh 0,000 < 0,05 sehingga dapat disimpulkan ada Hubungan antara Tingkat Perilaku Hidup bersih dan Sehat dengan Kecemasan Ibu Pada Anak Penderita Diare.

Kata kunci: Diare, Kecemasan, Perilaku Hidup Bersih Dan Sehat

INTRODUCTION

Diarrhea is often one of the epidemics that brings the most news of death. Diarrhea is a disease that is commonly found in children less than five years old, the second leading cause of death is diarrhea. In a global estimate there were 760,000 deaths from diarrhea in 2012. 0.6 million deaths occurred in children younger than five years in Pakistan, as stated by. WHO, after acute respiratory infections, diarrhea is the second order of death due to dehydration in 80% of case. 2

The factors that cause acute diarrhea in toddlers are environmental factors, mother's level of knowledge, socioeconomic community, and the food or drink consumed.³ The incidence of diarrhea can be reduced in various ways. Among others, through the use of clean water, good cooking practices, hand washing, immunization, exclusive breastfeeding, use of latrines, excreta sanitation disposal and good hygienic sanitation practices.⁴

Cleanliness in everyday life is very important and must be considered because cleanliness will affect a person's health. Diarrhea is an environmental-based disease if the environmental factors are unhealthy and contaminated with germs, it will cause diarrhea in toddlers. This illustrates that the worse the condition of an environment, the higher the incidence of acute diarrhea in

toddlers and the better the condition of an environment, the smaller the incidence of acute diarrhea in toddlers.

The environmental condition in the working area of the Kunir Health Center, Kunir District, is still relatively clean. This is evidenced from the results of observations and interviews of researchers with several people in the Kunir Health Center area who said that there are still many people who do not use healthy latrines, lack of hand washing with soap, defecate in any place, and most of the people also use rivers to wash their hands. defecation, bathing, and washing clothes. The behavior of these people can lead to diarrhea which causes mother's anxiety.

Carry out clean and healthy living behavior (PHBS), especially hygiene behavior including the habit of washing hands with soap that is right and proper as an effective way to prevent the spread of diseases such as diarrhea. However, the practice of implementing this fairly simple behavior is not always done, especially for families who are not used to it. The family has a very important role, if hygiene behavior in the family can be applied by all family members, such as the need to wash hands properly, then one of the diseases such as diarrhea will not attack easily.⁵

Based on the problems that occurred at the Kunir Health Center, researchers were

interested in examining the relationship between the level of clean and healthy living behavior with maternal anxiety in children with diarrhea at the Kunir Health Center, to reduce the number of diarrhea sufferers in Kunir District.

METHODS OF THE STUDY

This research was a quantitative research with a cross-sectional approach. The population in this study were all mothers who had children with diarrhea in the Kunir Health Center inpatient room. Using the sampling technique *Accidental Sampling* is done by taking cases or respondents who happen to exist or are available.

The inclusion criteria in this study were mothers with children suffering from diarrhea in the inpatient room of the Kunir Health Center, mothers with children who had diarrhea for the first time who were treated in the inpatient rooms of Kunir Health Center and mothers with children suffering from diarrhea without comorbidities.

In this study, the independent variable was the mother's clean and healthy living behavior regarding the implementation of the care for children with diarrhea. While the dependent variable is the mother's anxiety in caring for

children with diarrhea. The study was conducted in the Inpatient Room of the Kunir Health Center on March 4 to April 22, 2021. Questionnaire for the mother's clean and healthy living behavior in children with diarrhea using indicators of hand washing behavior, clean water usage behavior and healthy latrine use behavior with 8 questions answered. yes and no on an ordinal scale. While the anxiety questionnaire uses the Modified HARS Scale with 14 indicators.

The score with the PHBS criteria is good if the respondent gets (80-100). PHBS is sufficient if it gets a score (60-79), PHBS is less if the respondent gets a score (40-50) and PHBS is bad if the respondent gets a score (0-39). At the level of anxiety was given a score with a score of <6 (no anxiety), a score of 6-14 (mild anxiety), a score of 15-27 (moderate anxiety), a score of > 27 (severe anxiety). Correlation between PHBS and anxiety using *Spearman Rho*. In this study using an error rate of %, if Ho is rejected, H1 is accepted, it means that there is a relationship between the two variables studied.

RESULTS AND DISCUSSION

Characteristics of respondents

Characteristics including the age of mothers who have children with diarrhea, education, and occupation.

Tabel 1. Distribution of Respondents Characteristics in the Kunir Health Center Inpatient Room in 2021

Characteristics	Category	Frequency	Percentage
	20-25 Years	6	33.34%
Age	26-30 Years	3	16.66%
	> 31 Years	9	50%
	No school	0	0%
	Graduated from Elementary School / Equivalent	7	38.88%
Level of	Graduated from Middle School/Equivalent	4	22.22%
education	High school graduate / equivalent	5	27.77%
	Graduated Diploma/ Equivalent	2	11.13%
	Graduated Bachelor (S1) / Master (S2) / Doctoral (S3)	0	0%
Occupation	Housewife	10	55,56%
	entrepreneur	6	33,33%
	Teacher	2	11,11%

Based on the table above, out of 18 respondents, half (50%) are over 31 years old and a small portion (16.66%) are between 26-30 years old. As for the characteristics educational respondents, almost half (38.88%) have elementary school education and a small part (11.13%) have tertiary education. Regarding the work of mothers whose kids have diarrhea, the majority of housewives are 9 persons (55.56%). A person's strength and level of maturity increase as they become older, especially in terms of thinking and functioning. Someone who is more mature will be trusted more by the public than someone who is not mature enough. This is a product of his soul's maturity and experience.⁶ Based on the study's findings, it can be predicted that a person's strength, degree of maturity, and capacity for thinking and functioning will increase with age, which will have an impact on the respondents' responses. A person's education level has an impact on their PHBS as well because higher education levels are associated with greater understanding about PHBS, which may have an impact on survey respondents' responses.^{7,8}

Level of Clean and Healthy Life Behavior in Mothers of Children with Diarrhea

The proportion of people who live a clean and healthy lifestyle is seen in Table 2. 8 mother (44.45%) who look after children with diarrhea behave good, 1 mother (5.55%) behaves less well, and up to 9 mothers (50%) behave badly. This shows that the majority of children who

experience diarrhea have a pattern of poor mother behaviors about cleanliness and health (PHBS). Clean and healthy living behavior (PHBS) was an initiative to enable families' and enhance awareness. willingness, and capacity to engage in clean and healthy living behaviors in order to maintain and improve their health, reduce the risk of disease, protect themselves from threat of disease, and the actively

This study was in line with Putri that there was a relationship between clean and healthy living habits and the incidence of diarrhea in Polindes Palaan Ngajum. Because toddlers are still unable to care for themselves and are highly dependent on their environment, the behavior of the mother or other caregiver has a significant impact on the risk factor for diarrhea in toddlers. If the mother or caregiver is unable to properly care for the toddler, diarrhea in toddlers cannot be avoided. ¹⁰

Several actions, such as delaying the completion of breastfeeding until the child is between 4 and 6 months old, using non-sterilized milk bottles, keeping cooked food at room temperature, using tainted water for drinking, and failing to wash hands, can spread enteric germs and raise the risk of diarrhea before eating or feeding a child, after defecating, after defecating a child, or not defecating properly.¹¹

participate in the health movement in the community. 9

Tabel 2. Clean and healthy living behavior for mothers and children with diarrhea in the Kunir Health Center inpatient room in 2021

No	PHBS	Frequency	Percentage
1	Good	8	44,45%
2	Less	1	5,55%
3	Bad	9	50%
	Amount	18	100%

Mother's Anxiety Level of Children with Diarrhea

Based on table 3, respondents who experienced moderate anxiety were 9 respondents (50%) and 7 respondents experienced mild anxiety (38.89%) while 2 respondents had bad anxiety (11.11%). This demonstrates that the majority of women who have children with diarrhea experience moderate to severe anxiety.

Anxiety in mothers can be influenced by age, education and occupation. The older a person is, the more constructive they are in used coping with the problems they face. Respondents who have higher education will be better able to cope, use effective and constructive coping than someone with low education. 13

Tabel 3. Anxiety in mothers of children with diarrhea in the inpatient room at the Kunir Health Center in 2021.

No	Anxiety	Frequency	%
1	No Anxiety	0	0%
2	Mild Anxiety	7	38,89%
3	Moderate Anxiety	9	50%
4	Severe Anxiety	2	11,11%
	Amount	18	100

Diarrhea occurs in children, of course, this is a problem for mothers that triggers anxiety. A person's level of anxiety can be influenced by the age of the respondent, the more mature a person's age the level of anxiety tends to be lower because they are experienced in dealing with problems. A person's level of education can also affect a person's level of anxiety because the higher a person's education, the better he or she will be able to control anxiety, and vice versa.¹³

One of the elements that affects anxiety is work. The hypothesis that the work element is one of the components that can contribute to the formation of anxiety is supported by research. Jobs that are connected to a person's financial situation will have an impact on their stress levels, which in turn will increase their anxiety. The findings of this study are also consistent with Hermawati's (2010) study, which came to the conclusion that there is a connection between employment qualities and anxiety levels and that working women

are less likely to feel anxiety. 7

According to a different study, those who have to work and wait for a baby in the hospital would become more active, which will make them tired. Anxiety in parents is generated by fatigue as a conflict between job interests and caring for their infant while they are hospitalized.¹²

The findings revealed that the patient's mother's concern was caused by the fact that she was unsure of how to manage her child's diarrhea, whether or not the youngster was dehydrated, and whether or not the child would have trouble swallowing medication. Although anxiety cannot be completely eradicated, the patient's mother can manage it. Therefore, nurses in the room must assist the patient's mother with her issue in order to solve it and assist in responding to the situation of the mother whose child is receiving treatment for diarrhea in order for the respondent/mother to control and divert the mother's feelings of anxiety by providing excellent and satisfying service. 15

The relationship between the level of mother's clean and healthy living behavior with mother's anxiety in children with diarrhea

According to the table 4, 1 respondent (12.5%) with moderate anxiety and 7 respondents (87.5%) with mild anxiety had both good PHBS. One respondent (100%) with moderate anxiety had PHBS that was less, seven respondents (77.78%) with moderate anxiety had PHBS that was bad, and two respondents (22.22%) with severe anxiety had PHBS that was bad.

From the table 5 results obtained a significance value of 0.000 which indicates that the correlation between PHBS and anxiety levels is significant. Spearman

correlation value of 0.847 indicates that the direction of the correlation is negative with a very strong correlation strength. The sign of the negative correlation coefficient shows inverse relationship between variables. This indicates that the mother's anxiety level is decreasing as the PHBS improves. Based on the results of the Spearman Rho correlation analysis, it shows a significant value, which means that H₁ is accepted or there is a relationship between the mother's clean and healthy living behavior and maternal anxiety in children with diarrhea in the Kunir Health Center inpatient room. where is $r \le 0.05$ of <0.001.

Tabel 4. The relationship between the level of clean and healthy living behavior of mothers with mother's anxiety in children with diarrhea in the Kunir Health Center inpatient room in 2021

	<u></u>			Anxiety						
PHBS	S	evere	Me	oderat				dak .da	Total	
	f	%	f	%	f	%	f	%	f	%
Good	0	0	1	12,5	7	87,5	0	0	8	100
Less	0	0	1	100	0	0	0	0	1	100
Bad	2	22,22	7	77,78	0	0	0	0	9	100

Tabel 5. Table correlation spearman

		Correlations		
			PHBS	KECEMASAN
Spearman's rho	PHBS	Correlation	1.000	.847**
		Coefficient		
		Sig. (2-tailed)		.000
		N	18	18
	KECEMASAN	Correlation	847**	1.000
		Coefficient		
		Sig. (2-tailed)	.000	
		N	18	18
**. Correlation is	significant at the 0.01 l	evel (2-tailed).	_	

The development of mothers' clean and healthy living habits is a result of their knowledge of health, their positive reactions to health, and their ability to do it appropriately. There are three factors that influence the development of healthy behavior: information, attitudes, and behaviors or practices. By appropriately using these three elements, one will be able to control themselves and escape from anxious situations. ¹⁶

According to the study's findings, one of the elements influencing the high and low inclination of anxiety is engaging in healthy living behaviors. Nevid asserts that a variety of elements, including social and environmental factors, biological factors, behavioral factors, cognitive factors, and emotional aspects, might contribute to the development of anxiety tendencies. According to this study, the mother's anxiety level will rise the worse the behavior or environment. ¹⁶

This is also in line with research conducted by Gultom (2021) that there is a relationship between a person's level of knowledge with clean and healthy living behavior.¹⁷ Then Kastari's research (2017) in the work area of the Telaga Biru Health Center UPT, Siantan Hulu Village, Nort Pontianak, also found that one of the factors related to the implementation of household PHBS was knowledge (p value = 0.000). ²¹

The higher the PHBS level, the easier it is to understand the ability to analyze a problem faced by someone. The higher the PHBS level, the lower a person's level of anxiety because one of the factors that influence PHBS is a person's age and education or knowledge. The more mature the age, the higher a person's PHBS and higher education will be better able to cope, using effective and constructive coping than someone with low education. The results of other studies show that knowledge or information given before surgery can decrease a person's level of anxiety. ¹⁸

This study is in line with research conducted by Desta et al (2017) that there is a relationship between knowledge and anxiety levels in pre cataract surgery clients at the eye clinic of the Siti Khodijah Islamic Hospital, which concludes that health education can reduce anxiety levels and increase knowledge in preoperative patients fracture. ^{19, 20}

CONCLUSION AND SUGGESTION

There is a relationship between clean and healthy living behavior with maternal anxiety in children with diarrhea at the Kunir Health Center. Mothers should improve their clean and healthy lifestyle and prevent diarrhea, maintain children's health and hygiene, and reduce anxiety with adaptive coping patterns.

REFERENCES

- 1. Dini F, Machmud R, Rasyid R. Hubungan Faktor Lingkungan dengan Kejadian Diare Balita di Wilayah Kerja Puskesmas Kambang Kecamatan Lengayang Kabupaten Pesisir Selatan Tahun 2013. *J Kesehat Andalas*. 2015;4(2):453-461. doi:10.25077/jka.v4i2.271
- 2. Irianty H, Hayati R, Riza Y. Hubungan Perilaku Hidup Bersih Dan Sehat (Phbs) Dengan Kejadian Diare Pada Balita. *Promot J Kesehat Masy.* 2018;8(1):1. doi:10.31934/promotif.v8i1.224
- 3. Soentpiet MGO, Manoppo JIC, Wilar R. Hubungan Faktor Sosiodemografi Dan Lingkungan Dengan Diare Pada Anak Balita Di Daerah Aliran Sungai Tondano. *e-CliniC*. 2015;3(3). doi:10.35790/ecl.3.3.2015.10157
- 4. Pahmi L. Household Risk Factors for Diarrhoea Disease in Children Under Five Years Old in Indonesia Faktor-Faktor Dalam Rumah Tangga Yang Mempengaruhi. *J Ilmu Kesehat Masy.* 2019;10(March):50-58.
- 5. Sanyaolu A, Groetz R, Gillam J, et al. Global Trends of Diarrhea Diseases in Children. *Ann Microbiol Infect Dis.* 2018;1(1):24-38.
- 6. Abdinia B. Knowledge and practice of mothers in the management of children's Diarrhea, in Northwest, Iran. *Arch Pediatr Infect Dis*. 2014;2(4):2012-2015. doi:10.5812/pedinfect.17581
- 7. Kustiawan R, Cahyawati C. GAMBARAN TINGKAT KECEMASAN IBU TENTANG PENYAKIT DIARE ANAK DI RUANG ANAK BAWAH RSUD dr. SOEKARDJO KOTA TASIKMALAYA. Konf Nas

- 2020;7:197-202. https://journalpress.org/proceeding/ip kji/article/view/33
- 8. S PW, Saputra R. Faktor-Faktor Yang Berhubungan Dengan Perilaku Hidup Bersih Dan Sehat (Phbs) Di Desa Kualu Kecamatan Tambang Kampar. *Phot J Sain dan Kesehat*. 2018;8(2):121-128. doi:10.37859/jp.v8i2.725
- 9. Mashitoh S, Arso SP, Nandini N. Evaluasi Pelaksanaan Program Perilaku Hidup Bersih Dan Sehat (Phbs) Pada Masa Pandemi Covid-19 Di Puskesmas Mertoyudan 1 Kabupaten Magelang. *Media Kesehat Masy Indones*. 2021;20(4):291-299.
- 10. Aslindah A. Artikel penelitian 2020-1. 2020;6(2):97-107.
- 11. Anggraini MT, Aviyanti D, Saputri DM. PHBS yang Buruk Meningkatkan Kejadian Diare. *J Kedokt Muhammadiyah*. 2014;3(1):1-6.
- 12. Syafta S, Hasan N. Hubungan Karakteristik Dengan Tingkat Kecemasan Ibu Bayi Yang Dirawat Di Ruang NICU RSUD dr.Zainoel Abidin Banda Aceh. *J Ilm Mhs*. 2017;2(3):1-7.
- 13. Rinaldi PA, Opod H, Pali C. HUBUNGAN PENGETAHUAN DENGAN TINGKAT KECEMASAN IBU YANG ANAKNYA DI RAWAT RSUP Prof. Dr. R. D. Kandou Manado. *J e-Biomedik*. 2013;1(3):1101-1105. doi:10.35790/ebm.1.3.2013.3267
- 14. Mutiara S, Hastuti PR. Faktor-Faktor Yang Berhubungan Dengan Tingkat Kecemasan Orang Tua Bayi BBLR DI RSUD HM RYACUDU DAN RS HANDAYANI KOTABUMI –

- Lampung Utara. *J Kesehat Metro Sai Wawa*. 2016;9(1):51-55.
- 15. Tamsuri A, Lenawati H, Puspitasari H. Faktor-Faktor Yang Mempengaruhi Kecemasan Pada Ibu Saat Menghadapi Hospitalisasi Pada Anak Di Ruang Anak Rsud Pare Kediri Tahun 2008. *J Keperawatan*. 2010;1(2):83-90. doi:10.22219/jk.v1i2.404
- 16. Pitaloka¹ D, Noviekayati² I, Rina AP, Psikologi F. Gaya hidup sehat dan kecenderungan kecemasan ibu rumah tangga selama pandemi Covid-19. *J Psychol Res.* 2021;1(3):120-127.
- 17. Gultom R. Hubungan tingkat pengetahuan keluarga dengan penerapan phbs pada anak sd di dahana tabaloho. *Carplus J Nurs*. 2021;3(2):197-206.
- pendidikan kesehatan dengan kecemasan orang tua pada anak hospitalisasi. *J Nurs Stud.* 2012;1(1):163-168. https://ejournal3.undip.ac.id/index.ph p/jnursing/article/view/445/444

Indrayani A, Santoso A. Hubungan

18.

- 19. Chauhan S, Chauhan A, Shukla A. A study on the effect of skill-based health education on management of acute diarrheal diseases. *Int J Med Sci Public Heal*. 2015;4(1):81. doi:10.5455/ijmsph.2015.120920142
- 20. Desta BK, Assimamaw NT, Ashenafi TD. Knowledge, Practice, and Associated Factors of Home-Based Management of Diarrhea among Caregivers of Children Attending Under-Five Clinic in Fagita Lekoma District, Awi Zone, Amhara Regional State, Northwest Ethiopia, 2016. Nurs Res Pract. 2017;2017:1-8. doi:10.1155/2017/8084548
- 21. Kastari, S. Factors Relating to the Implementation of Clean and Healthy Living Behaviors in Households in the Upk Work Area of the Telaga Biru Community Health Center, Siantan Hulu Village, North Pontianak. equatorial sanitarian journal. 2017.9(1);1-10. 2017, 1–8. https://doi.org/10.1155/2017/8084548

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