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Indicators Of The Home Environment In Families At Risk Of Stunting In The Murai Valley Of Pontianak City

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Info article

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ABSTRACT

Stunting is a serious nutritional problem that Indonesia is still facing. One of the cities in West Kalimantan Province that still contributes to stunting cases is Pontianak City, which is the provincial capital. The condition of environmental factors that are not optimal, supported by the characteristics of slum and densely populated areas, makes Pontianak City, especially the Murai Valley, an area that is vulnerable to stunting risks. This study aims to analyze the indicators of the home environment in families at risk of stunting in the Murai Valley, Pontianak City. The research design used is descriptive observational with *a cross-sectional* approach, the number of samples is 58 respondents who are categorized as Families at Risk of Stunting. Sampling was carried out by *simple random sampling*. The location of the research is in the Murai Valley Quality Family Village, Mariana Village, Pontianak City. Data were collected through interviews and direct observations, consisting of variables such as personal hygiene, cleanliness of the home environment, and cleanliness of latrines. The data was analyzed univariate and presented in the form of tables and narratives. The results of the study showed that *the personal hygiene* of families at risk of stunting was mostly 91.4% in the poor category. The cleanliness of the home environment was not clean by 62.1%, and as many as 93.1% of respondents described the cleanliness condition of the latrines as less qualified. There is a need to improve sanitation, cleanliness of the home environment and improvements to family toilet facilities. It is also hoped that there will be awareness of families at risk of stunting related to the implementation of clean and healthy living behaviors in the family order as a form of stunting prevention efforts.

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INTRODUCTION

Indonesia is still facing nutrition problems that have a serious impact on the quality of human resources, nutrition problems that are one of the main concerns, namely stunting. Stunting is a condition of the human body that is short or even very short due to chronic malnutrition, especially in the first 1000 days of life. Lack of nutritional intake for a long time and the occurrence of repeated infections in children cause children to be classified as stunted when their height according to age is not in accordance with or lower than the applicable national

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standard. The problem of stunting in the first 1000 days of birth will have an impact on the quality of human resources in the future (Handayani 2023).

Data on the prevalence of stunting among toddlers based on *World Health Organization (WHO)* shows that Indonesia is among the third countries that have the highest prevalence in *South-East Asia Regional (SEAR)* with an average of 36.4% in 2005-2017 (Aryu Candra, 2020). Based on the trend of nutritional status, Indonesia has experienced a decrease in stunting rates in 2021 from 24.4% to 21.6% in 2022 (SSGI 2022). According to the results of the 2023 Indonesian Health Survey research, stunting is still relatively high with a figure of 21.5%, only experiencing a decrease of 0.1% compared to the previous year (SKI 2023). Based on the prevalence of nutritional status in West Kalimantan province according to the 2023 Indonesian Health Survey it has a percentage of 20.6% after experiencing a decrease of 7% from the previous year of 27.8%, In Pontianak City at the end of 2021 it had a percentage of 24.4% then at the end of 2022 it dropped to 19.7% and in 2023 it decreased by 16.7%. It needs a reduction of 3.8% per year to achieve the target of 14% in 2024 in Indonesia (SKI 2023).

Handling the reduction in stunting rates is broadly carried out through specific nutrition interventions and sensitive nutrition interventions that focus on the first 1000 days of life. Specific nutrition interventions are related to improving health nutrition while sensitive nutrition interventions are supportive interventions in reducing stunting rates such as the provision of clean water, proper sanitation, health nutrition services, increased awareness of parenting and nutrition and increased access to nutritious food. Many factors cause stunting such as toddlers who are very dependent on their mothers/families, so family and environmental conditions greatly affect which will have an impact on the development of nutritional status of toddlers. The factors in terms of the cleanliness of the home environment are still lacking as well as several things such as personal hygiene, basic sanitation, home conditions, clean water facilities, family latrines, drinking water sources, and sewage drains.

According to the Central Statistics Agency in 2022, the percentage of households that have access to proper sanitation in Indonesia reached 80.29% and for West Kalimantan it reached 77.41%. Aspects of sanitation and individual hygiene play an important role in the occurrence of stunting. The low habit of washing hands with soap is also a problem that affects stunting. Other negative behaviors, such as defecating indiscriminately in water bodies or rivers also affect health, so the ownership of healthy latrines that meet standards is important to minimize the spread of diseases directly due to human feces (Samiyati, Suhartano, & Dharminth 2019). This research focuses on the variable of personal hygiene, the cleanliness of the home environment, and the cleanliness of latrines in families at risk of stunting in the Murai Valley, Pontianak City. Previous studies have not focused on home environmental factors, sanitation, and personal hygiene which are other factors that cause stunting in toddlers. So that the focus of this research is more oriented to these factors. The community targeted in this study is in one of the areas in Pontianak City that is still exposed to risky environmental conditions. This shows that even though the location where the target group lives is in the middle of the city, it does not guarantee optimal conditions for home environmental factors and personal hygiene of the community.

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The percentage of stunting incidence is still found in the region. Murai Valley is also one of the Quality Family Villages located in the river basin in Pontianak City with the characteristics of densely populated and slum residential areas. The sanitation factor in the Murai Valley is part of environmental health problems that have an impact on public health, one of which is stunting.

METHOD

This study uses a descriptive observational design with *a cross sectional* approach. The location of the research was carried out in the Quality Family Village "Lembah Murai" Mariana Village, Pontianak Kota District, which is a river basin of Pontianak City. It will be held in June - July 2024. The population in this study is 379 families at risk of stunting who have toddlers aged 0-59 months. Based on the calculation of the sample using *the lemeshow* formula, 58 respondents were obtained, which were taken by *simple random sampling*. The variables in this study were the cleanliness of the home environment, the cleanliness of the latrines and *personal hygiene* and the incidence of stunting in toddlers. The respondents in this study have given consent to be respondents and it is proven through *informed consent* that has been prepared by the researcher. Data collection used questionnaires and observation sheets to assess the variables of home environmental cleanliness and toilet cleanliness. The data from the research results were analyzed univariably and displayed in the form of tables and narratives.

RESULTS AND DISCUSSION

Univariate Analysis

Characteristics of mothers of toddlers

Table 1. Frequency distribution characteristic of mothers under five

No.	Variable	n	%
Age			
1	18-34 years old	44	75,9
2	35-48 years old	14	24,1
Total		58	100,0
Education			
1	SD	4	6,9
2	SMP	13	22,4
3	SMA	34	58,6
4	D3/S1	7	12,1
Total		58	100,0
Working Status			
1	Not working	44	75,9
2	Work	14	24,1
Total		58	100,0
Marital status			
1	Unmarried	0	0
2	Kawin	54	93,1

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No.	Variable	n	%
3	Divorce	0	0
4	Divorce	4	6,9
Total		58	100,0
Status using KB			
1	Not using birth control	20	34,5
2	Using birth control	38	65,5
Total		58	100,0
Types of birth control			
1	No birth control	20	34,5
2	Injection	24	41,4
3	IUD	5	8,6
4	KB pil	5	8,6
5	Sterile	3	5,2
6	Spiral	1	1,7
Total		58	100,0
Number of children			
1	1 child	12	20,7
2	2 children	21	36,2
3	3 children	15	25,9
4	4 children	7	12,1
5	5 children	2	3,4
6	6 children	1	1,7
Total		58	100,0
Insurance Status			
1	None	12	20,7
2	Ada	46	79,3
Total		58	100,0
Types of insurance			
1	Non BPJS	12	20,7
2	BPJS	46	79,3
Total		58	100,0
Menarche age categories			
1	>13 years	17	29,3
2	<= 13 years	41	70,7
Total		58	100,0
Married age category			
1	Not in accordance with the Marriage Law	19	32,8
2	In accordance with the Marriage Law	39	67,2
Total		58	100,0

Source : primary data processed in 2024

Based on table 1. The frequency distribution of the characteristics of the respondents of mothers under five showed that the age of mothers under five in the age range of 18-34 years was 44 (75.9%), and the education of mothers under five was more than 34 (58.6%). The working status of mothers under five is more dominant in not working at 44 (75.9%), the

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marital status with a greater marital status is 54 (93.1%), for the status of using family planning for mothers who use more family planning is 38 (65.5%). For the type of birth control used, more mothers use the type of injectable birth control, which is 24 (41.5%) and mothers who only have 2 children are more dominant, namely 21 (36.2%). The insurance status of mothers is more who have insurance at 46 (79.3%) for the type of BPJS insurance is more dominant with a figure of 46 (79.3%). The Menarche age in mothers is more normal (<=13 years) at 41 (70.7%) and the marriage age category in accordance with the Marriage Law is 39 (67.2%). From the results of the analysis, there is still a maternal menarche age of >13 years of 17 (29.3%).

From the results of the data above, there are still mothers who have a > menarche age from 13 years old to 17 (29%). Based on the results of Lia Nurwilliani's research, adolescents who experience late menarche are one of the factors causing chronic nutritional status (height / age) and stated that there is a relationship between menarche age and stunting incidence. In adolescent girls aged 10-15 years in RW 5, 7, 8, 11 Cibangkong and RW 8 Kebon Waru Poor nutritional status due to stunting can affect reproductive development and slow down puberty, including causing late menarche. This is due to the inhibition of hormone production by the hypothalamus and pituitary gland, which in turn results in a delay in menarche. Late menarche age is associated with decreased fertility and reproductive function (Nurwiliani and Erlinda 2022). In the variable age of marriage, there are still mothers who marry under the age regulated by the Marriage Law, which is 19 years old, as many as 19 people (32.8%). Children born to mothers who marry too young are at risk of having nutritional problems, such as being thin, short, and malnourished. Mothers who are less than 19 years old tend to have poor parenting, which negatively affects the nutritional status of children. Research by Afriani showed that 63.6% of children of married mothers under 19 years old experienced stunting, which shows a significant relationship between stunting incidence and early marriage. (Abidin U.W and Afriani 2022).

Characteristics of toddler fathers

Table 2. Frequency distribution characteristic of toddler fathers

No.	Variable	n	%
Age			
1	23-35 years old	37	63,8
2	36-65 years old	21	36,2
Total		58	100,0
Education			
1	SD	1	1,7
2	SMP	12	20,7
3	SMA	41	70,7
4	D3/S1	4	6,9
Total		58	100,0
Job Type			
1	Courier	1	1,7
2	Satpol PP	1	1,7
3	Builder	1	1,7

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No.	Variable	n	%
4	Welder	1	1,7
5	Carpenter	1	1,7
6	Counter	1	1,7
7	Merchant	2	3,4
8	Driver	2	3,4
9	Self employed	6	10,3
10	Laborer	12	20,7
11	Private employees	30	51,7
Total		58	100,0
Income categories			
1	Under the MSE of Pontianak City	35	60,3
2	Above the MSEs of Pontianak City	23	39,7
Total		58	100,0
Insurance Status			
1	None	14	24,1
2	Ada	44	75,9
Total		58	100,0
Types of insurance			
1	Non BPJS	14	24,1
2	BPJS	44	75,9
Total		58	100,0
Smoking status			
1	Smoke	40	69,0
2	No smoking	18	31,0
Total		58	100,0
Smoking behavior			
1	Inside the house	18	31,0
2	Outside the home	22	37,9
3	Has stopped	7	12,1
4	No smoking	11	19,0
	Total	58	100,0
Homeownership			
1	Living with parents/in-laws	41	70,7
2	Contract/rent/cost	3	5,2
3	Own	14	24,1
Total		58	100,0

Source : Data Processed 2024

Based on table 2. The frequency distribution of the characteristics of respondents of fathers of toddlers showed that fathers of toddlers in the age range of 23-35 years were 37 (63.8%) older with the last level of high school education more dominant at 41 (70.7%). More fathers of toddlers work as private employees with a figure of 30 (51.7%), fathers' income under MSEs has a greater figure of 35 (60.3%). For insurance status, 44 (75.9%) fathers have insurance, the type of insurance used is BPJS of 44 (75.9%). The smoking status of fathers

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has a figure of 40 (69.0%) more fathers who smoke outside the house with a figure of 22 (37.9%). For home ownership, more people live in the house of their parents/in-laws with a figure of 41 (70.7%).

Family economics greatly affects the nutritional needs of toddlers. The low economic level affects the family's ability to buy necessities in fulfilling children's daily nutrition. In the study, Vinsensius Belawa Lemaking stated that there was a significant relationship between fathers' work and the incidence of stunting in toddlers in Central Kupang District, Kupang Regency, which means that fathers with non-working status have a greater chance of stunted children with working status (Lemaking, Manimalai, and Djogo 2022). Family economy is an indirect cause of stunting which is also influenced by the level of education of parents (Pearl of Tasyrifah 2021). From the data above, it still shows that the high income of families with incomes below the MSE in Pontianak City is 35 (60.35%). In the study of winda lestari, it was shown that parental income affects the risk of stunting in children aged 4 to 5 years in Lubuklinggau City, where families with low incomes affect the family's ability to fulfill additional food, healthy living habits, and the nutritional needs of toddlers are hampered (Lestari, Samidah, and Diniarti 2022).

In addition to economic factors, fathers' smoking behavior also affects the incidence of stunting in children, according to BKKBN, cigarettes contribute to the cause of stunting in Indonesia. According to WHO, around 225,700 people in Indonesia die from cigarettes or diseases caused by cigarettes. In the research, Wijaya and Erhardt have proven that there is a significant relationship between the incidence of stunting and the father's smoking behavior (Wardani et al. 2020). The high prevalence of smoking greatly contributes to the incidence of stunting as evidenced in Evi Nuryanti's research which shows that family smoking behavior has a 5.4 times higher probability of experiencing stunting compared to the behavior of families who do not smoke. Parents' smoking behavior can have an impact on children's growth, either directly or indirectly. This smoking habit can expose children to harmful chemicals from cigarettes, which has the potential to inhibit their growth process (Nooranti, Novita, and Ninsi 2024).

Characteristics of toddlers

Table 3. Frequency distribution of toddler respondent characteristics

No.	Variable	n	%
Age			
1	3-11 years	10	17,2
2	12-59 years old	48	82,8
Total		58	100,0
Gender			
1	Man	24	41,4
2	Woman	34	58,6
Total		58	100,0
Birth status			
1	Premature	2	3,4
2	Non-premature	56	96,6
Total		58	100,0

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No.	Variable	n	%
Birth history			
1	SC	10	17,2
2	Normal	48	82,8
Total		58	100,0
Categories BBLR			
1	BBLR	4	6,9
2	No BBLR	54	93,1
Total		58	100,0
Birth body length category			
1	< 48	16	27,6
2	>= 48	42	72,4
	Total	58	100,0
Immunization status			
1	Incomplete	34	58,6
2	Complete	24	41,4
Total		58	100,0
Status stunting			
1	Stunting	19	32,8
2	No stunting	39	67,2
Total		58	100,0

Source : data processed in 2024

Based on table 3. The frequency distribution of the characteristics of toddler respondents showed that toddlers in the age range of 12-59 months were more dominant with a figure of 48 (82.8%) and toddlers with a female sex were more with a figure of 34 (58.6%). The birth status of toddlers is more non-premature with a figure of 56 (96.6%) and the birth history is more normal with a figure of 48 (82.4%). The BBLR category of toddlers who are not BBLR is larger with a figure of 54 (93.1%) and the category of body length born toddlers who are >= 48 is more dominant with a figure of 42 (72.4%), toddlers with incomplete immunization status are higher with a figure of 34 (58.6%) and stunting status in the non-stunting category is greater with a figure of 39 (67.2%). From the data above, it shows that there are children with a premature birth status of 2 (3.4%) and BBLR 4 (6.9%) based on research Gita Dwi Karisma stated that the growth and development of babies born with low birth weight will take place more slowly compared to babies born with normal weight, because since in the womb, babies with a history of BBLR have experienced growth retardation as well as premature babies who have a risk of 2 (two) times more high risk of stunting, in his study showed that there was an influence between gestational age and the incidence of stunting with a significant value (0.002 < 0.05) which means that toddlers who were born less prematurely (premature) 2 (two) times more likely to experience stunting than children who had full-term (normal) births. This study also showed that there was an influence between low birth weight and stunting incidence which had a significant value (0.025 < 0.05), meaning that toddlers who had low birth weight were 2 (two) times more likely to be stunted than children who had normal birth weight (Karisma, Fauziyah, and Herlina 2022).

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In addition to prematurity and BBLR, birth length can also affect the incidence of stunting in toddlers. From the results of Vivin Eka Rahmawati's research which showed 0.001< 0.005 meaning that there was a relationship between birth length and stunting incidence, children born with PB <50 cm increased the risk of stunting compared to children born with PB ≥50 cm (Rahmavati 2020). From the data above, it was found that the dominant immunization status of children was incomplete with a large percentage, namely 34 (58.6%) as according to the research of Yosintha Dilina Wanda et al. showed a significant relationship between the history of basic immunization status and the incidence of stunting in toddlers in Hegarmanah Village, Jatinangor District, where toddlers with incomplete basic immunization had a fourfold risk of stunting. Poor nutrition and infections can both be triggered by poverty, unhealthy environment, and poor sanitation. Infections can interfere with normal immunological reactions and drain the body's energy, diseases have a negative impact on nutritional status, and if they last for a long time, can increase the risk of stunting (Wanda et al. 2021).

Distribution of *personal hygiene frequency* among families at risk of stunting in the Murai Valley, Pontianak City

Table 4. Distribution of personal *hygiene frequencies*

No.	Personal hygiene	n	%
1	Not good	53	91,4
2	Good	5	8,6
	Total	58	100,0

Source : data processed in 2024

Based on frequency distribution table *personal hygiene* In families at risk of stunting in the Murai Valley, Pontianak City, it was found that poor personal hygiene conditions were more common with a figure of 53 (91.4%). According to the research of Veramita Nanda Pradana et al., the results of data analysis are known that there is a relationship between personal hygiene and stunting The washing of hands with soap is a step taken to protect oneself from disease, the hands are a part of the body that can transfer germs through direct contact or through objects held, if the hand has touched feces, animal feces, or non-sterile body fluids then touch food or drinks without washing with soap, the food or drink can be contaminated with germs, so germs can enter the digestive tract (Pradana, Suparmi, and Ratnawati 2023). This can cause diarrhea disorders in the digestive system, If toddlers experience diarrhea, this can result in malabsorption of nutrients. If this condition is allowed to continue without being balanced with adequate nutritional intake, it can lead to stunting.

Table 5. Frequency Distribution of *Personal Hygiene Items*

No.	Item Personal Hygiene	Answer			
		Already		No	
		n	%	n	%
1	Mothers wash their hands before and after feeding toddlers	58	100,0	0	0
2	Mothers wash their hands after feeding toddlers and after bowel movements	58	100,0	0	0

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No.	Item Personal Hygiene	Answer			
		Already		No	
		n	%	n	%
3	Mother washing her hands with soap	44	75,9	14	24,1
4	The mother washes the toddler's hands with clean and running water	53	91,4	5	8,6
5	Mothers wash their hands when preparing formula for toddlers	42	72,4	16	27,6
6	Mom washing her hands when preparing toddler food	51	87,9	7	12,1
7	Mom wears a mask when coughing and catching a cold when with a toddler	31	53,4	27	46,6
8	Mother throws toddler feces in any place	0	0	58	100,0
9	Mom throws garbage in its place	56	96,6	2	3,4
10	Mother gives nutritious food to her toddler	51	87,9	7	12,1
11	Mothers make it a habit for their toddlers to wash their hands before eating	55	94,8	3	5,2
12	Mommy trimmed her fingernails and toenails regularly	47	81,0	11	19,0
13	Mothers trim toddlers' fingernails and toenails regularly	47	81,0	11	19,0
14	Mothers use healthy latrines	57	98,3	1	1,7
15	Mother forbids her toddler to suck her thumb	48	82,8	10	17,2
16	Mommy brushes my teeth and toddler's teeth (for those who already have teeth), 2 times a day	54	93,1	4	6,9
17	Bathing with clean water and soap regularly (2 times a day)	58	100,0	0	0
18	Use clothes and change underwear regularly	58	100,0	0	0

Source : data processed in 2024

Based on table 8, the frequency distribution of *Personal Hygiene Items* in Families at Risk of Stunting in the Murai Valley, Pontianak City was obtained in the items of mothers washing their hands before and after feeding toddlers and the items of mothers washing their hands after feeding toddlers and after defecation, all mothers had a "yes" answer with a number of 58 (100.0%). In the item of mothers washing their hands using soap, more mothers have an answer "yes" with the number 44 (75.9%), the item mothers wash their toddlers' hands with clean and running water more mothers have an answer "yes" with the number 53 (91.4%), the item mothers wash their hands when preparing formula milk for toddlers has more "yes" answers with 42 (72.4%), mothers wash their hands when preparing food toddlers more mothers have an answer "yes" with agka 51 (87.9%), Items of mothers using masks when coughing and running a cold when with toddlers have more "yes" answers 31 (53.4%), items of mothers throwing toddler feces in any place where all mothers have an answer of "no" 58 (100.0%), items of mothers throwing garbage in their place more mothers

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have an answer of "yes" with the number 56 (96.6%), items of mothers giving nutritious food to their toddlers more mothers have an answer of "yes" with the number 51 (87.9%), Items of mothers getting used to their toddlers washing their hands before eating more mothers have an answer of "yes" with the number 55 (94.8%), items of mothers cutting their fingernails and toenails regularly more mothers have an answer of "yes" with the number 47 (81.0%), items of mothers cutting their toddlers' fingernails and toenails regularly more mothers have an answer of "yes" with the number 47 (81.0%), Items of mothers using healthy latrines more mothers have an answer of "yes" with a number of 57 (8.3%), items of mothers forbidding their toddlers from sucking their thumbs more mothers have an answer of "yes" with the number 48 (82.8%), items of mothers brushing their mother's teeth and toddlers' teeth (for those who already have teeth), 2 times a day more mothers have an answer of "yes" with a number of 54 (93.1%). In the item of bathing using clean water and soap regularly (2 times a day) and the item of using clothes and changing underwear regularly, all mothers had a "yes" answer of 58 (100.0%).

Distribution of home environment cleanliness frequency in families at risk of stunting in the Murai Valley, Pontianak City

Table 6. Frequency distribution of home environmental cleanliness

No.	Cleanliness of the home environment	N	%
1	Less clean	36	62,1
2	Clean	22	37,9
	Total	58	100,0

Source : data processed in 2024

Based on the distribution table of the frequency distribution of home environmental cleanliness in families at risk of stunting in the Murai Valley, Pontianak City, it was found that the cleanliness of the home environment with the less clean category was greater than 36 (62.1%). Environmental sanitation is an indicator of the health of an area that includes housing, waste disposal, and clean water supply. Environmental sanitation can also be interpreted as an effort to improve and maintain the standard of basic environmental conditions that affect human welfare, especially in toddlers. In the research of Resty Ryadinency et al., the results of a statistical test using the chi square test obtained a value of P = 0.010 which means that there is a relationship between sanitation facilities and the incidence of stunting in toddlers in Pararra Village, Sabbang District in 2021, unhealthy sanitation facilities due to lack of qualifications such as sewage disposal facilities even though they have toilets and use gooseneck toilets but do not have septic tanks with channels channeled into the river, poor wastewater disposal facilities which are directly flowed into open sewers or left flooded in the yard and also the garbage disposal facilities/garbage cans used are still not good (Resty Ryadinency et al. 2022).

Table 7. Frequency Distribution Home environmental hygiene items

No.	Home environmental hygiene items	Answer			
		Already		No	
		n	%	n	%
1	Have clean running water	51	87,9	7	12,1

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No.	Home environmental hygiene items	Answer			
		Already		No	
		n	%	n	%
2	Have a trash can in the home area	53	91,4	5	8,6
3	No mosquito nests/puddles	41	70,7	17	29,3
4	No garbage/bad smell	44	75,9	14	24,1
5	Have a waste/dirty water disposal site such as a sewer	53	91,4	5	8,6
6	Home cleanliness (living room, bedroom, dining room, kitchen, WC)	43	74,1	15	25,9

Source : data processed in 2024

Based on table 9, the frequency distribution of home environmental cleanliness items in families at risk of stunting in the Murai Valley, Pontianak City, after observation, was obtained in houses that had clean running water as many as 51 (87.9%), had garbage cans in the house area as many as 53 (91.4%), there was no garbage/unpleasant smell as many as 44 (75.9%), had a waste/dirty water disposal site such as sewers as many as 53 (91.4%) and house cleanliness (living room, bedroom, dining room, kitchen, WC) as many as 43 (74.1%).

Distribution of toilet hygiene frequency among families at risk of stunting in the Murai Valley, Pontianak City

Table 8. Frequency distribution of toilet hygiene

No.	Toilet hygiene	N	%
1	Less qualified	54	93,1
2	Qualify	4	6,9
	Total	58	100,0

Source : data processed in 2024

Based on the distribution table of the frequency distribution of toilet hygiene in families at risk of stunting in the magpie valley of Pontianak city, houses that are less qualified are more dominant with a figure of 54 (93.1%), the cleanliness of many community latrines has been qualified, but some people also still have cemplung type latrines without septic tanks that are drained in the river (Soraya et al., 2022). The cleanliness of the latrines can be affected by the knowledge and attitude of the owner. Toilets used by some people can still provide opportunities for water source contamination from residents' toilets which can cause digestive disorders such as diarrhea. In the research of Teddy Firmanzah Zahrawani et al, there was a significant relationship between toilet conditions and stunting incidence (p = 0.000; p <0.05) and a three-fold higher risk of stunting.

Table. 9 Frequency Distribution of Toilet Hygiene Items

No.	Toilet hygiene items	Answer			
		Already		No	
		n	%	n	%
1	Cleaning the defecation area	45	77,6	13	22,4
2	Does not pollute drinking water sources	45	77,6	13	22,4

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No.	Toilet hygiene items	Answer			
		Already		No	
		n	%	n	%
3	Urine, clean water and pouring water do not pollute the surrounding soil, the floor is at least 1x1 meters in size and is made quite sloping, sloping towards the squat hole	43	74,1	15	25,9
4	It does not smell of feces and is not free to be touched by insects and rats	44	75,9	14	24,1
5	Has walls and covers	57	98,3	1	1,7
6	Have sufficient lighting and air circulation	31	53,4	27	46,6
7	Has a sufficient room area	33	56,9	25	43,1
8	Availability of water and cleaning tools	27	46,6	31	53,4

Source : data processed in 2024

Based on table 10, the frequency distribution of toilet hygiene items in families at risk of stunting in the Murai Valley, Pontianak City, after being observed, houses that cleaned the defecation area were found as many as 45 (77.6%), did not pollute drinking water sources as much as 45 (77.6%), urine, clean water and pouring water did not pollute the surrounding soil, the floor was at least 1x1 meters in size and made quite sloping, inclined towards the squat hole as many as 43 (74.1%), no smell of feces and not free to be touched by insects and rats as many as 44 (75.9%), have walls and covers as many as 57 (98.3%), have sufficient lighting and air circulation as much as 31 (53.4%), have enough room area as much as 33 (56.9%) and the availability of water and cleaning tools as much as 27 (46.6%).

CONCLUSION

The results of the study concluded that the home environment indicators in families at risk of stunting showed that most of the respondents' personal hygiene was in the poor category of 91.4%. The percentage of poor personal hygiene variable items are not doing CTPS, not washing hands when preparing formula milk for babies/toddlers, not wearing masks when sick, not cutting nails regularly, and not being used to giving nutritious food. Most of the cleanliness of the home environment is in the category of less clean at 62.1%. The percentage of variable items for home cleanliness is that there are still families of toddlers with unclean home hygiene conditions, both from the living room, bedroom, dining room, kitchen and also the toilet. Meanwhile, the toilet hygiene variable showed that most of the respondents were in the category of less qualified than 93.1%. Variable items of toilet hygiene that are still at risk consist of the absence of water and cleaning equipment in the toilet, insufficient toilet area, insufficient lighting and air circulation, and still some that pollute drinking water sources. The recommendations given based on the results of this study are the need for assistance efforts by health workers at health centers, cadres and village officials to families at risk of stunting, especially as an effort to improve a clean and healthy lifestyle, as well as improve personal hygiene in their daily lives. It is hoped that there will be awareness from the respondent (families at risk of stunting) to be more concerned about the cleanliness of the home environment and the cleanliness of the latrines. Respondents are also expected to be

actively involved in counseling activities as an effort to increase knowledge about the importance of personal hygiene and maintaining the cleanliness of the home environment as one of the efforts to prevent stunting.

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