



The Relationship of Personal Hygiene with the Incident of Scabies in Bumi Tamalanrea Orphanage Makassar

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ABSTRACT

The process of child growth and development is divided by age, one of which is the preschool phase. The growth and development of children at this age is very rapid, including cognitive, biological, spiritual and psychosocial development. With the rapid growth and development, education is very important to be given to form the foundation, build the personality, mentality and character of children, one of the important educations is to provide personal hygiene. Children's personal hygiene is an important aspect that includes personal hygiene from head to toe as a whole. The form of children's skills related to personal hygiene is the child's ability to control defecation and urination properly and regularly to avoid health problems, one of which is scabies. Scabies is a contagious disease caused by the infestation of *Sarcoptes scabiei hominis* variant on the skin which is characterized by itching and skin eruptions. The purpose of the study was to determine the relationship personal hygiene with the incidence of scabies. This type of research is quantitative with a cross-sectional study design. This study uses a total sampling technique. Data analysis used is univariate and bivariate analysis with the Chi Square test. The results of this study found that there was a significant relationship between personal hygiene and the incidence of scabies. The conclusion is that there is a relationship personal hygiene with the occurrence of scabies. It is recommended that party The nearest health center for Providing health education about personal hygiene has a positive impact, namely increase knowledge about personal hygiene leads to behavior or action under maintenance self Which Good, so that incident rate scabies can be minimized as much as possible.





Keywords : The Relationship, Personal Hygiene, The Incident of Scabies, Bumi Tamalanrea Orphanage, Makassar

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1. Introduction

The problem of infectious diseases and environmental quality that impact health in various countries is still a central issue handled by the government together with the community as part of the mission to improve people's welfare. Environmental and behavioral factors are still the main risks in the transmission and spread of infectious diseases caused by environmental quality, basic sanitation facilities problems and environmental pollution, so that the incidence and prevalence of environmentally based infectious diseases in Indonesia are still relatively very high. One of the infectious diseases that is a health problem is skin disease (Fabriza, 2015).

Personal hygiene independence must be instilled in children at preschool age, because it will foster habits in carrying out personal hygiene practices such as bathing, brushing teeth, washing hands with soap, cutting nails, combing hair by themselves, and can improve health. The impact that occurs if children are not instilled with personal hygiene independence at preschool age, children will potentially have health problems such as infections, skin diseases, diarrhea, worms, and cavities (Aprilie, et al. 2019).

The World Health Organization (WHO) states that as many as 300 million people in the world are reported to be affected by scabies every year. In 2017, according to the International Alliance for the Control of Scabies (IACS), the incidence of scabies varied from 0.5 % to 48%. In some developing countries, the prevalence of scabies is around 6% - 27% of the general population, affecting all races and age groups and tends to be high in children and adolescents. The incidence of scabies in 2017 was also high in several countries, including Egypt (4.4 %), Nigeria (10.5%), Mali (4%), Malawi (0.7%), and Kenya (8.3%) (Afienna, 2019).





In Indonesia in 2015, the number of scabies sufferers was 6,915,135 (2.9 %) of the population of 238,452,952 people. This number increased in 2016, where the number of scabies sufferers was estimated at 3.6 % of the population (Ministry of Health of the Republic of Indonesia, 2017).

2. Research Methods

This study uses a quantitative method with a cross-sectional study design to see the relationship between the independent variable (personal hygiene) and the dependent variable (incidence of scabies). The population in this study was 56 people with sampling techniques in data analysis using univariate analysis and bivariate analysis.

3. Results and Discussion

a. Results

Study this is done on the 10th-15th February 2020 with amount Respondent 56 people. The data collected in this study include respondent characteristics (age), *personal hygiene* (independent variable) and scabies incidence (dependent variable). Furthermore, the results of the study are presented in the following table:

1) Analysis Univariate

a) Personal Hygiene

Table 1
Frequency Distribution of Respondents
Based on *Personal Hygiene*

No	Variables	Frequency (n)	Percentage (%)
	Personal Hygiene		
1	Not enough	34	60.7
2	Good	22	39.3
	Total	56	100

Based on results study on table 1 can known that from 56 Most respondents had poor *personal hygiene*, namely 34 respondents (60.7 %).

b) Incident Scabies





Table 2
Distribution Frequency Incident Responder Scabies

No	Variables	Frequency (n)	Percentage (%)
	Incident scabies		
1	Scabies	33	58.9
2	No scabies	23	41.1
	Total	56	100

Based on results study on table 2 can known that from 56 Most respondents experienced scabies, namely 33 respondents (58.9 %).

2) Analysis Bivariate

This bivariate analysis provides an overview of the relationship personal hygiene with the incidence of scabies. This bivariate analysis uses the Chi Square test, so that the relationship between the two variables can be seen. The results of the analysis are presented in the following table:

Table 3
Personal Relationships Hygiene with Incident Scabies

Personal Hygiene	Incident Scabies				Total		POR (95% CI)	P value
	Scabies		No scabies		n	%		
	n	%	n	%				
Not enough	26	76.5	8	23.5	34	100	6,964	0.002
Good	7	31.8	15	68.2	22	100	(2.10	
Total	33	58.9	23	41.1	56	100	4- 23.05 3)	

Based on table 2, it was found that of the 34 respondents with poor personal hygiene, 8 respondents (23.5%) did not experience scabies and of the 22 respondents with good personal hygiene, there are 7 Respondent (31.8%) had scabies. Test results chi-square obtained a p value = 0.002, it can be concluded that there is a significant relationship between personal hygiene and the incidence of scabies. From the results of the analysis, the OR value was also obtained = 6.964, meaning Respondent with personal hygiene not enough have





opportunity 6,964 time more likely to experience scabies than respondents with good personal hygiene.

b. Discussion

Based on the research results, it is known that out of 34 respondents with poor personal hygiene, 8 respondents (23.5%) did not experience scabies. According to the researcher's assumption, this is possibly due to the respondents' good immune system so that they are not easily infected with scabies and respondents also rarely have contact with children who suffer from scabies.

Of the 22 respondents with good personal hygiene, 7 respondents (31.8%) experienced scabies according to the researcher's assumption, this was possibly due to frequently exchanging clothes and personal equipment with those with scabies and respondents also often had contact with children who suffered from scabies.

The chi-square test results obtained a p value of 0.002, so it can be concluded that there is a significant relationship between personal hygiene and the incidence of scabies. The analysis results also obtained an OR value of 6.964, meaning that respondents with poor personal hygiene have a 6.964 times greater chance of experiencing scabies than respondents with good personal hygiene.

According to the researcher's assumption, there is a significant relationship between personal hygiene and the incidence of scabies because respondents who experience scabies have poor personal hygiene patterns, such as wearing clothes that are not dry, towels that are wet and dirty because they have not been washed for a long time, and repeated use of school clothes.

In line with the research conducted by Ni'mah, N (2016) entitled The Relationship Between Personal Hygiene Behavior and the Incident of Scabies in Male and Female Students at the An-Nur Ngrukem Sewon Bantul Yogyakarta Islamic Boarding School. The results of the chi square statistical test obtained a value of $\tau = 71.189$ with a significant level of $p = 0.000 < 0.05$. The conclusion is that there is a relationship between personal hygiene behavior and the incident of scabies in male





and female students at the An-Nur Ngrukem Sewon Bantul Yogyakarta Islamic Boarding School.

In line with the research conducted by Rahmi (2016) entitled Personal Hygiene with the Incidence of Scabies in Wustho Students (Junior High School) at Al-Falah Islamic Boarding School, Banjarbaru. The results of the chi square statistical test obtained a value of $r = 12,590$ with a significant level of $p = 0.000 < 0.05$. The conclusion is that there is a relationship between personal hygiene behavior and Scabies in Wustho Students (Junior High School) at Al-Falah Islamic Boarding School, Banjarbaru.

In line with the research conducted by Afienna (2019) entitled The Relationship between Personal Hygiene and Environmental Sanitation with the Incidence of Scabies Disease at the Marifatul Ulum Bringin Islamic Boarding School, Ngawi Regency. The results of the chi square statistical test obtained a p value = $0.001 < 0.05$ ($OR = 7.57$). The conclusion is that there is a relationship between personal hygiene and scabies disease at the Marifatul Ulum Bringin Islamic Boarding School, Ngawi Regency.

According to Notoatmodjo (2010), behavior is all human activities or actions, both those that can be observed directly and those that cannot be observed by outside parties. Meanwhile, personal hygiene is an action to maintain a person's cleanliness and health for physical and psychological well-being from head to toe. Personal hygiene is needed to minimize the spread of diseases, especially those related to poor personal hygiene. Poor personal hygiene will make it easier for the body to be attacked by various diseases such as skin diseases, infectious diseases, mouth, and digestive tract (Atikah, 2012).

Personal hygiene is a preventive measure that involves individual responsibility to improve health and limit the spread of infectious diseases, especially those transmitted through direct contact. A person is said to have good personal hygiene if he/she can maintain the cleanliness of his/her body, including the





cleanliness of the skin, nails, hair, mouth and teeth, clothes, eyes, nose, ears, genitals, and towels, as well as bedding (Badri, 2019).

Factors that can influence personal hygiene behavior are the level of knowledge because individuals who have a good level of personal hygiene knowledge will perform optimal personal hygiene, cultural factors also influence a person's personal hygiene, for example Europeans generally take a shower once a week because the weather in Europe is cold, economic status factors that influence personal hygiene, for example in buying toiletries such as towels, soap and others, then there are individual choice factors, such as every human being has their own choice when they want to cut their hair, cut their nails or the desire to take a shower twice a day or not (Saryono, 2011).

4. Conclusion

Based on the research data that has been conducted, it can be concluded as follows: 56 respondents mostly have poor personal hygiene (60.7%), 56 respondents mostly experience scabies (58.9%). There is a significant relationship between personal hygiene and scabies (p value = 0.002).

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.





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**Reference**

1. Anuradha. 2013. A Study on Menstrual Hygiene Among Rural Adolescent Girls. *Indian Journal of Health and Wellbeing* ;4(9):09-11.
2. Arikunto, S. 2013. *Research Procedures: A Practical Approach*. Jakarta: Rineka Cipta.
3. Ali Imran, Dr. A. Nursinah, Verawati, Rusnita. *Health Communication Textbook (Key to Success in Hospital Administration)*. ISBN: 978623-10-0088-0. <https://agdosi.com/2024/04/04/buku-ajar-komunikasi-kesehatan-kunci-sukses-administrasi-rumah-sakit/>
4. Afieena. (2019). The Relationship Between Personal Hygiene and Environmental Sanitation with the Incidence of Scabies at the Marifatul Ulum Bringin Islamic Boarding School, Ngawi Regency.
5. Atikah D, (2012), *Clean and Healthy Living Behavior (PHBS)*, Nuha Medika, Yogyakarta.
6. *Wound Care And Treatment For Health*. ISBN No.: 978-623-09-8231-6. <https://agdosi.com/2024/01/10/wound-care-and-treatment-for-health/>
7. Ministry of Health. 2014. *Information data center of the Ministry of Health of the Republic of Indonesia*. Ministry of Health: Jakarta.
8. Fabriza. (2015). The Influence of Clean and Healthy Living Behavior (PHBS), Income and Sanitation on the Incidence of Diarrhea in Meranti Pandak Village, Rumbai Pesisir Pekanbaru. *Journal of Environmental Science*. Environmental Science Study Program PPS Riau University. Vol. I No. 2.
9. Harisa, WOD and ES Wahyuni. 2020. Video Based Instructions Improve Personal Hygiene Practices During Menstruation in Students with Intellectual Disabilities. *Journal of Physical Therapy*. 5 (2): 62-145.
10. Indriastuti, P. 2009. *The Relationship Between Reproductive Health Knowledge and Hygienic Behavior in Adolescent Girls [thesis]*. Muhammadiyah University of Surakarta.
11. Ministry of Health of the Republic of Indonesia, (2017). *Indonesian Health Data Profile 2016 Republic of Indonesia*. <http://www.depkesgo.id>
12. Kusumawaty, I., Yunike, Y., & Astuti, RD (2023). Enhancing the Achievement of Community Mental Health Through Health Cadre Development in Talang Buluh Village. *Sahabat Sosial: Journal of Community Service*, 2(1), 28–39. <https://doi.org/10.59585/sosisabdimas.v2i1.212>
13. Ministry of Health of the Republic of Indonesia. 2017. *Indonesian Health Profile 2016*. Jakarta: Ministry of Health of the Republic of Indonesia.
14. Masdarwati, M., Kadir, E., Serli, S., Ruben, SD, Pannyiwi, R., & Rante, A. (2023). Counseling on Complementary Foods for Breast Milk with Toddler Nutritional Status. *Sahabat Sosial: Journal of Community Service*, 1(2), 58–60. <https://doi.org/10.59585/sosisabdimas.v1i2.28>
15. Masdarwati, M., Kadir, E., Serli, S., Ruben, SD, Pannyiwi, R., & Rante, A. (2023). Counseling on Complementary Foods for Breast Milk with Toddler Nutritional Status. *Sahabat Sosial: Journal of Community Service*, 1(2), 58–60. <https://doi.org/10.59585/sosisabdimas.v1i2.28>





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16. Ni'mah, N (2016). Personal Hygiene Behavior and the Incident of Scabies in Male and Female Students at the An- Nur Ngrukem Islamic Boarding School, Sewon, Bantul, Yogyakarta.
17. Notoatmodjo, (2010), Health Education and Behavior Ep.2, Jakarta, Rineka Cipta. Profile of the Kampar Health Service (2019).
18. Pemiliana, PD, W. Agustina, and D. Verayanti. 2019. Behavior of Adolescent Girls with Personal Hygiene During Menstruation at Etidlandia High School, Medan in 2018. GASTER. 17 (1): 62-79.
19. Permata, DD 2019. The Relationship between Knowledge and Attitude with Vulva Hygiene Behavior During Menstruation in Female Adolescents at SMP N 01 Pulau Beringin, South Sumatra in 2019 [thesis]. Jakarta: National University.
20. Rasyid, Djumadi, & Rante, A. (2022). Joint Pain in the Elderly and How to Overcome It. Sahabat Sosial: Journal of Community Service, 1(1), 21–26. <https://doi.org/10.59585/sosisabdimas.v1i1.12>
21. Saryono, (2011). Basic Human Needs (BHN) Yogyakarta, Nuha Medika.
22. Srianingsih, S., Wijaya, A., Nasution, TA, Anto, S., Muhajrin, M., Rauf, NI, Yusufik, Y., & Pannyiwi, R. (2022). Family Nursing Care with Environmental Health Problems. Barongko: Journal of Health Sciences, 1(1), 53–56. <https://doi.org/10.59585/bajik.v1i1.41>
23. Yamin, RA, E. Pratiwi, and M. Amalia. 2019. Analysis of the Relationship between Attitudes to Menstrual Hygiene Practices in Female Students at the Ummul Mukminin Islamic Boarding School, Makassar City in 2019. Mulawarman Public Health Journal. 1(2): 87-92.
24. Yasnani, N. and PEM Erawan. 2016. The Relationship between Knowledge, Attitude, and Action with Personal Hygiene Menstruation in Adolescent Girls at Satap Bukit Asri State Middle School, Buton Regency in 2016. JIM Kesmas. 1(2): 1-10.

