



PERSONAL HYGIENE AND DERMATITIS INCIDENCE IN RESIDENTS OF RIANG NAIBONAT CHILDREN'S SOCIAL ASSOCIATION

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Abstract

Skin disease is one of the health problems that are still often found in orphanages. Factors such as environmental cleanliness and personal hygiene habits play an important role in preventing skin diseases. The purpose of this study was to determine environmental sanitation and personal hygiene with the incidence of skin diseases in adolescents at the UPTD of the Riang Naibonat Children's Social Welfare Institution. This type of research is descriptive and was conducted by survey. This study was conducted at the UPTD of the Riang Naibonat Children's Social Welfare Institution with a sample of 64 beneficiaries. The data analysis used was univariate analysis which only looked at the frequency distribution of each variable studied. The study stated that poor bed hygiene was 38 people (59.4%), poor towel hygiene was 34 people (53.1%), poor clothing hygiene was 19 people (29.7%), poor skin and hair hygiene was 5 people (7.8%) and poor hand and nail hygiene was 37 people (57.8%). Children living in orphanages should be accustomed to implementing a clean and healthy lifestyle in their daily activities. To support this, the role of orphanages and health workers is greatly needed, especially in providing easy-to-understand education.

keywords: Environmental Sanitation, Personal Hygiene, Skin Diseases, Social Homes

Introduction

Environmental sanitation and personal sanitation are two important components in maintaining health, especially in dealing with skin diseases. Skin diseases can be caused by not maintaining personal hygiene and an unmaintained environment. Germs, parasites, and fungi can live in unclean places, which can cause various skin problems. Therefore, good sanitation is very important, especially in places such as social homes, where there are few hygiene facilities and many residents [1].

Risk factors for skin disease are closely related to environmental sanitation and personal hygiene. Studies show that poor personal hygiene practices, such as not maintaining hand, clothing, and skin hygiene, and not using towels properly, are significantly correlated with an increase in the number of skin diseases suffered. For example, a study at the Kupang City Juvenile Penitentiary found that lack of personal hygiene, which includes maintaining skin and hand hygiene, increases the likelihood of being accused of skin disease [2]. Poor sanitation and low body mass index (BMI), people with limited access to sanitation services are also more susceptible to environmental skin bacterial infections. According to other studies, humid and unclean environments increase the likelihood of skin diseases such as dermatitis, especially in areas with high residential density [3]. This shows how important it is to maintain environmental and personal hygiene to prevent skin diseases.

Skin diseases rank third out of the ten most common diseases in Indonesia, with prevalence ranging between 4.60% and 12.95%. This includes common types of skin diseases, such as boils, acne, dermatitis, chicken pox, horse, ringworm, herpes, and hives. Skin diseases rank third out of the ten most

common diseases in Indonesia, with prevalence ranging between 4.60% and 12.95 [4]. The results of research conducted by [5] about Personal Hygiene Behavior towards the incidence of scabies at the Jabalnur Islamic Boarding School, Dewantara Health Center Work Area, North Aceh Regency, it is known that there is an influence of hand and nail cleanliness ($p = 0.004$), clothing cleanliness ($p = 0.000$), towel cleanliness ($p = 0.000$), bed cleanliness ($p = 0.035$) and cleanliness of clean water facilities ($p = 0.000$) on the incidence of scabies at the Jabalnur Islamic Boarding School, Dewantara Health Center Work Area, North Aceh Regency. The results of the study concluded that there is an influence of personal hygiene behavior on the incidence of scabies at the Jabalnur Islamic Boarding School, Dewantara Health Center Work Area, North Aceh Regency.

Some of the most common types of skin diseases experienced by humans are scabies, leprosy, yaws, dermatitis, and others. Scabies, caused by *Sarcoptes scabiei* var. *hominis*, is a parasite that attacks humans. Tiny mites enter the skin and lay eggs, causing severe itching and rashes. Scabies infections can be complicated by bacterial infections, causing wounds on the skin. This can lead to more serious consequences such as septicemia, heart disease, and long-lasting kidney disease. [1].

Based on data obtained from the Kupang City Health Service in 2019 in the thesis [2] the incidence of skin diseases due to allergies experienced by men was 3,638 people and women were 4,426 people with a total of 8,064 people suffering from allergic skin diseases, and there were infectious skin diseases suffered by men as many as 1,188 people and women as many as 1,331 people with a total of 2,519 sufferers. In 2020, there were 3,530 men suffering from skin diseases and 3,690 women suffering from skin diseases with a total of 7,220 sufferers and in 2021, there were 88 men suffering from skin diseases and 99 women suffering from skin diseases with a total of 182 people.

Based on data obtained from the Kupang Regency Central Statistics Agency (BPS) in 2023, the incidence of skin disease was one of the 10 largest diseases in Kupang Regency and was ranked 5th with a total of 1,487 cases.

Orphanages improve child welfare and stop child neglect. Around the world, around 153 million children are either motherless or fatherless, and 17.8 million of them are both parents. Children have the same right to health and well-being, so the environment and well-being of children in orphanages must be prioritized. In addition, children are the main pillars in building a prosperous country [6].

Riang Children's Social Welfare Institution is one of the Regional Technical Implementation Units. The Social Development and Assistance Institution within the East Nusa Tenggara Province Social Service. The Child Social Welfare Institution is responsible for providing Social Welfare services to neglected children in meeting the physical, mental, social and skills needs of foster children [7].

Initial observation data at the UPTD of the Riangan Naibonat Children's Social Welfare Institution, information obtained from employees shows that the number of beneficiaries in this institution is 90 people, with 24 of them experiencing skin diseases. The skin diseases are caused by several factors, such as the habit of children re-wearing clothes that have been worn after bathing, exchanging clothes and towels with friends, and less than optimal sanitation facilities. In the Boys' Dormitory, although there are 20 bathrooms, only 4 bathrooms are usually used, thus reducing access to adequate sanitation facilities.

The Riangan Naibonat Children's Social Welfare Institution accommodates 90 foster children with different numbers of boys and girls each year. These children live in 4 dormitories: Girls' Dormitory 1 with 8 rooms, Girls' Dormitory 2 with 6 rooms, and Boys' Dormitories 1 and 2, each with 10 rooms. Several rooms in the Boys' Dormitory are occupied by 1 to 2 people, while in Girls' Dormitory 1 there are rooms occupied by 4 to 5 people with additional mattresses in rooms occupied by 5 people. The crowded conditions in these rooms pose potential health risks, especially those related to environmental sanitation and individual hygiene. These risks can trigger skin diseases among foster children.

Based on the background description above, the researcher wants to know the description of environmental sanitation and personal hygiene with the incidence of skin diseases at the UPTD Riag Naibonat Children's Social Welfare Institution.

Method

This type of research is descriptive research with the aim of knowing the picture or description of a condition objectively. The method used is a survey that aims to see the picture of the phenomenon (including health) that occurs in a certain population [9]. The study was conducted in March-April 2025. The population in this study were all beneficiaries at the UPTD Panti Kesejahteraan Sosial Anak Riag, Naibonat Village, aged 16-19 years, totaling 64 people, with the sample taken being the entire population of 64 people based on inclusion criteria. Data collection was carried out using a closed questionnaire, respondents were given informed consent before filling out the questionnaire. Data analysis was carried out univariately to describe the characteristics of respondents, distribution and frequency.

Results

Respondents in this study were beneficiaries at the UPTD of the Riag Naibonat Children's Social Welfare Institution, totaling 64 people. The characteristics of the beneficiaries in this study included age, gender, education and length of stay at the institution. The results of this study can be seen in Table 1.

Table 1. Characteristics of beneficiaries based on age, gender, education and length of stay at the Riag Naibonat Children's Social Welfare Institution UPTD

Beneficiary Characteristics	Amount	Percent
Age		
16-17	54	84,4
18-19	10	15,6
Gender		
Male	24	37,5
Female	40	62,5
Education		
senior high school	45	70,3
Vocational School	19	29,7
Length of Stay in the Shelter		
6 month -<1 Year	22	34.4
1-<2 Year	16	25.0
2-<3 Year	12	18.8
3-<4 Year	10	15.6
4-<5 Year	3	4.7
5-6 Year	1	1.6

Table 2. Distribution of Personal Hygiene Regarding Cleanliness of Beds at UPTD Riang Naibonat Children's Social Welfare Home

Cleanliness of Bed	n	%
Good	26	40,6
Not Good	38	59,4
Total	64	100

Table 2 shows that the beneficiaries at the UPTD Panti Kesos Anak Riang Naibonat have good bed hygiene, namely 26 people (40.6%) and poor hygiene as many as 38 people (59.4%).

Table 3. Distribution of Personal Hygiene Regarding Towel Cleanliness of UPTD Riang Naibonat Children's Social Welfare Home

Towel Cleanliness	n	%
Good	30	46,9
Not Good	34	53,1
Total	64	100

Table 3 shows that the beneficiaries at the UPTD Panti Kesos Anak Riang Naibonat had good towel cleanliness, namely 30 people (46.9%) and 34 people (53.1%) had poor towel cleanliness.

Table 4. Distribution of Personal Hygiene Regarding Cleanliness of Clothes of UPTD Riang Naibonat Children's Social Welfare Home

Clothing Cleanliness	n	%
Good	45	70,3
Not Good	19	29,7
Total	64	100

Table 4 shows that the beneficiaries at the UPTD Panti Kesos Anak Riang Naibonat have good clothing hygiene, namely 45 people (70.3%) and 19 people (29.7%) have poor clothing hygiene.

Table 5. Distribution of Personal Hygiene Regarding Cleanliness of Skin and Hair at UPTD Riang Naibonat Children's Social Welfare Home

Skin and Hair Cleanliness	n	%
Good	59	92,2
Not Good	5	7,8
Total	64	100

Table 5 shows that the beneficiaries at the UPTD Panti Kesos Anak Riang Naibonat have good skin and hair hygiene, namely 59 people (92.2%) and not good as many as 5 people (7.8%).

Tabel 6. Distribusi Personal Hygiene Tentang Kebersihan Tangan Dan Kuku UPTD Panti Kesos Anak Riag Naibonat

Hand and Nail Hygiene	n	%
Good	27	42,2
Not Good	37	57,8
Total	64	100

Table 6 shows that the beneficiaries at the UPTD Panti Kesos Anak Riag Naibonat have good hand and nail hygiene, namely 27 people (42.2%) and poor hygiene as many as 37 people (57.8%).

Table 7. Distribution of Beneficiaries Based on Skin Disease Complaints at the UPTD Riag Naibonat Children's Social Welfare Home

Beneficiary's Skin Disease Complaints	Experiencing Complaints		No Complaints		Total	
	Amount	%	n	%	n	%
Itchy skin with repeated frequency	29	45,3	35	54,7	64	100
There are reddish spots on the skin	31	48,4	33	51,6	64	100
The presence of bumps on the skin	26	40,6	38	59,4	64	100
There is peeling skin like scales and it is dry.	20	31,3	44	68,8	64	100

Table 7 shows that the beneficiaries who felt itchy skin with a recurring frequency were 29 people (45.3%), while those who did not feel itchy skin with a recurring frequency were 35 people (54.7%). The beneficiaries who had white spots on their skin were 31 people (48.4%) and those who did not have white spots on their skin were 33 people (51.6%). The beneficiaries who had bumps on their skin were 26 people (40.6%) and those who did not have bumps on their skin were 38 people (59.4%). The beneficiaries whose skin peeled like scales and was dry were 20 people (31.3%) and those who did not peel like scales and was dry were 44 people (68.8%).

Table 8. Observation Results of Clean Water Availability at the Riag Naibonat Children's Social Welfare Home UPTD

Building	Water Reservoir Amount	Availability of Clean Water
Girls 1	5	Enough
Girls 2	4	Enough
Boys 1	10	Enough
Boys 2	10	Enough
office	5	Enough
official residence (10 unit)	11	Enough
public kitchen	3	Enough
Hall		

Table 8 shows that the results of observations at the Riag Naibonat Children's Social Welfare Institution UPTD show that the availability of clean water is very sufficient because the source of clean water comes from drilled wells.

Discussion

Personal Hygiene Overview Based on Bed Cleanliness with Skin Diseases at UPTD Riang Naibonat Children's Social Welfare Home

Bed cleanliness in this study was considered fulfilled if the sheets were changed at least twice a week. The results of observations and direct information from the orphanage children, it was found that most of them only had one sheet. Due to this limitation, they rarely changed the sheets regularly, so that the cleanliness of the bed was not maintained. Children also rarely dried the mattress in the sun, causing the mattress to become damp and produce an unpleasant odor. A damp mattress that is rarely cleaned becomes an ideal place for germs, fungi, and mites to grow. This condition certainly increases the risk of various skin diseases. The limited bedding and bad habits are challenges that need more attention in efforts to maintain the skin health and personal hygiene of the orphanage children. The above findings are in line with research conducted by [10] at the Al Amin Orphanage in Benjeng District, where some children also rarely dry their bedding, share pillows and blankets, do not wash their sarongs regularly, and sleep without using sheets. These habits strengthen the suspicion that unhygienic bedding can be a risk factor for skin diseases in the orphanage environment.

Personal Hygiene Overview Based on Towels with Skin Disease Complaints at the UPTD of the Riang Naibonat Children's Social Welfare Home

Towels are personal items that are important to keep clean because they function directly to dry the body after bathing. Therefore, it is important to get into the habit of washing towels at least once a week and drying them in the sun to keep them clean and safe to use. According to [11] the use of towels together should be avoided, because it is very easy to transmit bacteria from one individual to another. Moreover, if towels are rarely washed or not dried directly under the sun, the number of bacteria that accumulate will increase. This condition makes towels a very risky medium for transmitting various skin diseases.

Personal Hygiene Overview Based on Cleanliness of Clothes with Skin Disease Complaints at UPTD Riang Naibonat Children's Social Welfare Home

The results of the study showed that most of the children in the orphanage had maintained the cleanliness of their clothes well, namely 45 people (70.3%). However, there were still 19 people (29.7%) whose clothes were not clean. One of the habits found was that they often stored dirty clothes together with their friends' clothes in one place. In addition, the habit of borrowing or taking turns wearing friends' clothes also occurred quite often. Although it may seem trivial, this habit can be risky for skin health. Dirty and damp clothes can be a place for various bacteria, fungi, and parasites to grow that cause skin diseases. Moreover, if the clothes are often borrowed or used alternately, the microorganisms that stick to the clothes can move from one individual to another. This certainly increases the possibility of spreading skin diseases, whether caused by bacterial, fungal, or parasitic infections. In [12] a person will have a 4,062 times higher chance of developing a skin disease than those who have better clothing hygiene. According to [13] there are things that need to be considered in maintaining the cleanliness of clothes, namely changing clothes twice a day, always ironing clothes, washing clothes using detergent, drying clothes under the sun and not exchanging clothes with friends. The impacts that are often encountered due to not paying attention to the cleanliness of clothes are skin diseases such as scabies, fungus, tinea versicolor, infections, bacteria and pyoderma.

Personal Hygiene Overview Based on Skin and Hair Cleanliness with Skin Disease Complaints at the Riang Naibonat Children's Social Welfare Home UPTD

The results of the study showed that out of 64 beneficiaries, 59 people (92.2%) had fairly good skin and hair hygiene. They generally implemented clean living behaviors such as bathing twice a day, using sufficient water, cleaning the body with soap, washing hair with shampoo, and using personal towels when bathing. This shows that most beneficiaries already have fairly good personal hygiene habits. However, there are still 5 people (7.8%) whose skin and hair hygiene is not yet fairly good. Although soap, shampoo and other toiletries are routinely distributed every month, some of the beneficiaries do not always use them when bathing and only rinse without thoroughly cleaning the body and hair. In addition, the habit of using towels alternately with friends was also found, which risks triggering the transmission of skin diseases. In [14] it is explained that the skin is the outermost organ of the body that covers the human body. The weight of the skin is estimated to be 7% of the total body weight. On the outer surface of the skin there are pores (cavities) that are the place where sweat comes out. The skin is an organ that has many functions, including as a protector of the body from various things that can be dangerous, as a sense of touch, regulating body temperature, etc. The skin plays an important role in maintaining cleanliness and health of the body by protecting against skin diseases through its protective function and natural immune system. Cleaning the skin can help remove excess oil, sweat, dead skin cells, and dirt that can become a place for bacteria or other microorganisms to grow. Maintaining clean skin and hair is an important part of personal hygiene that is often considered trivial, even though it has a big impact. Skin and hair that are rarely cleaned can become a place for dirt, oil, and dead skin cells to accumulate. This condition can trigger the growth of microorganisms such as bacteria, fungi, or even parasites that can cause various health problems, ranging from itching, dandruff, skin infections, to inflammation. For this reason, bathing regularly, using appropriate soap and shampoo, and maintaining the cleanliness of personal items such as towels, are very important as simple steps to prevent the emergence of skin diseases.

Personal Hygiene Overview Based on Hand and Nail Cleanliness with Skin Disease Complaints at the Riang Naibonat Children's Social Welfare Home UPTD

The results of the study showed that out of 64 beneficiaries who had good hand and nail hygiene were 27 people (42.2%) and those who did not have good hygiene were 37 people (57.8%). This condition illustrates that there are still many beneficiaries who are not used to maintaining overall personal hygiene. Skin diseases can be caused by various unhygienic habits, one of which is the behavior of residents of the orphanage who do not wear footwear when in the orphanage complex. Feet that are in direct contact with the floor or ground make it easy for dirt to stick, and when hands unconsciously touch their feet or are used to walk barefoot, the dirt can transfer to the hands and eventually accumulate under the nails, increasing the risk of skin infections. In addition, routine activities such as cleaning the orphanage yard every afternoon also play a role in this condition. These activities are generally carried out without gloves, so their hands are in direct contact with soil, dust, and other dirt. If it is not followed by the habit of washing hands and cleaning nails, the dirt will continue to stick and can become a nest for germs. This condition worsens the situation, because they are not only at risk of experiencing skin health problems, but are also more susceptible to other infections transmitted through unclean hands. These infections can be caused by various microorganisms such as bacteria, viruses, fungi, or parasites that enter through the skin or are carried by the hands to other areas of the body.

The results of the interview revealed that the main reason why the orphanage children did not wear footwear while inside the complex was because their sandals often got lost. In an orphanage environment inhabited by many children, sandals being exchanged or lost is a fairly common occurrence, so many children choose not to wear them so as not to bother looking for them again. This

habit has been going on for quite a long time and is considered normal, especially since there are no specific rules requiring the use of footwear in the orphanage area. In addition, limited personal equipment is also a cause, where some children only have one pair of sandals that are used for outside purposes such as school or going to places of worship, so they prefer not to use them inside the orphanage so that they remain durable and do not get damaged quickly. The findings above are in line with research [15] that Maintaining nail hygiene is an important aspect of maintaining personal care because germs can enter the body through nails. Careful cutting of fingernails and toenails can prevent microorganisms from entering long nails. Feet and nails often require special attention to prevent infection, odor, and tissue injury. But often people are not aware of foot and nail problems until pain or discomfort occurs. Maintaining nail hygiene is important in maintaining personal hygiene because various germs can enter the body through nails.

Environmental Sanitation Conditions Based on the Distribution of Clean Water Availability with Skin Disease Complaints at the UPTD of the Riang Naibonat Children's Social Welfare Home

Based on the results of the study at the Riang Naibonat Children's Social Welfare Institution UPTD, it is known that the availability of clean water used by all residents is said to be sufficient for bathing, washing and ablution needs for Muslim beneficiaries. Based on the results of observations, the availability of clean water at the Riang Naibonat Children's Social Welfare Institution UPTD. However, cases of skin diseases are still found among residents, which are most likely not caused by a lack of water, but rather because of clean living habits and suboptimal water use. Residents of the Riang Naibonat Children's Social Welfare Institution UPTD still experience complaints of skin diseases, even though the availability of clean water in the institution is sufficient and in good condition. This condition indicates that the available clean water has not been fully utilized optimally by the residents. Most likely, complaints of skin diseases are caused by several other factors, such as a lack of awareness of the importance of maintaining personal hygiene, irregular bathing habits, and a lack of understanding of good sanitation. Although clean water is available, not all residents routinely wash their hands or maintain the cleanliness of their bodies, clothes, and beds. These habits can trigger the appearance of skin disorders, such as itching, rashes, bumps, and peeling skin.

Complaints of skin disease

Skin health complaints are caused by, among others, low socio-economic factors, poor hygiene such as bathing, changing clothes and using towels. This disease is usually found in places such as dormitories, orphanages, prisons or in areas of villages that are not very clean [16]. The observation results can be seen that the beneficiaries who felt itchy skin with a recurring frequency were 29 people (45.3%), while those who did not feel itchy skin with a recurring frequency were 35 people (54.7%). Beneficiaries who had white spots on their skin were 31 people (48.4%) and those who did not have white spots on their skin were 33 people (51.6%). Beneficiaries who had bumps on their skin were 26 people (40.6%) and those who did not have bumps on their skin were 38 people (59.4%). Beneficiaries whose skin peeled like scales and was dry were 20 people (31.3%) and those who did not peel like scales and was dry were 44 people (68.8%).

Conclusion

This study shows that most adolescents at the Riang Naibonat Children's Social Welfare Institution UPTD still have poor personal hygiene, especially in terms of cleanliness of their beds, towels, and hands and nails. As many as 59.4% of respondents have poor bed hygiene, 53.1% have poor towel hygiene, and 57.8% have poor hand and nail hygiene. Although most respondents have maintained the cleanliness of their clothes, skin and hair, there are still complaints of skin diseases such as itching, red spots, bumps, and peeling skin. This shows that less than optimal personal hygiene practices and overcrowding can contribute to the high incidence of skin diseases, even though the availability of clean water in the institution is adequate.

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