

The Relationship of Characteristics Individual and Personal Hygiene with Symptoms of Dermatitis Contact on Scavengers

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ABSTRACT

Skin disease is a condition that affects the body's surface and has a number of causes. The most prevalent infectious illnesses that afflict people of all ages are skin conditions. The majority of skin infection treatments take a while to start working. The goal of this study was to ascertain how scavengers at the Medan City Waste Landfill's personal hygiene habits and contact dermatitis symptoms related to one another. Approach: This study uses a cross-sectional analytic survey design as its methodology. The population of this study consisted of 72 respondents who served as research samples. They were all scavengers in Environment VII of the Waterfall Village. The chi-square statistical test was utilized in the univariate and bivariate analyses. The Findings: Scavengers' symptoms of contact dermatitis were related to age ($p = 0.019$), education ($p = 0.021$), length of labor ($p = 0.007$), and personal hygiene ($p = 0.000$). The study's findings suggest that scavengers in the Medan City Waste Landfill may have contact dermatitis symptoms in relation to their age, education, length of employment, and personal hygiene. It is planned that TPA Falls would offer health education about skin conditions, including dermatitis, so that scavengers may avoid contracting these illnesses by practicing good personal hygiene after work, including as cleaning their hands, feet, and taking a shower.

Keywords: Age, Education, Length of Work, Personal Hygiene, Symptoms of Contact Dermatitis

INTRODUCTION

Environmental health is fundamentally a state of being that is ideal enough to positively impact attaining an ideal state of health. Housing, the removal of human waste (feces), the supply of clean water, the removal of trash, the removal of filthy water (waste), and other factors are all included in the definition of environmental health. One of the environmental issues is waste. Diseases caused by waste are very broad, and can be in the form of communicable, non-infectious diseases, can also be caused by fire, poisoning, and others. In addition, garbage can also cause an increase in vector-borne diseases, the causes of which can be bacteria, fungi, worms, and chemicals (Mei et al., 2022; WHO, 2018).

According to Akindede and Fashae (2020), health will suffer greatly if waste management is not done correctly. This effect may be immediate or delayed. Humans coming into close touch with the garbage is what causes the direct effect. While the existence of disease-transmitting vectors, such as skin diseases, which proliferate in rubbish and spread to humans, is often what causes the indirect effect. Skin disease is a condition that affects the body's surface and has a number of causes. The most prevalent infectious disorders in persons of all ages are skin conditions. The majority of skin infection treatments take a while to start working. If the condition does not improve with treatment, the issue becomes much more concerning. There are few statistics that demonstrate the precise prevalence of skin disorders, but the typical perception is that 10–20% of individuals who have skin problems seek medical counsel.

According to the 2018 International Alliance for the Control of Dermatic (IACD), the incidence of dermatitis varies from 0.3% to 46% (Adhi et al., 2018). Dermatitis is found in all countries with varying prevalence. Dermatitis affects people of all races and age groups and is most common in children and adolescents in a number of developing nations, where the incidence

ranges from 6% to 27% of the general population. Subcutaneous tissue based on the prevalence of the 10 most common diseases in Indonesian society is ranked sixth for skin diseases with a total of 501,280 cases or 3.16%, of which dermatitis disease reaches 67.3%.

Based on Basic Health Research Data by the 2018 Ministry of Health, the national prevalence of dermatitis is 6.8% (based on respondent complaints). A total of 13 provinces has a prevalence of dermatitis above the national prevalence, namely: Gorontalo, Central Sulawesi, North Sulawesi, South Kalimantan, Central Kalimantan, East Nusa Tenggara, DI Yogyakarta, Central Java, Jakarta, Bangka Belitung, Nanggro Aceh Darussalam, and including North Sumatra (Ministry of Health, 2018). According to the Health Profile of North Sumatra Province in 2017 based on the disease pattern of outpatients at the Puskesmas, the number of skin and other subcutaneous tissue diseases for all age groups and gender groups ranked 3rd with the number of new cases of 1,052,122 or 13.32% and suffered the most in adolescents, adults and parents in the 15-44 year age group with 703,222 or 19.6% of new cases (Provincial Health Office of North Sumatra, 2017).

Dermatitis is an itching-related condition that results in clinical abnormalities such as polymorphic efflorescence (erythema, edema, papules, vesicles, scales, and latensification) and skin inflammation in the dermis and epidermis. No more than a few polymorphic indicators may appear at once (oligomorphic). Dermatitis tends to reside and become chronic. The impact of dermatitis depends on the patient's immunity. It could be that the impact of one person's reaction is different from another person even though the cause is the same. However, if someone has severe dermatitis, blisters will form on the skin and are very dangerous for the skin. To prevent disease transmission, clean water facilities, sewage facilities, food storage facilities are needed, avoiding intervention from insects and pests or other animals that can transmit disease. Poor hygiene, such as not bathing, changing into clean clothes, and utilizing towels, are variables that contribute to skin complaints. This illness is typically seen in unclean village areas, hostels, orphanages, jails, and locations like that.

Personal hygiene is an individual's self-care behaviour to maintain his health. Therefore, personal hygiene is a specific primary prevention. Because personal hygiene can reduce the entry of microorganisms, disease occurs, including skin diseases, infectious diseases, oral diseases, and gastrointestinal diseases, or because it can even stop some body parts from functioning, personal hygiene is crucial to maintaining individual health. Living in a clean and healthy environment and adopting a clean and healthy lifestyle or behaviour are both examples of clean and healthy living. A healthy environment can have an impact on the quality of one's health. A person's health will be excellent if the environment in which he lives is likewise good, and vice versa, if the environment in which he lives is not good.

According to Gao et al. (2021) the maintenance of personal cleanliness has a significant role in determining health status, with people actively choosing to be healthy and avoid illness. Cleanliness of the hair, eyes, ears, lips, skin, nails, and clothes are all included in these personal hygiene activities. One personal hygiene practice is to keep the skin clean. because the skin functions to protect the surface of the body, maintain body temperature and excrete certain impurities. Given that the skin is important as a protector of the body's organs, it is necessary to maintain the health of the skin. Fungi, viruses, bacteria, and parasites can all contribute to skin problems.

Scavengers are very closely related to waste, because their daily activities are working to find used goods among piles of garbage. According to Shah et al. (2021), the work of scavengers is prone to the risk of infectious diseases due to their daily activities working with waste. So, from a health standpoint, the work of a scavenger is prone to the risk of infectious diseases. Diseases that can be caused by waste such as non-communicable diseases, contagious, so that it can result in fires, poisoning, and others. Garbage can also cause an increase in vector-borne diseases caused by bacteria, fungi, worms, and chemicals. Scavengers are informal sector workers who have not received health care or health insurance as they should. When viewed from a health perspective, scavengers have a very high risk of disease. The working environment which is not conducive and dirty allows scavengers to contract various diseases, such as coughing, itching, diarrhea, and

others. According to information from the Falls Health Centre, there were 121 instances of dermatitis in 2020, affecting both adults and children.

The findings of a study titled *Relationship between Personal Hygiene and Use of Personal Protective Equipment with Occupational Contact Dermatitis Incidence in Garbage Transport Workers at DLHK Denpasar City*. Age ($p=0.023$), years of service ($p=0.010$), education ($p=0.010$), skin hygiene ($p=0.002$), hand, foot, and nail cleanliness ($p=0.010$), and hair and scalp hygiene ($p=0.000$) all significantly correlated with the findings. The prevalence of contact dermatitis among garbage transport employees in the DLHK City of Denpasar. According to the findings, contact dermatitis was significantly correlated with worker age ($p=0.002$), education ($p=0.036$), years of service ($p=0.005$), and cleanliness ($p=0.000$) (Utami et al., 2020; Dhera & Fielrantika, 2017). According to a study by Bello et al. (2017), waste workers are exposed to a variety of health hazards, including infectious diseases, chemical exposures, and ergonomic stresses. These hazards can lead to a range of health outcomes, including respiratory and gastrointestinal illnesses, skin disorders, musculoskeletal injuries, and mental health issues. A study by Park et al. (2020) found that waste workers in South Korea had a higher risk of developing asthma and chronic obstructive pulmonary disease (COPD) compared to the general population. The use of personal protective equipment and good hygiene practices have been shown to reduce the risk of occupational contact dermatitis in waste workers (Hormozi et al., 2019; Kariyawasam et al., 2021).

Based on an initial survey conducted at the TPA Garbage Landfill, Niagara Village. Based on the results of interviews with 10 respondents, it was discovered that 7 scavengers complained of itching and burning sensations on their palms after interacting with used goods. In terms of individual characteristics, the majority of those affected by dermatitis were aged 20 years, the majority of scavengers have only completed elementary and junior high school, so they don't really understand what dermatitis is, and the majority of scavengers have worked for more than 3 years. Judging from the personal hygiene of the scavengers, it can be seen and observed from the fact that they rarely change their work clothes, when they also rarely take breaks. to practice personal hygiene, such as handwashing This circumstance confirms that scavengers are more sensitive to developing Contact Dermatitis symptoms. The other 3 scavengers had no complaints of dermatitis because they kept themselves clean at work and after work (Sahni et al., 2019).

METHODS

An analytical survey, which uses a cross-sectional strategy to explore the dynamics of the link between risk factors and consequences, is the research methodology utilized. This approach, observation, or data gathering occurs all at once (Notoadmojo's, 2018). This research was conducted at the Medan City Garbage TPA, located in Waterfall Village, Medan Marelan District. This research starts from May 2021 to January 2022, starting from the initial survey, literature search and research. The overall subject of the study or subject of the research is the population (Notoadmojo's, 2018). Edited, coded, and tabulated primary and secondary data were then used for data processing, including univariate and bivariate analysis. With a univariate analysis, the distribution of the recapitulation frequencies as well as the frequency distribution of the questionnaire responses for each independent and dependent variable are described.

Bivariate analysis was used to examine the connection between the two independent factors and the dependent variable. Chi-square analysis was employed at the statistical significance limit of the p value to demonstrate that there is a significant association between the independent variable and the dependent variable (0.05). If the computation results indicate $p < \alpha$ (0.05), the assumption (H_0) is rejected, indicating that there is a statistically significant association between the two variables. If the computation results reveal that $p > \alpha$ (0.05), then (H_0) is accepted, indicating that there is no link. Cross tabulation analysis is then utilized to describe the connection between the dependent variable and the independent variable.

RESULTS

Table 1. Age Distribution, Gender of Scavengers at the Medan City Garbage TPA in 2021

Character	f	%
Age's		
17 to 21 Year's	29	40,3
22 to 26 Year's	0	0,0
27 to 31 Year's	4	5,6
32 to 36 Year's	20	27,8
37 to 41 Year's	12	16,7
Gender's		
Man's	41	56,9
Woman's	31	43,1
Total	72	100,0

According to the chart above, there were 29 respondents aged 17 to 21 years (40.3%), none aged 22 to 26 years, 4 individuals aged 27 to 31 years (5.6%), 20 people aged 32 to 36 years (27.8%), 12 people aged 37 to 41 years (16.7%), and 7 people aged 42 to 46 years (9.7%). There were 41 male responders (56.9%) and 31 female respondents (43.1%) among the 72 respondents studied.

Table 2. Distribution of Age, Education, Years of Work, Personal Hygiene, Symptoms of Contact Dermatitis in Scavengers at the Medan City Waste TPA in 2021

Variable	f	%
Age's		
< 20 Year's	29	40,3
≥ 20 Year's	43	59,7
Education		
Low (Not Completed in Primary School (SD))	10	13,9
Medium (SMP-SMA)	56	77,8
High (D3-S1)	6	8,3
Length of Working		
< 36 Month	26	36,1
≥ 36 Month	46	63,9
Personal Hygiene		
Good	22	30,6
Less Good	50	69,4
Contact Dermatitis Symptoms		
Suffers	44	61,1
Not's Suffers	28	38,9
Total	72	100,0

Based on the table above, of the 72 respondents studied, there were 29 respondents aged <20 years (40.3%) and those aged ≥ 20 years were 43 persons (59.7%). Of the 72 respondents studied, 10 respondents (13.9%) had low education (did not graduate from elementary school) and medium education (SMP-SMA) as many as 56 people (77.8%) and those with higher education (D3-S1) as many as 6 people (8.3%). Of the 72 respondents studied, 26 respondents (36.1%) worked < 36 months and 46 (63.9%) worked ≥ 36 months. Of the 72 respondents studied, 22 people (30.6%) had good personal hygiene and 50 people (69.4%) had poor personal hygiene. Of the 72 respondents studied, 44 people (61.1%) had symptoms of contact dermatitis and 28 people (38.9%) did not suffer from symptoms of contact dermatitis.

Table 3. Relationship between Age and Symptoms of Contact Dermatitis in Scavengers at the Medan City Waste Landfill in 2021

Characters	Contact Dermatitis Symptoms				Total		P Value
	Suffer		Not Suffer		f	%	
	F	%	f	%			
Age							
< 20 Years	23	31,9	6	8,3	29	40,3	0,019
≥ 20 Years	21	29,2	22	30,6	43	59,7	
Education							
Low (Not completed in Primary School- SD)	3	4,2	7	9,7	10	13,9	0,021
Medium (SMP-SMA)	39	54,2	17	23,6	56	77,8	
High (D3-S1)	2	2,8	4	5,6	6	8,3	
Length of Work							
< 36 Month	10	13,9	16	22,2	26	36,1	0,007
≥ 36 Month	34	47,2	12	16,7	46	63,9	
Total	44	61,1	28	38,9	72	100,0	

Table 4. The relationship between personal hygiene and symptoms of contact dermatitis in scavengers at the Medan city waste landfill in 2021

Characters	Contact Dermatitis Symptoms				Total		P Value
	Suffer		Not's Suffer		f	%	
	f	%	f	%			
Personal Hygiene							
Good	6	8,3	16	22,2	22	30,6	0,000
Less Good	38	52,8	12	16,7	50	69,4	
Total	44	61,1	28	38,9	72	100,0	

The table above indicates that of the 72 respondents polled, there were 23 people (31.9%) who suffered from symptoms of contact dermatitis with age <20 years (31.9%), 21 people (29.2%) who were aged ≥ 20 years and those who did not. 6 people (8.3%) had symptoms of contact dermatitis with age <20 years, 22 people (30.6%) were aged ≥ 20 years. Furthermore, the probability value is (0.019) < $\alpha = 0.05$ based on the findings of the Chi-Square analysis in the appendix of the Continuity Correction test table between the link between age and symptoms of contact dermatitis. Because the findings of this study match the parameters of the connection hypothesis, it can be inferred that there is a link between age and dermatitis symptoms in scavengers at the Medan City Garbage TPA.

Of the 72 respondents studied, the category suffering from contact dermatitis symptoms with low education (did not finish elementary school) was 3 people (4.2%), medium (junior high school) as many as 39 people (54.2%), high (D3 -S1) as many as 2 people (2.8%) and categories that do not suffer from contact dermatitis symptoms with low education (did not finish elementary-school) as many as 7 people (9.7%), medium (junior high school) as many as 17 people (23.6%), High (D3-S1) as many as 4 people (5.6%). Additionally, it is known that the probability value is (0.021) < $\alpha = 0.05$ from the Chi-Square analysis findings in the attached Chi-Square test table regarding the link between education and dermatitis symptoms. Given that the findings of this research satisfy the parameters of the connection hypothesis, it is possible to draw the conclusion that scavengers' dermatitis symptoms and education are related at the Medan City Garbage TPA.

Of the 72 respondents studied, 10 people (13.9%) had symptoms of contact dermatitis with a duration of work <36 months, 34 people (47.2%) worked for ≥ 36 months and a category without symptoms of the disease contact dermatitis with length of work <36 months in 16 people (22.2%), duration of work ≥ 36 months in 12 people (16.7%). Additionally, it is known that the probability value is (0.007) < $\alpha = 0.05$ from the Chi-Square analysis findings in the appendix of the Continuity

Correction test table on the link between length of labor and dermatitis symptoms. Given that the findings of this research satisfy the parameters of the connection hypothesis, it is possible to draw the conclusion that scavengers' length of work and dermatitis symptoms are related at the Medan City Garbage TPA.

Of the 72 respondents studied, there were 6 people (8.3%) who suffered from symptoms of contact dermatitis with good personal hygiene, 38 people (52.8%) who did not suffer from symptoms of contact dermatitis with poor personal hygiene. 16 people (22.2%) have good personal hygiene, 12 people (16.7%) have poor personal hygiene. Furthermore, it is known that the probability value is $(0.000) < \alpha = 0.05$ from the Chi-Square analysis findings in the attachment to the Continuity Correction test table between the association between personal cleanliness and the symptoms of dermatitis. Given that the study's findings are in line with the relationship hypothesis' requirements, it is possible to draw the conclusion that scavengers' dermatitis symptoms and personal hygiene are related at the Medan City Garbage TPA.

DISCUSSION

Correlation between Age and Symptoms of Contact Dermatitis in Scavengers at the Medan City Garbage Landfill in 2022

The findings revealed that out of the 72 participants, there 29 were respondent aged < 20 years old (40.3%), and 43 were aged ≥ 20 years old (59.7%). The statistical analysis of the research's findings indicated $p = 0.019$ or < 0.05 . This implies that in 2021, there will be a correlation between scavengers at the Medan City Garbage Landfill's age and the symptoms of contact dermatitis. Research by Pada Pradana Ningrum (2018), titled the relationship between worker characteristics and symptoms of contact irritant dermatitis in garbage scavengers surrounding TPS Sesengai Semarang, supports the findings of this study. Age of the respondent and the frequency of irritating contact dermatitis among garbage scavengers are correlated. around TPS Sesengai Semarang with p value = 0.001.

The findings of the same investigation by Hidayati et al in 2021 entitled Factors Associated with Symptoms of Contact Dermatitis in Scavengers at Tpa Talang Gulo Jambi City in 2021. demonstrates a strong connection between the incidence of contact dermatitis symptoms, namely the age variable (p -value = 0.019) (Hidayati et al., 2021). Age is a variable that is always taken into account in epidemiological studies. In general, as people age, their physical abilities also decrease. The process of getting old will be accompanied by a lack of ability to work due to changes in body functions, the cardiovascular and hormonal systems. From age it can be seen that some physical capacities such as vision, hearing and reaction speed decrease after the age of 40 years. The older the age, the more difficult it is for someone to adapt and the faster they get tired. Likewise, the shorter the sleep time and the more difficult it is to sleep (Suma'mur, 2009). In terms of age, 15-24 years old is the age with the highest incidence of occupational skin diseases. This is due to limited experience and lack of understanding of the use of personal protective equipment. Age is one of the characteristics or characteristics of an individual that is classified as important, because age has a close relationship with exposure (IOSH, 2006).

According to some sources, human skin deteriorates with age. As a result, the skin loses its fat layer and becomes drier. The dryness of the skin makes it simpler for chemicals to infect the skin, making it more susceptible to dermatitis. Skin conditions experience an aging process starting at the age of 40. At that age, it is more difficult for skin cells to retain moisture due to the depletion of the basal layer. Sebum production has decreased sharply, so that many dead cells have accumulated due to cell turnover. Older employees in the industrial environment are more susceptible to irritants. The therapy of contact dermatitis frequently fails in old age, leading to chronic dermatitis. It is true that contact dermatitis will affect elderly workers more frequently (HSE, 2013).

Since they are less concerned about exposure to their work environment and believe their physical defenses against exposure to garbage in their work environment are strong, respondents who are older than 20 years old are more likely to avoid wearing gloves at work, according to the

researcher's assumptions. They do not realize that if the immune system is exposed to harmful substances repeatedly, it will weaken and become less effective. When sorting rubbish at work, as opposed to responders under the age of 20 who have more work experience, did not use a mask, work clothing, or gloves. The results obtained in the field showed that the majority were aged ≥ 20 years as many as 43 people (59.7%). This means that it can be concluded that age greatly influences a person's maturity in working, one of which is scavenger work, the more mature a person's age, the more experience in acting and understanding more about the work environment, such as in efforts to prevent skin diseases, namely dermatitis.

Relationship between Education and Symptoms of Contact Dermatitis in Scavengers at the Medan City Garbage Landfill in 2022

The findings indicated that 10 of the 72 respondents who participated in the study (did not graduate from elementary school) had low education, 56 people (77.8%) had moderate education (junior high school) and 6 students (8.3%) had high education (D3-S1) as many as 6 people (8.3%). The statistical analysis of the research's findings indicated $p = 0.022$ or <0.05 . This indicates that among scavengers, contact dermatitis symptoms and education are related at the Medan City Garbage Landfill in 2021. The results of the study are in line with research published in 2018 by Agung and Rustika, with titled Characteristics of Garbage Collector Officers with *Tinea Pedis* at the Rawa Kucing Final Disposal Site (TPA), Tangerang City, which was published in 2018. The findings indicate that education p value = 0.017 and adjusted OR or Exp (B) of 1.214 (95% CI: 1.101-10.132). The findings of the same study, Factors Associated with Symptoms of Contact Dermatitis in Scavengers in Tpa Talang Gulo Jambi City in 2021 by Hidayati et al., show a strong relationship between the prevalence of contact dermatitis symptoms and the education variable (p -value = 0.015) (Hidayati, 2021).

According to Notoatmodjo's theory, the process of teaching and learning constitutes the core of education. A series of behavioral modifications are the end outcome of the teaching and learning process. Therefore, one's conduct is greatly influenced by their education. A highly educated person will behave differently than a person with less education. The existence of a relationship between education and contact dermatitis symptoms is supported by the idea that education is a teaching and learning process, which means that from the learning process, an individual should be able to think, sort out good deeds to do, in this case, in preventing contact dermatitis.

The lack of public education leads to a lack of concern for illness prevention. Education can bring one's insight or knowledge. In general, someone with a higher education will have broader knowledge than someone with a lower level of education (Notoadmojo, 2010). In line with the research results obtained in the field, out of the 72 respondents studied, the majority had moderate education (SMP-SMA) as many as 56 people (77.8%) and a minority with high education (D3-S1) as many as 6 people (8.3%), from it can be seen that the lack of education will affect a person in taking action in this case, namely how to prevent dermatitis.

According to the assumptions of educational researchers, it is also very related to paying attention to personal hygiene which can cause various kinds of diseases, one of which is skin disease, namely dermatitis. From the results of education, the most dominant respondents are moderately educated (junior high school), moderate education makes a lack of knowledge about the negative effects which is caused if you do not pay attention to personal hygiene which causes various skin health problems. Supposedly if the respondent has sufficient education and understanding of a disease, it will be better and can be adequate, it will have a good impact on himself, such as in efforts to prevent dermatitis. The findings of this study support Notoatmodjo's idea that education influences understanding; the more one's education, the better one's understanding and knowledge, and vice versa. Personal cleanliness is essential when it comes to preventing skin problems.

The Relationship between Length of Work and Symptoms of Contact Dermatitis in Scavengers at the Medan City waste Landfill in 2022

The findings revealed that of the 72 individuals investigated, 26 (36.1%) worked < 36 months and 46 (63.9%) worked ≥ 36 months. The study's findings were statistically significant at $p = 0.007$ or < 0.05 . This suggests that there is a connection between scavengers' work hours and their symptoms of contact dermatitis at the Medan City Garbage Landfill in 2021. The findings of this study are consistent with previous studies by Laksono et al in 2020 concerning Analysis of the Relationships of Allergic Contact Dermatitis in Scavengers, demonstrates the connection between duration of action on allergic contact dermatitis with a pathway coefficient of ($p = 0.000 < 0.05$). The findings of this study are consistent with study by Agung and Rustika in 2018 with the title Characteristics of Garbage Collector Officers with Tinea Pedis at the Rawa Kucing Final Disposal Site (TPA), Tangerang City. The results show that the length of work shows a p value = 0.035 and an Adjusted OR or Exp(B) of 6.25 (95% C.I.: 1.511-25.860 (Agung & Rustika, 2018).

The duration of labor has an impact on occupational illnesses. The longer a person works in a place, the more likely they are to be exposed to work-related variables, both physical and chemical, that might cause health problems/disease, which will result in decreased work efficiency and productivity of a worker. The longer a person has worked, the more he has been exposed to the risks of the workplace. Looking at the condition of workers who are at risk of developing dermatitis due to their long working period, the seaweed farming profession is a promising profession for the community around Puntondo Hamlet so that more attention is needed to workers in this non-formal sector (Harahap, 2015). According to the researchers' assumptions, respondents who worked for ≥ 36 months were more susceptible to a high risk of skin complaints compared to those with work duration < 36 months. Because the longer we work, the longer we are exposed to the work environment and the higher the level of risk of skin complaints disorders. If the work continues for a long time, the body's ability will decrease and can cause the risk of skin disorders in garbage scavengers. In addition, the respondent's length of work should better understand the conditions of the workplace so that they can take precautions as early as possible so they don't get dermatitis.

The Relationship between Personal Hygiene and Symptoms of Contact Dermatitis in Scavengers at the Medan City Garbage Landfill in 2022

According to the findings, out of the 73 participants in the study, 22 (30.6%) had high personal hygiene, whereas 50 respondents (69.4%) had poor personal hygiene. The research's statistical findings indicated $p = 0.000$ or < 0.05 . This indicates that in 2021, scavengers at the Medan City Waste Landfill may exhibit contact dermatitis symptoms in connection to their personal hygiene. The results of this study are consistent with research conducted by Laksono et al in 2020 concerning Analysis of the Relationships of Allergic Contact Dermatitis in Scavengers. Shows that there is a direct connection personal hygiene to allergic contact dermatitis with a pathway coefficient of ($p = 0.003 < 0.05$) (Laksono, 2020).

The same research by Agung and Rustika in 2018 with the title Characteristics of Garbage Collector Officers with Tinea Pedis at the Rawa Kucing Final Disposal Site (TPA), Tangerang City. The results show that the characteristics of individual hygiene variables with a p value = 0.004 and an Adjusted OR or Exp(B) of 10 (95% C.I.: 2.337-42.783) (Agung & Rustika, 2020). Personal hygiene is one of self-care consisting of cleaning the scalp and hair, eyes, nose, ears, toenails and hands, skin and care of the body as a whole. Personal hygiene (personal hygiene) is an individual or group effort to maintain health through individual hygiene by controlling environmental conditions. The purpose of personal hygiene is to improve health status, maintain personal hygiene, prevent disease (Isro'in & Andarmoyo, 2012).

In attempts to maintain health, personal cleanliness, particularly skin hygiene, is crucial. For example, taking two times a daily bath in clean water with soap. The skin is one area of the body that is particularly susceptible to numerous illnesses. The skin shields the body from the effects of the environment because it is elastic. Skin health will benefit from a clean, healthy atmosphere. A polluted environment, on the other hand, will be a cause of many ailments, including skin conditions (Suma'mur, 2009). Poor personal hygiene and labor are two of the causes of dermatitis. To maintain clean skin, healthy behaviors such as keeping clothing clean,

bathing frequently, bathing with clean water and soap, utilizing one's own daily essentials, eating nutritious food, particularly vegetables and fruit, and maintaining healthy skin must always be considered. Hygiene in the environment (Harahap, 2015). If people have good personal hygiene, skin complaints will be lower than people who have poor personal hygiene, personal hygiene must become a habit so that it can be applied in everyday life, so as to avoid various health problems, including skin complaints.

According to the researcher's assumption, good personal hygiene is a respondent who is aware of occupational diseases, namely skin complaints disorder due to exposure to the work environment and practicing PHBS on himself such as washing hands before work, washing hands after work, and cutting nails short and then cleaning them. Meanwhile, poor personal hygiene refers to respondents who are not aware of and care about skin diseases and are lazy to do PHBS for themselves. This requires self-awareness for every scavenger to maintain personal hygiene from the risk of an unfavorable work environment, for example the large amount of dirt, bacteria, fungi and germs that can trigger skin disease in scavengers. It is hoped that the scavengers can maintain personal hygiene starting from the cleanliness of their skin, nails, feet and hands, as well as their clothes.

CONCLUSION

Based on the research that has been done, it can be concluded as follows: There is a significant relationship between age and symptoms of contact dermatitis in scavengers at the Medan City Waste Landfill in 2022 with a p value = 0.019. There is a significant relationship between education and symptoms of contact dermatitis in scavengers at the Medan City Waste Landfill in 2022 with a p value = 0.021. There is a significant relationship between length of work and symptoms of contact dermatitis in scavengers at the Medan City Waste Landfill in 2022 with a p value = 0.007. There is a significant relationship between personal hygiene and symptoms of contact dermatitis in scavengers at the Medan City Waste Landfill in 2022 with a p value = 0.000.

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