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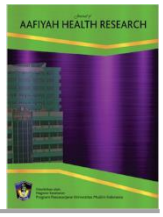

Original Article

Incidence of Irritant Contact Dermatitis in Pottery Craftsmen at Sandi Pattalassang Pottery Center, Takalar Regency, Indonesia

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Abstract

Backgrounds: Dermatitis is a big problem in public health because this disease is considered common by sufferers. This study aims to analyze the factors that influence the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency in 2021.
Methods: This research is an analytical study with a cross-sectional study approach. The population in this study was pottery craftsmen. The number of samples in this study was 117 respondents. The sampling technique in this research is using a non-probability sampling method, namely Purposive Sampling. Univariate, bivariate and multivariate analyzes were performed using SPSS 20.0.
Results: Factors found to have an effect on the incidence of irritant contact dermatitis in pottery craftsmen at the Pattallassang Pottery Center, Takalar Regency, were working period (ρ value = 0.021), history of skin disease (ρ value = 0.000), personal hygiene (ρ value = 0.048). Meanwhile, those that had no effect on the incidence of irritant contact dermatitis were the length of contact (ρ value = 0.781), history of atopy (ρ value = 0.214), and use of PPE (ρ value = 0.849). The variable of service period is the most influential variable on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with an Odds Ratio (EXP(B)) value of 0.153.
Conclusions: Factors that influence the incidence of irritant contact dermatitis in pottery craftsmen are years of service, history of skin diseases, and personal hygiene, while those that have no effect are the length of contact, history of atopy, and use of PPE, while the most influential variable is years of service. Suggestions in this study are for pottery craftsmen to always pay attention to personal hygiene and the use of PPE in order to avoid irritant contact dermatitis in the workplace.

INTRODUCTION

Irritant Contact Dermatitis is dermatitis caused by external contact that causes toxic phenomena. Irritant Contact Dermatitis develops after prolonged or repeated exposure to chemical or physical trauma and can affect anyone who is exposed. Dermatitis is a big problem in public health because this disease is considered common by sufferers (Amado et al., 2009). The World Organization for International Labor (ILO) 2013 states that work-related diseases occur annually as many as 1.1 million people, in America it shows that about 80% of skin diseases caused by work that are often encountered are contact dermatitis (Taylor J, 2017). . Among the most common contact dermatitis is irritant contact dermatitis which ranks first with 80% of cases.

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Based on the 2013 Basic Health Research by the Ministry of Health, the national prevalence of dermatitis was 6.78%. In Indonesia, the prevalence of dermatitis varies widely, about 90% of occupational skin diseases are contact dermatitis, one of which is irritant contact dermatitis. In epidemiological studies, Indonesia showed that 97% of 389 cases were contact dermatitis, where the most common was irritant contact dermatitis with 66.3% of cases. The dermatitis disease was found in 13 provinces that had dermatitis prevalence above the national prevalence, namely Gorontalo, Central Sulawesi, West Sumatra, South Kalimantan, Central Kalimantan, East Nusa Tenggara, Yogyakarta Special Region, Central Java, West Java, Jakarta, Bangka Belitung, Nanggro Aceh Darussalam, and South Sulawesi. The prevalence of dermatitis in South Sulawesi is quite high, namely 53.2%. In 2009 there were 35,853 (5.06%) cases of dermatitis and in 2012 it increased almost 3 times to 97.3318 (14.60%) cases.(Gafur, Abd and Sham, 2018).

Contact Dermatitis is a multifactoral skin disease, the risk factors for this can come from exogenous and endogenous factors. Exogenous factors consist of chemical exposure characteristics such as acetic acid, whey, rock calcium, and environmental factors such as temperature and humidity. While the endogenous factors consist of individual factors which include age, gender, years of service, length of contact, history of atopy, and history of previous skin diseases. As for other factors such as behavioral factors which include personal hygiene and the use of PPE (Hannam, 2013). Research conducted by Sinta Pradaningrum, et al (2019) on mrican tofu craftsmen workers showed that as many as 69.7% of workers suffered from dermatitis. Workers who experience dermatitis due to poor personal hygiene, length of contact more than 3 hours/day and working period of more than 2 years. This is influenced by the long working period with long contact with raw materials that contain chemicals and is supported by poor personal hygiene so that workers are easily exposed to dermatitis.

In addition, research conducted by Mochamad Chafidz (2017) showed that the use of PPE was associated with the incidence of contact dermatitis in Kediri tofu workers (p value = 0.000). Respondents who wore PPE such as boots did not experience contact dermatitis on their feet, while respondents who did not wear or rarely wore PPE boots all experienced contact dermatitis. This is influenced because workers who do not use PPE will be in direct contact with irritant materials so that there will be a greater risk of developing dermatitis (Chafidz, 2017).

On the other hand, according to Hannam and Nixon in a study where there is a relationship between a history of atopy and contact dermatitis. This is influenced because a history of atopy will increase the risk of experiencing contact dermatitis this is due to damage to the barrier function of the skin and an increase in the penetration of irritants and allergens into the skin (Hannam, 2013). Based on the results of research conducted by Suryani (2017). Risk factors for contact dermatitis include a history of previous skin disease, this is because the protective function of the skin has been reduced. The reduced skin protection function includes the loss of the skin layer, the ducts of the sweat glands and oil glands become damaged and due to changes in skin pH (Djuanda A, 2007).

The cause of dermatitis, especially in the work environment that can cause irritant contact dermatitis, is in informal workers such as pottery craftsmen who generally pay less attention to sanitation and protection for their health. This is due to the fact that the raw materials and manufacturing processes of pottery do not support the creation of good sanitation and the lack of protection for the health of workers. On the other hand, the making of pottery is processed into several stages, starting from the sorting of clay to the burning process. The basic material for making pottery is clay. The nature of this clay is watertight where the content of the clay is in the form of silica and aluminum.

Although on the other hand, this skin disease rarely endangers the life of the sufferer, but it can cause high morbidity and suffering for someone who experiences it, so that it can affect the economic needs and quality of life of the sufferer. In addition, the occurrence of this dermatitis can also reduce productivity, especially for pottery craftsmen, because the symptoms can interfere with work. Takalar

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Regency is one of the traditional pottery producing areas that still survives to this day and is a source of livelihood, Takalar Regency has three sub-districts that are centers of the pottery industry, one of which is Pattallassang District which is the center of coded pottery.

Based on observations and initial data collection conducted by researchers on 21 pottery craftsmen at the Sandi Pattallassang Pottery Center, there are about 61.9% who have experienced symptoms such as itchy and red hands and the skin tissue on their hands gradually peels off, but this is ignored and considers this to be the case. this is a common thing. Based on the description, this study aims to conduct research on the factors that influence the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency in 2021.

METHOD

Type, Location and Time of Research

This research is an analytical study with a cross-sectional study approach. This research was conducted in the Sandi Pattallassang Pottery Center, Takalar Regency with the time of the research being carried out in November 2021.

Population and Sample

In this study, the population was all pottery craftsmen in the Sandi Pattallasang Pottery Center, Takalar Regency, as many as 167 people. The total sample is 117 respondents. The sampling technique in this study is using a non-probability sampling method, namely Purposive Sampling, where sampling is based on certain considerations made by the researcher himself, based on the characteristics or characteristics of the population that have been known previously (Notoatmodjo, 2010).

Inclusion Criteria; Pottery craftsmen who are willing to be research subjects by signing the consent form. Exclusion Criteria; respondents who have a history of allergies to a certain material, respondents who are not in place at the time of the study, and respondents who cannot read and write.

Variable

Dermatitis is an inflammation of the skin caused by chemicals/irritants attached to the workers' skin with symptoms such as redness of the skin, swelling, formation of small blisters on the skin, dryness, peeling, and scaliness and is diagnosed by a doctor. Suffering from Dermatitis: if there are symptoms of dermatitis and diagnosed by a doctor. Not Suffering from Dermatitis: if there are no symptoms of dermatitis and it is not diagnosed by a doctor.

The length of contact in this study was the length of time the pottery craftsmen were in contact with the irritant in a matter of hours/day. Referring to the average value of the hours used by all pottery craftsmen in working on pottery with 2 categories, namely long and not long. Length: If the respondent works > 6 hours/day. Not long: if the respondent works 6 hours/day.

The working period in this study is the period of time or the length of the pottery craftsman working in the place until the time the data collection takes place. Length: if the respondent has worked as a pottery craftsman for > 5 years. New: if the respondent has worked as a pottery craftsman for 5 years (Hadyan, 2017). Atopy history is an individual who has a history of disease sensitivity and a family history of the disease. Individuals with a history of atopy, one of which is bronchial asthma. Yes: if there is a history of atopy, one of them is bronchial asthma. None: if there is no history of atopy, one of them is bronchial asthma.

The history of skin disease in this study was someone who had previously suffered from skin diseases such as dermatitis. Yes: if you have had a previous skin disease, such as dermatitis. None: If you have never had a previous skin disease, such as dermatitis (Lestari, 2007).

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*Personal Hygiene*in this study are the habits of pottery craftsmen to maintain personal hygiene before and after doing their work, including hand hygiene, skin hygiene, and clothing hygiene (Depkes, 2012). Referring to the Guttman scale with two categories, namely sufficient knowledge and lack of knowledge, where each item has a score, namely correct answers are given a value of 1 and incorrect answers are given a value of 0. The total number of questions is 7 questions so that the number of possible scores (values) is: Enough: if Answer scores from respondents > 50%. Less: if the respondent's answer score is 50%. The use of PPE referred to in this study is a safety device/protective equipment used while working to avoid various kinds of hazards, these tools include; use gloves, work clothes, and boots. Use: when using one or more PPE such as gloves, work clothes, and boots. Not Using: if not using PPE at all such as gloves, work clothes, and boots.

Data Collection and Analysis

Interview (interview) that is collecting data through interviews using a questionnaire directly to the pottery craftsmen. The data that has been collected is then tabulated in a table according to the variables to be measured. Data analysis was carried out through the stages of editing, coding, tabulation and statistical tests. The statistical tests used were univariate, bivariate and multivariate using computerized services, namely the Statistical Product and Service Solution (SPSS) 20.0 program.

Data analysis includes univariate analysis performed on each variable from the research results in the form of frequency distribution and percentage of each variable. Bivariate analysis was conducted to see the effect of the independent variable and the dependent variable using categorical data, so the statistical test used was the Chi square test (X2) with a significance level (α) of 0.05% or a 95% confidence level. Multivariate analysis was used to determine the effect of joint exposure of several factors that influence the incidence of irritant contact dermatitis. The procedure is carried out on the logistic regression test, if each independent variable with the results shows a value of < 0.25, then the variable can be continued in a multivariate model. All candidate variables were included together to be considered as a model with the results showing the value ($\rho < 0.05$) of the p table. Selected variables were included in the model and insignificant values were excluded from the model, sequentially from the highest value.

Research Ethics

In this study, the researcher assures that respondents need to be protected from things that are detrimental during the study, by paying attention to the aspects of self-determination, privacy, anonymity, confidentiality and protection from discomfort. Researchers also made informed consent before the study was conducted.

RESULTS

Characteristics of Respondents

Table 1. Distribution of Respondents Based on Characteristics of Respondents at the Sandi Pattallassang Pottery Center, Takalar Regency in 2021

Characteristics	n	%
Age		
< 20 Years	1	0.9
20 - 29 Years	20	17.1
30 - 39 Years	12	10.3
40 - 49 Years	26	22.2

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50 - 59 Years	30	25.6
60 Years	28	23.9
Total	**117**	**100**
Gender		
Man	45	38.5
Woman	72	61.5
Total	**117**	**100**
Level of education		
No school	1	0.9
SD	29	24.8
JUNIOR HIGH SCHOOL	32	27.4
SENIOR HIGH SCHOOL	51	43.6
PT	4	3.4
Total	**117**	**100**

Source: Primary Data, 2021

Based on Table 1 above, the distribution of respondents based on age is known from 117 respondents, the most of whom are in the age group 50-59 years as many as 30 respondents (25.6%), while the lowest age frequency is in the age group <20 years (0.9%) The distribution of respondents based on gender is known from 117 respondents, the most of which are women with 72 respondents (61.5%) while there are only 42 respondents (38.5%). The distribution of respondents based on education level, most of the 117 respondents were with high school education level (SMA) as many as 51 respondents (43.6%), while the lowest were respondents who did not take education at all or did not attend school, namely 1 respondent (0.9%).

Table 2. Distribution of Respondents Based on Research Variables at the Sandi Pattallassang Pottery Center, Takalar Regency in 2021

Research variable	n	%
Irritant Contact Dermatitis		
Suffer	40	34.2
No Suffering	77	65.8
Total	**117**	**100**
Contact Length		
Long	40	34.2
Not long	77	65.8
Total	**117**	**100**
Years of service		
Long	105	89.7
New	12	10.3
Total	**117**	**100**
History of Atopy		
Exist	5	4.3
There isn't any	112	95.7
Total	**117**	**100**
History of Skin Disease		
Exist	20	17.1
There isn't any	97	82.9
Total	**117**	**100**
***Personal*Hygiene**		
Not enough	2	1.7
Enough	115	98.3

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Total	**117**	**100**
Use of PPE		
Do not use	60	51.3
Use	57	48.7
Total	**117**	**100**

Source: Primary Data, 2021

Based on Table 2 above, the distribution is based on research variables, namely irritant contact dermatitis, length of contact, years of service, history of atopy, history of skin disease, personal hygiene, and use of personal protective equipment (PPE). Distribution of respondents based on the incidence of irritant contact dermatitis among pottery craftsmen at the Sandi Pattallasang Center for Pottery, Takalar Regency, of 117 respondents, there were 77 respondents (65.8%) who did not suffer from irritant contact dermatitis, while there were only 40 respondents (34.2%) who suffered from irritant contact dermatitis. irritant contact dermatitis. The distribution of respondents based on the length of contact with pottery craftsmen at the Sandi Pattallassang Center for Pottery, Takalar Regency, was found to be 40 respondents (34,

The distribution of respondents based on years of service for pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency, it is known that from 117 respondents there were 105 respondents (89.7%) who had a long service period and who were included in the category of new tenure there were 12 respondents (10, 3%). Distribution of respondents based on history of atopy in pottery craftsmen at the Sandi Pattallassang Center for Pottery, Takalar Regency, from 117 respondents, it was known that there were 112 respondents (95.7%) who did not have a history of atopy and there were 5 respondents (4.3%) who had a history of atopy. previously. The distribution of respondents based on a history of skin disease in Pottery Worker Sandi Pattallassang Takalar Regency can be seen from 117 respondents there are 97 respondents (82,

The distribution of respondents based on personal hygiene for pottery craftsmen at the Sandi Pattallassang Center for Pottery, Takalar Regency, it is known that there are 115 respondents (98.3%) who have sufficient personal hygiene and there are as many as 2 respondents (1.7%) who have poor personal hygiene. Distribution of respondents based on the use of personal protective equipment (PPE) for Pottery Worker Sandi Pattallassang, Takalar Regency, it is known that from 117 respondents there are 57 respondents (48.7%) who use PPE and there are 60 respondents (51.3%) who do not use PPE. PPE.

Table 3. Factors Affecting the Incidence of Irritant Contact Dermatitis in Pottery Craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency in 2021

Research variable	Irritant Contact Dermatitis				Total		*Value*
	Suffer		No Suffering				
	n	%	n	%	N	%	
Contact Length							
Long	13	32.5	27	67.5	40	100	0.781
Not long	27	35.1	50	64.9	77	100	
Years of service							
Long	32	30.5	73	69.5	105	100	0.021
New	8	66.7	4	33.3	12	100	
History of Atopy							
Exist	3	60	2	40	5	100	0.214
There isn't any	37	33	75	67	112	100	

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History of Skin Disease							
Exist	20	100	0	0	20	100	0.000
Never	20	20.6	77	79.4	97	100	
Personal Hygiene							
Less	2	100	0	0	2	100	0.048
Enough	38	33	77	67	115	100	
Use of PPE							
Do not use	21	35	39	65	60	100	0.849
Use	19	33.3	38	66.7	57	100	

Source: Primary Data, 2021

Based on Table 3 above, it is known that the distribution of respondents is based on the influence of research variables on the occurrence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Center for Pottery, Takalar Regency. There are 13 respondents (32.5%) who suffer from irritant contact dermatitis and there are 27 other respondents (67.5%) who do not suffer from irritant contact dermatitis, while those who are in the category of not having prolonged contact with irritant substances are 77. respondents among 27 respondents (35.1%) who suffer from irritant contact dermatitis and 50 respondents (64.9%) of whom do not suffer from irritant contact dermatitis.

The results of statistical tests using the chi-square test obtained a value of 0.781 > 0.05. This means that there is no effect of length of contact on the incidence of irritant contact dermatitis in pottery craftsmen. The distribution of respondents based on the effect of working period on the incidence of irritant contact dermatitis in pottery craftsmen, it is known from 105 respondents who have a long working period there are 32 respondents (30.5%) who suffer from irritant contact dermatitis and 73 respondents (69.5%) who suffer from irritant contact dermatitis. do not suffer from irritant contact dermatitis. Meanwhile, the new category of workers with 12 respondents, 8 respondents (66.7%) suffered from irritant contact dermatitis and 4 respondents (33.3%) did not suffer from irritant contact dermatitis.

The results of statistical tests using the chi-square test obtained a value of 0.021 <0.05. This shows that there is an effect of working period on the incidence of irritant contact dermatitis in pottery craftsmen. The distribution of respondents based on the effect of a history of atopy on the incidence of irritant contact dermatitis in pottery craftsmen showed that of the respondents who had a history of atopy there were 3 respondents (60%) with irritant contact dermatitis and 2 respondents (40%) of whom did not suffer from irritant contact dermatitis. As for the respondents who did not have a history of atopy, there were 37 respondents (33%) suffering from irritant contact dermatitis and 75 respondents (67%) not suffering from irritant contact dermatitis.

The results of statistical tests using the chi-square test obtained value 0.214 > 0.05. This means that there is no influence of atopy history on the incidence of irritant contact dermatitis in pottery craftsmen. The distribution of respondents based on the effect of a history of skin disease on the incidence of irritant contact dermatitis in pottery craftsmen is known from 20 respondents who have a history of skin diseases, all 100% suffer from irritant contact dermatitis, while respondents who do not have skin diseases from 97 respondents, 20 respondents (20.6 %) suffered from irritant contact dermatitis and the other 77 respondents (79.4%) did not suffer from irritant contact dermatitis.

The results of statistical tests using the chi-square test obtained value 0.000 <0.05. This shows that there is an influence of a history of skin disease on the incidence of irritant contact dermatitis in pottery craftsmen. The distribution of respondents based on the influence of personal hygiene on the incidence of irritant contact dermatitis in pottery craftsmen, showed that from 115 respondents who had adequate personal hygiene, 38 respondents (33%) suffered from contact dermatitis and 77 respondents

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(67%) did not suffer from contact dermatitis. while respondents with poor personal hygiene all suffer from irritant contact dermatitis as many as 2 respondents (100%).

The results of statistical tests using the chi-square test obtained a value of 0.048 <0.05. This shows that there is an influence of personal hygiene on the incidence of irritant contact dermatitis in pottery craftsmen. Distribution of respondents based on the effect of the use of PPE on the incidence of irritant contact dermatitis in pottery craftsmen, it is known that from 60 respondents who used PPE, there were 21 respondents (35%) suffering from irritant contact dermatitis and 39 respondents (65%) not suffering from irritant contact dermatitis. , while the respondents who did not use PPE were 57 respondents who suffered from irritant contact dermatitis, there were 19 respondents (33.3%) and 38 respondents (66.7%) did not suffer from irritant contact dermatitis.

The results of statistical tests using the chi-square test obtained value of 0.849 > 0.05. This shows that there is no effect of the use of PPE on the incidence of irritant contact dermatitis in pottery craftsmen.

Table 4. Results of Logistics Regression Test Analysis

Variabel Independen		B	S.E	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1[a]	Masakerja	-1.847	.732	6.369	1	.012	.158	.038	.662
	Riwayatatopi	-16.808	7.111E3	.000	1	.998	.000	.000	.
	penyakitkulit	36.907	1.017E4	.000	1	.997	1.068E16	.000	.
	personalhigien	-38.488	2.375E4	.000	1	.999	.000	.000	.
	Constant	1.761	2.784E4	.000	1	1.000	5.818		
Step 2[a]	Masakerja	-1.875	.732	6.567	1	.010	.153	.037	.644
	penyakitkulit	22.571	8.598E3	.000	1	.998	6.345E9	.000	.
	personalhigien	-21.741	2.303E4	.000	1	.999	.000	.000.	
	Constant	-19.875	2.874E4	.000	1	.999	.000		

Sumber : *Data Primer, 2021*

Based on Table 4 above, the results of the logistic regression analysis show that the results of the logistic regression test analysis, it is known that with the backward stepwise method there are 2 stages to arrive at the final result. In the first step, all variables included in the logistic regression test were included, in this first step the variable history of atopy had (sig) > 0.05, and was not included again in the second stage, in the second stage is the end of the analysis.

Based on the multivariate analysis in Table 5.6 above, it can be seen that the variable that has the most significant effect on the incidence of irritant contact dermatitis is working period, seen from the value of Sig. i.e. 0.010 (value < 0.25) and the value of Odd Ratio (EXP(B)) is 0.153

DISCUSSION

Effect of contact time on the incidence of irritant contact dermatitis in pottery craftsmen

From the results of the questionnaire and the results of interviews, one of these is influenced by the inconsistent length of contact in a day a pottery worker in making pottery at the Sandi Pattallassang Pottery Center, Takalar Regency, because they are non-formal industrial workers so they work according to their wishes and abilities without target every day, so that the time in direct contact with

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irritant materials such as the basic ingredients of pottery, namely clay and other materials, does not have a major influence on the incidence of irritant contact dermatitis at the Sandi Pattallassang Pottery Center.

The results of the research that have been carried out are not in line with the research conducted by Pramuningtyas et al (2019) regarding "Risk factors for hand dermatitis in traditional workers in the pottery industry". chi-square test obtained the value of = 0.004.

Possible causes of hand dermatitis in pottery craftsmen are some of the ingredients in clay as the main stone. One of the content, clay or clay in the pottery kasongan is calcium oxide. Calcium oxide (CaO) when touched with water will turn into calcium hydroxide (Ca(OH)2), which is an alkaline substance, with a pH value of 11-13 and can cause very strong irritation to the skin, and can cause skin erosion. and even skin necrosis (Wang, et al., 2011). In addition to the calcium hydroxide content, kasongan clay or pottery also contains 20.09% Al2O3 (aluminum oxide). Another study by Nuraga et al (2008) also stated that the longer contact with chemicals, the easier it is to experience inflammation or skin irritation. The longer the contact with the irritant material, inflammation or skin irritation can occur, causing the outer layer of skin cells to experience deeper damage (Lestari and Utomo, 2007). The length of time a person works well in a day is generally 8 hours, extending working time more than the ability to work long is usually not accompanied by optimal efficiency and effectiveness and work productivity, it is even common for there to be a decrease in work quality and results and working for a prolonged period of time will cause fatigue. , health problems and diseases (Suma'mur, 2009).

The Effect of Working Period Factors on the Incidence of Irritant Contact Dermatitis in Pottery Crafts

The period of work is the period of time or the length of time the worker works in a place where he works. The working period can affect the occurrence of dermatitis, this is related to work experience, so that workers who work longer hours are less likely to get dermatitis than workers who have little experience in work. However, workers who have worked for a long time will increase the risk of developing dermatitis because they are more exposed to chemicals or irritants (Sularsito, 2007).

The results of this study are supported by the theory according to Fatma Lestari and HariSuryo Utomo (2007), which states that workers with 2 years of service can be one of the factors indicating that these workers do not have sufficient experience in doing their jobs. If these workers are often found making mistakes or not paying attention to the SOPs of their work, then this has the potential to increase the incidence of dermatitis in workers. Experienced workers will be more careful so that they are less likely to be exposed to irritants even for a long period of time.

In addition, workers who have a long working period and do not suffer from irritant contact dermatitis assume that if they come into contact with clay, which is the raw material for making pottery, even though in the long term there will be no risk and consider it normal, they have also proven that it is flat. On average, starting from junior high school age they have been introduced and started to make pottery to help their family's economy until the elderly. When this happens such as itching or irritation of the skin that is not the effect of the work they do every day, they come into contact with clay which has an irritating content on the skin when it has been repeatedly in contact and for a long period of time.

Based on the results of this study, respondents with relatively new tenures mostly suffered from irritant contact dermatitis, as evidenced from 12 respondents, 8 of them suffered from irritant contact dermatitis, this is in line with the theory related to the lack of work experience that they undergo so that they will be more likely to experience errors in work. and do not pay too much attention to one of them personal hygiene so that they will be more at risk of experiencing irritant contact dermatitis. This research is supported by Rahmi Garmini (2018) where there is a significant relationship between tenure and the incidence of irritant contact dermatitis with value = 0.019. The value of RP = 3.750 means that

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workers with 3 years of service have a risk of developing irritant contact dermatitis 3.750 times greater than workers with years of service >

In addition, Cahyawati's research (2011) also supports this study where tenure is related to the incidence of dermatitis in fishermen, most (75%) fishermen with dermatitis have a working period of 2 years, on the other hand those who do not suffer from dermatitis all have a working period of > 2 years. A person's tenure determines a person's level of experience in mastering his work and avoiding a few things that can pose a long-term risk to the work he is doing.

The results of this study are not in line with the results of research conducted by Indrawan et al (2014) regarding the relationship between years of service and irritant contact dermatitis where there is no significant relationship between tenure and the incidence of irritant contact dermatitis in premix workers at PT. X Cirebon, with the results of the chi-square test statistic, the value of value = 1,000 (ρ > 0.05). This is due to the fact that workers with long working periods feel that they are already immune to the chemical CuSO4, even though there are symptoms of skin disorders or dermatitis, they think this is normal and is only a risk from their work.

The Influence of Atopy History Factors on the Incidence of Irritant Contact Dermatitis in Pottery Crafts

Based on the results of the questionnaire and the results of interviews conducted that those who have a history of atopy with irritant contact dermatitis do not have a big influence on the incidence of irritant contact dermatitis because they have a history of atopy, routinely take drugs and complete treatment so that the disease they have experienced does not recur. . This study is not in line with the research conducted by Pramuningtyas (2019) entitled "Risk factors for hand dermatitis in traditional workers in the pottery industry". .05 and RP value = 3.8(1.311 – 11, 474). This shows that a history of atopy has a risk of 3.8 times compared to without a history of atopy.

A history of atopy is significantly associated with the incidence of dermatitis. Many studies in the general population report that a history of atopy is the most important risk factor for dermatitis. Atopic conditions increase the susceptibility of dermatitis to irritants and hinder the healing process. Intact stratum corneum, a protective barrier layer of compact, keretinized epidermal cells, has an important role in preventing irritant contact dermatitis. Individuals with a history of atopy have decreased hydration in the stratum corneum and low levels of amino acids in the skin, making it easier for irritants to enter.

Influence of Factors History of previous skin disease on the incidence of irritant contact dermatitis in pottery craftsmen

History of skin disease is one of the bases used in determining whether a skin disease occurs due to a previous disease. Someone who has previously suffered from skin diseases will be more susceptible to irritants, because the skin's defense against irritating substances will decrease. Previously suffered skin diseases can be one of the factors that workers suffer from contact dermatitis again (Djuanda, 2007). Based on the results of questionnaires and interviews conducted in this study, those who have a history of previous skin diseases affect the occurrence of irritant contact dermatitis, this is because those who experience skin diseases often occur repeatedly due to the possibility, as in theory,

The results of this study are in line with research conducted by Suryanti et al (2017), which compared salt farmer workers and rice farmers to the risk factors for the incidence of irritant contact dermatitis. irritant contact, both of which have value = 0.0001 with POR 9.2 and 13, it is known that salt farmers have 9.2 times more risk of irritant contact dermatitis, while rice farmer workers have 13 times greater risk of contracting the disease irritant contact dermatitis.

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Workers who have a previous skin disease, will more easily experience occupational dermatitis, because the protective function of the skin has been reduced due to the skin disease that he suffered previously. The reduced protective functions include the loss of the skin layer, the ducts of the sweat glands and oil glands being damaged and changes in skin pH (Djuanda, 2007).

The results of this study contradict the research conducted by Zania et al (2018) where there is no relationship between a history of previous skin diseases and the incidence of contact dermatitis in fishermen in the Induha sub-district, Latambaga sub-district, with a value = 0.980. This can happen because previously the fishermen who had skin diseases had completely recovered either by means of treatment or not at all, besides that all workers, whether they had a history of skin diseases or not, had the potential to suffer from contact dermatitis because all workers were exposed and came into contact. right at work.

The results of the research and theory above are also comparable with the research conducted at the Cipayung TPA which showed that there was no significant relationship between a previous history of skin disease and the incidence of irritant contact dermatitis. Based on the statistical test in the study entitled "Factors related to irritant contact dermatitis in waste processing workers at the Cipayung TPA, Depok city in 2010 it was found that the value of value = 0.464 (Mausulil, 2010).

Effect of Personal Hygiene Facts on the incidence of irritant contact dermatitis in pottery craftsmen

In addition, there are still some respondents who do not use soap when washing their hands, only use water to reduce it by cleaning the remnants of the material attached to the skin of workers used in making pottery, so that it does not support the occurrence of irritant contact dermatitis in workers, but only as an effort to reduce the impact of irritating materials on the occurrence of irritant contact dermatitis, therefore this affects the occurrence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency.

This research is in line with research conducted bySarfiah et al (2016). Regarding the relationship between personal hygiene and the incidence of irritant contact dermatitis, it is proven that based on the results of the chi square test analysis, the value of value = 0.000 <0.05. This proves that there is a significant relationship between personal hygiene and irritant contact dermatitis in fishermen in Lamanggau Village, Tomia District, Wakatobi Regency. This is because their work environment is not clean and the available facilities are not adequate, so they are not concerned with their personal hygiene. The above research is comparable to research conducted on rice farmers in Balerejo Village, Balerejo District, Madiun Regency with the results of the chi square test obtained a value of 0.001 <0.05 which means that there is an influence between personal hygiene and contact dermatitis, and it is known that the OR value = 6.769 > 1 ,

On the other hand, a person's level of education greatly influences the incidence of irritant contact dermatitis because a person's level of education is comparable to one's knowledge of everything, one of which is the problem of the risk of irritant contact dermatitis in pottery craftsmen, as evidenced by the results of questionnaires and interviews conducted from 2 respondents who having poor personal hygiene, all of whom have an education level with elementary school (SD) so that this is what influences a person to be at risk of developing dermatitis in pottery craftsmen, this is proven based on research conducted by germini (2018) with a value of RP = 3.750 this means workers who Those who have less knowledge have a risk 3.750 times greater than people who have good knowledge.

This study is not in line with research conducted by Garmini (2018) where there is no statistically significant relationship between personal hygiene and the incidence of irritant contact dermatitis in tofu factory workers, this is evidenced by statistical tests conducted using the chi square test, the value of is obtained. value = 0.858 > 0.05. The research above is also comparable to the research conducted on premix workers at PT. X Cirebon, there is no significant effect between personal hygiene

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and the incidence of irritant contact dermatitis, this is evidenced by the results of statistical tests, obtained a significant value of 0.689 > 0.05.

Effect of PPE use on the incidence of irritant contact dermatitis in pottery craftsmen

According to Suma'mur, personal protective equipment is one of the tools used to protect oneself or the body from the dangers or impacts of work. However, it is technically recognized that personal protective equipment is not perfect for protecting the body but can reduce the severity of the health impacts on the job that will occur.

In addition, respondents did not use personal protective equipment (PPE) because there are several processes in the manufacture of pottery that do not support the use of personal protective equipment (PPE), such as gloves in the process of making pottery using clay, but most of the workers do not suffer from irritant contact dermatitis. , So it has no effect on the incidence of irritant contact dermatitis in pottery craftsmen.

This study is in line with research conducted by Indrawan (2014) regarding the relationship between the use of personal protective equipment and the incidence of irritant contact dermatitis in premix workers at PT. X Cirebon with statistical test results with value = 0.369 > 0.05, this indicates that there is no significant relationship between the use of personal protective equipment and the incidence of irritant contact dermatitis. Based on the results of interviews in this study, because the workers had several reasons, namely feeling less comfortable or less agile at work and the limited stock of PPE supplies, one of which was gloves. Even though workers already use PPE such as gloves to protect their hands, they still suffer from irritant contact dermatitis.

This study is not in line with the research conducted by Fitriah et al (2021) regarding the use of personal protective equipment, where there is a significant relationship with value = 0.000 <0.05 between the use of personal protective equipment and the risk of contact dermatitis in workers at the PT Wijaya project. In this work, the Prevalence Rate (PR) value is 3.333, which means that workers who do not fully use personal protective equipment (PPE) have a 3.333 times risk of developing contact dermatitis compared to workers who complete use of PPE.

The Most Influential Factors on the Incidence of Irritant Contact Dermatitis in the Pattallassang Sandi Pottery Center, Takalar Regency

Based on the results of logistic regression analysis, using the 2-step backward method, the variable that has the most significant effect on the incidence of irritant contact dermatitis in pottery craftsmen is the working period, which can be seen from the Sig value. That is 0.010 ($\rho < 0.05$) and the value of Odd Ratio (EXP(B)) is 0.153. According to Sularsito (2007), the working period can affect the occurrence of dermatitis, this is related to work experience, so that workers who work longer hours are less likely to get dermatitis compared to workers who have little experience at work. Experienced workers will be more careful so that they are less likely to be exposed to irritants even for a long period of time.

Workers with a length of work 4 years can be one of the factors that indicate that the worker does not have sufficient experience in doing his job and has not paid attention to the health risks that will occur, so that workers are still often found making mistakes in their work or not paying attention to cleanliness at work, then it has the potential to increase the incidence of dermatitis in workers.

CONCLUSION

Based on the results of research and discussion, it is concluded that "Factors that influence the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency" are as follows: 1). There was no effect between length of contact with irritant

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materials on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.781 > 0.05. 2). There is an effect of working period on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.021 <0.05. 3). There is no effect between atopic history and the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.214 > 0.05. 4). There is an influence between a history of skin disease on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.000 <0.05. 5). There is an influence between personal hygiene on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.048 <0.05. 6). There was no effect between the use of Personal Protective Equipment (PPE) on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency with a value of 0.849 > 0.05. 7). The most influential factor on the incidence of irritant contact dermatitis in pottery craftsmen at the Sandi Pattallassang Pottery Center, Takalar Regency based on the results of multivariate analysis is the period of service with a value of Sig. that is 0.010 ($\rho < 0.05$) and the value of Odd Ratio (EXP(B)) is 0.153.

SUGGESTION

Some suggestions from this research are 1). dIt is hoped that every pottery craftsman, both those who have long working hours or not every day, who has long contact times to always pay attention and prevent the risks that will occur in carrying out their work, namely by fulfilling every component that can prevent pottery craftsmen workers from getting irritant contact dermatitis. 2). Every pottery craftsman, especially for workers who have a relatively new working period who do not have sufficient experience in work to always learn the risks that will occur in order to avoid irritant contact dermatitis. 3). For pottery craftsmen who already have a history of atopy, be obedient in undergoing treatment until they are completely healed because those who have a history of atopy are more at risk of developing irritant contact dermatitis. 4). Pottery craftsmen who have a previous history of skin disease are expected to always use and use components that will prevent them from getting irritant contact dermatitis, because those who have a history of skin diseases will be more susceptible to getting dermatitis again. 5). Every pottery worker, whether experiencing irritant contact dermatitis or not, must always maintain personal hygiene to avoid dermatitis, one of which is by using running water to clean the remnants of materials that can irritate the workers' bodies. 6). It is expected that pottery craftsmen always use PPE such as boots and masks during the process of forming, burning and painting pottery, In addition, it is necessary to use gloves during the burning and painting process in order to avoid diseases that will occur, especially irritant contact dermatitis. 7). For further researchers, it is better to conduct research involving other variables such as environmental variables, soil types and parts of it so that it can be better known what are the factors that influence the occurrence of irritant contact dermatitis in pottery craftsmen.

Declaration of Conflict of Interest

All authors state that there is no potential Conflict of Interest in this research and article.

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