



Dermatitis Contact In Warehouse Workers

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Received: 28 September 2019 / Accepted: 10 February 2020 / Published Online: 29 February 2020

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Abstract

Dermatitis contact is dermatitis (inflammation of the skin) that can occur due to work. The prevalence rate is still high among workers. Botot warehouse workers can also be at risk of experiencing this. The purpose of this study was to determine what factors influence the incidence of contact dermatitis in Botot warehouse workers in Percut Sei Tuan District, Deli Serdang Regency. Quantitative research. The study population was all Botot warehouse workers, 30 workers, and all of them used as research samples. Collection by using a questionnaire with direct interviews. Data analysis using the chi-square test and multiple logistic regression. The results showed that the majority of workers during the last six months had experienced an incidence of dermatitis by 73.3%. Knowledge and personal hygiene are factors that influence the prevalence of contact dermatitis, while individual elements (age and sex) do not affect the incidence of dermatitis in Botot workers. The conclusion in this study, the most dominant factor influencing the prevalence of contact dermatitis is personal hygiene.

Keywords: Contact; Dermatitis; Warehouse; Worker

INTRODUCTION

Based on the 2009 Health Law, one of which is to protect workers in the law governing health efforts that must be carried out by workplace managers in both the formal and informal sectors to maintain the health of workers and prevent work accidents that can result in losses to various parties (MOH, 2009).

Workers' health must consider, not only for the manager but must also be a concern for the workers themselves. Awareness of healthy behavior is critical in preventing occupational diseases such as contact dermatitis. Especially in the present era of the industry tends to use chemicals that are toxic or allergic, which causes an increase in the prevalence of contact dermatitis (Ridwan, 2009).

The percentage of occupational dermatoses from the whole occupational disease occupies the highest portion of around 50-60%. The occurrence of dermatitis is usually found on the hands, fingers, and arms so that it can interfere with workers at work, which results in decreased work productivity (Susanto & Ari, 2013). Skin disorders in workers in the United States reported that 90% of contact dermatitis in which 2% is dermatitis on the hands (Orton & Wilkinson, 2004).

Direct factors or indirect factors can cause the occurrence of dermatitis in workers. Direct factors include chemicals, poison Tananman, physics, mechanics, and biology. Indirect factors are genetic, age, environment, personal hygiene, race, sex, skin texture, and others (DiBerardinis, 1999).

Research conducted on Tahu Mrican artisans states there is a relationship between personal hygiene and work life with the occurrence of contact dermatitis on craftsmen (Pradaningrum, Lestantyo, & Jayanti, 2018). In the employee laundry research, contact dermatitis caused by a type of work, history of atopy, mechanical exposure, frequency of exposure (Afifah, Ernawati, & Sudaryanto, 2012).

In informal companies such as Botot cellars, occupational diseases that often occur are contact dermatitis. Moreover, subjective symptoms of the diseases or complaints such as itching, burning, redness, swelling, small blisters, peeling skin, dry skin, scaly skin, thickening of the skin (Susanto & Ari, 2013).

Botot is an informal business located in Percut Sei District, Deli Serdang Regency. Working in the Botot warehouse is one job that is at risk of exposure to materials that can cause symptoms of contact dermatitis. The most common allergens to contact dermatitis are chemicals contained in used goods that located around Botot warehouse workers. In Botot warehouse / used goods that will recycle the risk of danger along with diseases that are often caused by contact dermatitis arising from contact with chemical mixtures when washing, sorting and packing to be ready to be given to companies engaged in recycling. The data obtained, in 2017 contact dermatitis ranked 6th out of 10 biggest diseases in the working area of Tanjung Rejo Puskesmas, and in 2018 Contact Dermatitis was still included in the 10 biggest diseases ranked 5th out of 10 Diseases in the Puskesmas Tanjung working area Rejo In 2018 people who came for treatment at Tanjung Rejo Health Center with Contact Dermatitis Diagnosis totaled 212 people. This data obtained from 9 villages in the working area of Tanjung Rejo Health Center. For Tanjung Rejo Village, 20 people treated with Contact Dermatitis Diagnosis. This diagnosis is determined based on

clinical examination. This research is to find out what factors influence the incidence of contact dermatitis in Botot warehouse workers in Percut Sei Tuan District, Deli Serdang Regency.

METHOD

This study is analytical research using a cross-sectional study approach. The population in this study were all Botot warehouse employees as many as 30 people, where each employee has their respective jobs. Botot warehouse is located in the Percut Region and entirely sampled. The dependent variable in this study was contact dermatitis, while the independent variables were age, sex, knowledge, attitude, and personal hygiene. Primary data collection using a questionnaire in which interviews were conducted directly with workers. This research used Questionnaires in the form of a checklist. Data analysis uses the chi-square test and multiple logistic regression. Research this obtained ethical merit from the ethics commission with number: 065/GJ/OPS/MDN/IX/2018.

RESULT AND DISCUSSION

Table 1. Frequency Distribution Based on Characteristics, Knowledge, Attitudes, Personal Hygiene and Contact Dermatitis in Botot warehouse workers.

Characteristics	n	Percentage (%)
Age		
≤ 35 years	13	43,3
>35 years	17	56,7
Gender		
Female	20	66,7
Male	10	33,3
Level of Education		
Elementary School	6	20,0
Junior High School	20	66,7
Senior High School	4	13,3
Level of Knowledge		
Know well	7	23,3
No Information	23	76,7
Attitude		
Positive	5	16,7
Negative	25	83,3
Personal Hygiene		
Very Good	6	20,0
Poor	24	80,0
Dermatitis		
No	8	26,7
Yes	22	73,3

The results showed that the majority of workers aged > 35 years by 56.7%, female workers were more expensive than male workers by 66.7%. Almost all workers have a junior high school education of 66.7%. Workers also lack knowledge (76.7%), negative attitudes (83.3%), and personal hygiene, the majority of them (80.0%). The

majority of workers in the past six months experienced contact dermatitis symptoms of 73.3%.

The analysis of the relationship between individual factors, knowledge, attitude, and personal hygiene with the incidence of contact dermatitis can see as follows:

Table 2. Cross Tabulation Age, Gender, Knowledge, Attitude, Personal Hygiene with Contact Dermatitis in Botot Warehouse Workers

Variable	Dermatitis Contact				Total		p
	Yes		No		f	%	
	f	%	f	%			
Age							
≤ 35 years	3	23,1	10	76,9	13	100,0	0,697
>35 years	5	29,4	12	70,6	17	100,0	
Gender							
Female	2	20,0	16	80,0	20	100,0	0,243
Male	4	40,0	6	60,0	10	100,0	
Level of Knowledge							
Know well	4	57,1	3	42,9	7	100,0	0,037
No Information	4	17,4	19	82,6	23	100,0	
Attitude							
Positive	3	60,0	2	40,0	5	100,0	0,065
Negative	5	20,0	20	80,0	25	100,0	
Personal Hygiene							
Very Good	4	66,7	2	33,3	6	100,0	0,013
Poor	4	16,7	20	83,3	24	100,0	

Research results show that knowledge (p = 0.037) and personal hygiene (0.013) have a relationship with the incidence of contact dermatitis

in Botot warehouse workers. Meanwhile, based on the analysis of the most dominant factors affecting the incidence of contact dermatitis as follows:

Table 3. Analysis of the Factors that Most Affect the Occurrence of Contact Dermatitis in Botot Warehouse Workers

Variable	B	EXP
Level of Knowledge	2.013	7.482
Personal Hygiene	2.454	11.633

The results showed that the factor that most influenced the incidence of contact dermatitis was personal hygiene. The contact scrutiny experienced by Botot warehouse workers is part of the palm and fingers. This factor can cause by their direct contact with materials in Botot warehouses such as used bottles, glass, plastic, etc. where the material can contain chemicals or biologics that ultimately exposed to the human body. Events can occur in a fast or long period can also be influenced by individual factors, differences in skin thickness in various places cause differences in permeability, race, sex, age and skin disease that is or has experience (Sularsito & Djuanda, 2011).

Knowledge is essential possessed by workers, thus encouraging workers to behave safely. Sarfiah's research states that there is a relationship of personal hygiene with the onset of irritant contact dermatitis in fishers in Lamaggau Village (Sarfiah, Asfian, & Ardiansyah, 2017).

Lack of respondent's actions in maintaining personal hygiene, the respondent will easily experience symptoms of contact dermatitis. This slackness is because the symptoms of contact dermatitis often become occupational diseases. Personal hygiene that causes symptoms of contact dermatitis is not fast going on, so by doing habits such as washing hands after working with soap, changing

work clothes every day, and using PPE when working can reduce the risk of contact dermatitis symptoms.

Personal hygiene measures must also support health facilities, such as providing soap and clean water. The worker's habit is not always changing clothes (personal and work) every working day and not washing right after finishing work. They mainly used to women after working on homework first like cooking, and after household chores finished, they washed. The results of the study also found in workers at fish auction sites in Palembang, who stated there was a link between personal hygiene and the incidence of dermatitis (Cahyawati & Budiono, 2011).

Therefore, to improve information obtained by workers about personal hygiene to avoid contact dermatitis symptoms, it is necessary to have health education about occupational diseases, especially contact dermatitis symptoms.

Knowledge is very much in line with behavior. Likewise, the incidence of dermatitis experienced by Botot workers is caused due to lack of personal hygiene behavior due to lack of knowledge as well. This is consistent with research conducted by Nurwahidah, which states that there is a correlation between knowledge and behavior (Nurwahidah, Dramawan, & Haris, 2018). The results of other studies also show that there is an influence of personal hygiene with skin disorders in female scavengers (Ferusgel, Nasution, & Butar-Butar, 2018).

CONCLUSION

The results showed that the majority of workers in the botot warehouse during the last 6 months had experienced dermatitis, the majority of which occurred on the palms and fingers with complaints of itching, dry hands and blushing. Personal hygiene is the most dominant factor affecting dermatitis in workers.

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