

Factors Relating to Respiratory Disorders on Workers the Wood

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Abstract: Lung disease due to work or lung disease that occurs due to work relations is defined as lung disease caused by work or the work environment. Based on the researchers' preliminary observations, workers in the industrial area of the furniture range are at risk of experiencing lung function disorders due to exposure to wood dust, this disease can be caused by dust particles that are inhaled by workers for a long time. The research objective was to determine the factors associated with respiratory problems in wood mill workers. This type of research is analytic with a cross sectional survey design. The population and sample in this study were workers as many as 37 wood workers, the study was conducted in Beutong district on december 22 June 2018, Sampling was carried out by total sampling. Univariate and bivariate analyzed using correlation test. The results showed that there was a significant relationship between length of work (Value $r = 0.459$), years of service (Value $r = 0.405$), use of PPE masks (Value $r = 0.467$), attitude (Value $r = 0.408$), knowledge (Value $r = 0.460$) with respiratory distress. It is concluded that there is a significant relationship between length of work, length of service, use of PPE masks, attitudes of knowledge and respiratory disorders. It is recommended that the owners of the wood mill work together with the puskesmas in overcoming workers' respiratory disorders in order to obtain counseling and information about preventing respiratory disorders in workers.

Keywords: Working Period, Knowledge, PPE and Respiratory Disorders

Introduction

In beutong district nagan raya there were 11 the wood mashing-mashing operated for 8 hours per day and night 4 hours per night, and every day operate in wood processing capacity of labor still 37 people of all the wood and wood furniture, lack of awareness of workers to use the self protection mask sat at work, in addition to exposure to dust and habit of not using a mask, workers also have smoking habit can affect parunya capacity, put behind their health and local health agencies lack of supervision, 4 of the 10 workers the wood much complaining of breathing due to illness, and skin irritation and exposure to wood dust cough stones because his each day, the existence of wood furniture is close to residential areas but operate on each day and produce dust so much and affect pollutiondiseases were not reported, it is estimated that 13% of them are occupational diseases, who have complaints of health problems related to workers, one of which is respiratory problems. The age of many ARIs depends on the length of work they are engaged in, usually starting from the age of 20 years and over (PUSKESMAS Beutong, 2017).

Based on the researchers' preliminary observations, workers in the furniture industrial area are at risk of experiencing pulmonary function disorders due to exposure to wood dust produced during the production process, this disease can be caused by dust particles that are inhaled by workers for a long period of time. Did not provide masks, previously the management provided personal protective equipment for workers but many workers did not want to use them, so the management did not provide them anymore. Some people who do

not wear PPE stated that they are used to doing this work, so they do not need to be afraid when working, and they consider using PPE such as a mask to reduce their feeling of comfort while working. The research objective was to determine the relationship between working period, use of PPE, attitude and knowledge with respiratory disorders in wood mill workers. Research purposes the research objective was to determine the relationship between working period, use of PPE, attitude and knowledge with respiratory disorders in wood mill workers. Benefits of research 1). Can increase knowledge, awareness, understanding and insight of workers to obtain information, especially wood mill workers about factors that can cause respiratory problems. 2). Can be taken into consideration for employers in their efforts to make policies in terms of protection of workers.

Methods

This research is a type of survey research that is analytic with a Cross Sectional survey approach. This research was conducted in Beutong Subdistrict on wood mill workers carried out on 06 December-22 December 2018. The population in this study were all workers in 4 villages from 11 wood mills and as many as 37 workers, the sample size was 37 people.

Result

Univariate Analysis

Table 1. Frequency Distribution Based on Period of Service

Years of Service	Frequency	%
New	17	45.9
Long	20	54.1
Total	37	100

Table 2. Frequency Distribution Based on the Use of PPE

Use of PPE	Frequency	%
Used	14	37.8
Not Used	23	62.2
Total	37	100

Table 3. Frequency Distribution Based on attitude

Attitude	Frequency	%
Positive	15	40.5
Negative	22	59.5
Total	37	100

Table 4. Frequency Distribution Based Knowledge

Knowledge	Frequency	%
Good	16	43.2
Not Good	21	56.8
Total	37	100

Table 5. Frequency Distribution Based Respiratory Disorders

Respiratory Disorders	Frequency	%
There is no	18	48.6
There is	19	51.4
Total	37	100

Table 6. Correlation Analysis

No	Variable	Nilai Sig. (2-tailed)	Pearson Correlation (r)
1.	Years of Service	0.006	0.405
2.	Use of PPE	0.002	0.467
3.	Attitude	0.006	0.408
4.	Knowledge	0.002	0.460

The correlation analysis display is in the form of a matrix between correlated variables, the information that appears is three lines, the first line contains the correlation value (r), the second line displays the p value (P-value), and the sixth row displays N (the amount of data). In the results above, it is found that:

Discussion

Based on the findings in the field, where the work period of a mill worker is 3 years, the longer the time for the mill worker to work, the easier it is for someone to suffer from respiratory problems if it is like someone working for almost 10 years in a wood mill. This study is in line with the research of Wulandari *et al.*, (2015) in Protocol 3, 4 and 6 in Semarang where there is a relationship between tenure and pulmonary function disorders as evidenced p-value = 0,000.

Based on the findings in the field where there are still mill workers who do not want to use PPE masks because they are uncomfortable and interfere with activities due to being unfamiliar and more prone to respiratory disturbances, while workers who use mouth coverings sometimes use anything even though it is not a mask, but it is safe to cover it. nose and mouth, but there are some who know and wear masks because it is to protect themselves from the dangers of work carried out by wood mill workers. This research is in line with Fahmi's (2012) research at PT. X, Pekalongan Regency, where there is a relationship between the use of masks and a lung function capacity as evidenced by p-value = 0.001.

Based on the findings in the field where the wood mill workers who are positive that implementing PPE (Masks) can prevent occupational diseases, after work it is necessary to clean the dust that sticks to the body, to overcome workers who suffer from respiratory problems with cough symptoms can only be given traditional ingredients Meanwhile, for the mill workers who have a negative attitude because the food workers they consume daily at work are not very nutritious, if they are sick they are given time to rest for healing, but the mill workers often perceive a minor illness just go to work. This research is in line with the research conducted by Fujianti *et al.*, (2015) on the Blessing Teak Furniture Workers in

Jambi City, where there is a relationship between working years and respiratory disorders as evidenced by the value of p-value = 0.003.

Based on the findings in the field where workers with good knowledge that workers know the impact of wood dust on health, before working, employees need to be briefed on safe work procedures, while wood mill workers who have poor knowledge where there is a danger of accidents and occupational diseases. a combination of various factors, namely labor and work environment, absence of employee training on PPE (Masks), an unsanitary work environment is one of the risk factors for respiratory disorders. This research is in line with the research of Ombuh, et al (2017) in the Port of Manado, North Sulawesi, where there is a relationship between length of work and lung function disorders in TKBM workers as evidenced by the value of p-value = 0,000

Conclusion

It is concluded that there is a significant relationship between length of work, length of service, use of PPE masks, attitudes of knowledge and respiratory disorders. It is recommended that the owners of the wood mill work together with the puskesmas in overcoming workers' respiratory disorders in order to obtain counseling and information about preventing respiratory disorders in workers.

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