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DESCRIPTION OF EMPLOYEE'S KNOWLEDGE ABOUT OCCUPATIONAL DISEASES IN PT. X

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ABSTRACT

Background: Occupational disease is a health disorder that occurs due to the influence of unsafe actions at work or what are known as unsafe acts and also conditions in an unsafe work environment or what are called unsafe conditions. A condition in the work environment will greatly affect the level of health for workers, where there are various risks of health problems that can occur if there are conditions like the above while working. **Objectives :** To find out the description of employee's knowledge about occupational diseases in PT X.

Methods : In this study, researchers used a type of observational descriptive research. **Results :** Based on the results of the research conducted, there were 21 people (52.5%) with old age ≥ 40 years, the category of working time ≥ 5 years was 27 (67.5%), working time 8-10 hours was 22 people (55.0%), 33 people (82.5%) had a good level of knowledge, 33 people (82.5%) used personal protective equipment. **Conclusions:** The most occupational diseases in PT X were respiratory diseases with 11 people (27.5%) followed by respondents who had no diseases with 10 people (25.0%). Occupational diseases at PT x namely respiratory system diseases as many as 11 respondents (27.5%) Allergic diseases as many as 7 people (17.5%), digestive system diseases 5 people (12.5%), skin diseases 5 people (12.5%) others (fever etc.) 2 people (5.0%) and no disease as many as 10 people (25.0%).

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INTRODUCTION

Occupational disease is a health disorder that occurs due to the influence of unsafe actions at work or what are known as unsafe acts and also conditions in an unsafe work environment or what are called unsafe conditions. A condition in the work environment will greatly affect the level of health for workers, where there are various risks of health problems that can occur if there are conditions like the above while working. In Indonesia, many workers are not aware that they will protect themselves from various kinds of occupational diseases, so what can be done to prevent various diseases is by wearing PPE / Personal Protective Equipment so that they are not exposed to hazardous substances or materials in the work area.

According to the National Institute for Occupational Safety and Health, there is one disease that ranks first out of the top 10 in the number of occupational diseases, namely diseases of the respiratory system, namely their relation to the lungs.¹ Judging from the data taken by the World Health Organization/WHO, it shows around 1.1 million deaths caused by various illnesses acquired at work, on a world scale, namely 5% of Pneumoconiosis. Then in the Southeast Asia region, including Indonesia, where there are respiratory diseases as a cause of non-communicable work-related diseases with high morbidity and mortality rates. The total mortality rate caused by health problems in the respiratory

system is as much as 30% which affects the age group less than 70 years.¹¹ Exposure to industrial processes in workers can be the cause of a disease caused by the potential that exists in the workplace. In developing countries, around 30% to 50% of people with pneumoconiosis are restrictive lungs according to the International Labor Organization (ILO).⁷

Based on the initial survey, it was found that there were many cases of occupational diseases at PT X, where the number of workers totaled 40 people. The results of the study found that workers did not use PPE such as masks as the main protection for the respiratory system. Through this survey, it became a background for researchers' interest in digging deeper into the description of knowledge about occupational diseases at PT. X.

Formulation Of The Problem

What is the description of Employee's knowledge about occupational diseases at PT X?

Research Purposes

To find out the description of Employee's knowledge about occupational diseases at PT X.

Benefits Of Research

1) Theoretical Benefits

So that through this research carried out can broaden the horizons and even the experience of researchers in knowing the description of workers' knowledge about occupational diseases and can be

a reference for conducting further research, in terms of developing OSH knowledge according to the researcher's field.

2) Practical Benefits

Through this research, it is hoped that it can provide useful information and education related to occupational diseases in workers.

Literature Review

Occupational illness

A health problem that is acquired by a worker in his work environment is called an occupational disease. The disease is caused by an unsafe work activity or lack of attention by workers, so it is often called a man-made disease or (Manmade disease).⁴

Health problems that occur due to certain things within the scope related to work, the work environment or diseases acquired due to work are called occupational diseases. Of the three things above have the same meaning and each of these meanings has a legal basis and also statutory regulations as its basis. Diseases caused by work or related to the work environment of workers.⁵

There are three types of Occupational Diseases based on the International Symposium by the ILO.⁶ As below, they include:

a. Occupational illness

Occupational diseases known as Occupational Diseases are health problems or

diseases that have more specific causative factors and even have associations that are quite correlated with the work of workers, which are generally caused by an agent originating from outside that has been recognized.⁶

b. Work Related Disease

A health problem or disorder caused by several causative agents, in which the acquired disease is related to the work being undertaken or known as work-related disease. Occupational diseases have various types of agents that cause workers to get sick, in which these factors are obtained in work that has the potential for danger or risk so that the development of disease in the workplace is based on a complex etiology of the disease.⁶

c. Diseases in the working population (Disease affecting working populations)

The disease referred to here is a disease that occurs and affects the population at work without any causative agent. The disease in question is mainly exacerbated by working conditions that can disrupt the population scale.⁶

Factors Causing Occupational Diseases

Regarding occupational diseases, there are various trigger factors that can have an influence related to work-related causes which are divided into 5 groups of causative factors,⁴ namely:

Physical group

Basically a sound wave that exceeds the capacity with the number of exposures continuously can produce deafness which is associated with hearing loss and can cause deafness or deafness.

- 1) The emission of radiation from various radioactive rays can be one of the factors that cause disease. This light can cause diseases related to blood cells and also the surface of the skin with various abnormalities according to the location. Radiation from infrared (infrared) rays can be a risk factor for disorders of the eye organs, namely triggering the growth of cataracts in the lens of the eye, then the presence of ultraviolet light can cause conjunctivitis.⁴
- 2) Exposure to extreme temperatures can be a factor in the occurrence of occupational diseases such as heat cramps, heatstroke and hyperpyrexia. Meanwhile, the presence of temperatures that are too low can cause Frostbite.⁴
- 3) Under conditions of excessive pressure and exceeding capacity can influence the occurrence of Caisson disease.⁴
- 4) The existence of a poor lighting process on an object can affect the eye health of workers, so that it becomes an eye health disorder. On the other hand, lighting that is too excessive continuously can make vision disturbed by the

presence of glare so that it can have the potential for work accidents.⁴

Chemical group

- 1) Exposure to dust can cause a disease Pneumoconiosis with several examples including: Silicosis, Asbestosis.⁴
- 2) Pollution of vapors resulting from chemical processes can cause health problems in the form of steam, which can cause Metal Fume Fever Dermatitis and also Poisoning.⁴
- 3) Exposure to gas, namely poisoning caused by CO₂ and H₂S.⁴
- 4) In industries that use or produce chemical solutions on average, it can cause skin disorders in the form of inflammation of the skin or Dermatitis.⁴
- 5) A cloud or fog, in the form of an insecticide (Insecticides), mushroom poison and which can cause poisoning.⁴

Class of Infectious Diseases

Various kinds of diseases caused by infections in the form of anthrax or even Brucella often occur in leather tanning workers or what is known as raw leather processing.⁴

Physiological Group

Physiological groups include diseases caused by errors or construction errors of a machine, or improper body position, errors in terms of work

execution and others which can cause physical fatigue, and over time changes occur in the body of the workforce.⁴

Psychological Mental Group

From a psychological perspective, one of the contributing factors is an uncomfortable working relationship, or a working condition that creates boredom because of the monotonous way of working. The causal factors can be obtained separately or in synergy.⁴

Prevention of Occupational Diseases

Prevention carried out in order to minimize the incident numbers of occupational diseases is one of the most important actions to be carried out in the work area earlier. Various efforts to prevent work-related accidents have been regulated in legislation, standardization, the existence of various supervisions, research, education and training in deepening skills, outreach and various other fields. In terms of prevention there are two aspects, namely the administrative aspect and the technical aspect in the form of what is implemented in the work environment for workers, work, and also the working environment conditions themselves.

From a technical point of view, a prevention effort is the first step to prevent various kinds of risks or hazards that can threaten the officers or workers involved in it, namely Health

which includes measurement, evaluation, and control, even some important things before starting the main work by looking at the potential - the potential for accidents and illnesses.

There is a pre-placement which is carried out periodically and is special in nature, then substitution of materials that are felt to have a negative influence or are potentially dangerous so that prevention can be carried out earlier by using PPE or Personal Protective Equipment.⁵

METHODS

Pada penelitian ini, peneliti menggunakan jenis penelitian deskriptif observasional, dimana penelitian ini dapat menggambarkan suatu kondisi masalah yang ditelusuri dengan melakukan pengamatan secara langsung di lapangan.

Work Procedures

A research work procedure begins with the distribution of questionnaires and observation sheets using adapted and validated questionnaires, documentation studies, and literature studies.

RESULTS

Characteristics of Respondents

Table 4.1.1 Distribution of Respondent Characteristics to Workers at PT X.

Characteristics of Respondents		
Age		
Age	Frequency	Percentage %
Age < 40 years	8	20,0
Age > 40 years	21	52,5
Total	40	100,0
Working Period		
Working period (year)	Frequency	Percentage %
< 5 years	13	32,5
> 5 years	27	67,5
Total	40	100,0
Length Of Working		
Length of working (hour)	Frequency	Percentage %
6 - 8 hours	12	30,0
8 - 10 hours	22	55,0
10 hours	6	15,0
Total	40	100,0
Level of Knowledge		
Knowledge	Frequency	Percentage %
Not good	7	17,5
Good	33	82,5
Total	40	100,0
Personal Protective Equipment		
	Frequency	Percentage %

Not use Personal Protective Equipment	7	17,5
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Using Personal protective equipment	33	82,5
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Total	40	100,0
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Primary data source, 2020

Based on the table of respondent characteristics, it can be seen that, from the results of the discussion analysis, namely, first, age has an influence on the work risk experienced by respondents, in this case respondents aged ≥ 40 years, namely 21 people (52.5%), while age ≤ 40 years, namely as many as 8 people (20%).

Second, work period or length of time worked, is the length of time workers carry out their duties as workers. Based on the results of the study, it was shown that as many as 27 people (67.5%) had a working period of ≥ 5 years, then as many as 13 people (32.5%) had a working period of ≤ 5 years.

Third, the length of work of the respondents, according to the results of the study, there were 22 people (55.0%) who worked ≤ 8 -10 hours, then as many as 12 people (30.0%) worked ≥ 6 -8 hours, and as many as 6 people (15 .0%) worked for 10 hours.

Fourth, the level of knowledge shows that 33 people (82.5%) have a good level of knowledge and 7 people (17.5%) have a bad level of knowledge. Fifth, there were 38 people (82.5%)

who used PPE, while there were 7 people (17.5%) who did not use PPE while working.

Occupational Disease

Table 4.1.2 Distribution of Respondents Based on Diseases Experienced in Workers at PT X.

Penyakit Yang Dialami		
	Frequency	Percentage %
Skin disease	5	12,5
Respiratory system disease	11	27,5
Allergic disease	7	17,5
Digestive system disease	5	12,5
Others: Fever, Flu, etc	2	5,0
Tidak Ada	10	25,0
Total	40	100,0

Table 4.1.2 shows that the distribution of respondents with diseases experienced by each worker with higher outcomes was respiratory system disease, namely 11 respondents (27.5%), followed by the distribution of respondents who did not complain of health problems, namely 10 people (25.0%). on the other hand, the distribution of respondents who experienced allergic diseases, namely 7 people (17.5%), then there were 2 diseases with the same number of respondents who experienced skin and digestive system diseases, namely 5 workers or the percentage was (12.5 %)

and respondents with other disease complaints amounted to 2 people (5.0%).

DISCUSSION

Based on the results of the research conducted, there were 21 people (52.5%) aged ≥ 40 years. In terms of age, where age has an influence on the occurrence of work-related diseases.⁷ In the older age group, there is a higher tendency for accidents and occupational diseases to occur compared to younger age groups where they have maximum response and movement/agility.⁸ Older workers begin to experience a decline in physical function which can increase the occurrence of work-related diseases.⁹ According to research that has been studied in the United States, it states that many younger workers suffer from work-related diseases. compared to older ones. This is due to the lack of experience that younger workers have.⁵

The results of the study in the category of working period ≥ 5 years found 27 (67.5%). Where the working period of workers is related to the experience factor that has been owned so that the longer an individual works, the higher the experience and working hours, thus one can be better able to understand how to work properly and safely in order to avoid occupational diseases. workers who are new to the world of work they are concerned with are considered not very knowledgeable about their work. Meanwhile, having a longer working period is considered to

have qualified knowledge and skills, especially from the aspect of safety at work.¹⁰ However, on the other hand, the length of time a person has worked cannot guarantee that he can completely avoid illness, because things such as ignoring provisions where circumstances do not safe and unsafe actions coupled with continuous exposure to toxic substances in the workplace can be fatal to the health of workers.¹¹

The results of the study related to the length of work of 8-10 hours showed that there were 22 people (55.0%), where workers could carry out their work activities well within 8 hours per day or 40 hours per week. While the remaining time outside working hours, namely 16 hours each day, is used in activities or carrying out joint activities with family and mingling with the community, and don't forget to be used for resting.⁵ working hours beyond the existing normal working hours can cause work fatigue so that it can trigger work-related illnesses.¹²

Judging from the results of the study, there were 33 workers who had good knowledge (82.5%), of which the rest were workers with a lack of knowledge related to how to work safely and comply with K3 values which can cause occupational diseases.¹³ Related to the knowledge of an individual when it is related to the presence of factors that have the potential to occur hazards and also various types of potential hazards in the work environment can affect awareness of self-

protection from various types of potential hazards in the workplace.¹⁴ An increase in knowledge is one of the factors control over the occurrence of PAK and ways of managing the risk of disturbances related to K3.¹⁶

The most occupational diseases in PT X were respiratory diseases with 11 people (27.5%) followed by no diseases with 10 people (25.0%). Diseases of the respiratory system generally arise as a result of exposure to dust which occurs due to decreased air quality to a limit that can cause a hazard to health and can cause interference with the respiratory tract, namely in the form of acute respiratory infections.⁵ PAK or occupational disease which is a health problems experienced by workers/employees due to work factors, both in terms of unsafe acts or unsafe conditions. Actions and conditions that are unsafe and deviate from the rules at work, especially in jobs that have a high potential for danger, can ultimately affect health problems for the individual himself or even other workers, one example that is often found is acute respiratory infections.¹⁷

CONCLUSION

Based on the objectives to be achieved in knowing an overview of workers' knowledge related to illness due to work at PT. X, so it can be concluded that:

a. Occupational diseases at PT X, namely respiratory system diseases as many as 11

respondents (27.5%) Allergic diseases as many as 7 people (17.5%), digestive system diseases 5 people (12.5%), skin diseases 5 people (12, 5%) others (fever etc.) 2 people (5.0%) and no disease as many as 10 people (25.0%).

Suggestion

Based on the results of the research, the authors put forward several suggestions:
The hope is that workers can further increase their knowledge related to diseases that can be experienced while working, and also use personal protective equipment so that they can continue to be used in minimizing the occurrence of work-related illnesses.

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