ISSN: 2709-5215 DOI: https://doi.org/10.48173/jwh.v1i2.41

Journal Wetenskap Health

Occupational Diseases and Occupational Accidents Including Disease Diagnosis and Prevention

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Abstract

This article discusses occupational diseases and occupational accidents including disease diagnosis and prevention. Of the reported contact dermatitis, 90% are occupational diseases of the skin diseases associated with work. It is important to have a work history in identifying irritants that are occupational diseases that cause, make you sensitive or due to other factors, in controlling occupational diseases, one of the efforts that must be made is early detection, so that treatment can be given as quickly as possible. Thus, the disease can be recovered without causing disability. Occupational Diseases the patient experiences other exposures which are known to cause Occupational Diseases that cause illness. However, the presence of other causes cannot always be used to rule out causes in the workplace. At the very least, it will not cause further disability. Early detection should have caused work-related illnesses an integral part of occupational health. Many cases of hearing loss show the result of prolonged noise exposure, in some cases it is not due to work. The way to prevent illness at work is discipline and sufficient rest time.

Keywords: Hemothorax, Trauma, Madagascar Disease, Work Accident, Prevention

Introduction

This article discusses occupational diseases and occupational accidents including disease diagnosis and prevention. Of the reported contact dermatitis, 90% are occupational diseases of the skin diseases associated with work. It is important to have a work history in identifying irritants that are occupational diseases that cause, make you sensitive or due to other factors, in controlling occupational diseases, one of the efforts that must be made is early detection, so that treatment can be given as quickly as possible. Thus, the disease can be recovered without causing disability. Occupational Diseases The patient experiences other exposures which are known to cause Occupational Diseases that cause illness. However, the presence of other causes cannot always be used to rule out causes in the workplace. At the very least, it will not cause further disability. Early detection should have caused work-related illnesses an integral part of occupational health. Many cases of hearing loss show the result of prolonged noise exposure, in some cases it is not due to work, the way to prevent illness at work is discipline and sufficient rest time.

Occupational Diseases and its Types

Occupational Diseases are diseases arising from work, work tools, materials, processes and work environment. WHO distinguishes four categories of Occupational Diseases (1) Diseases of which one of the causes is work. For example Carcinoma, Bronchogenic, Silicosis, Asbetosis, Cancer by smoking and dust. (2) Diseases with occupation are occupational diseases one of the causes among other causative factors, for example *bronchitischronic*. (3) Disease in which work aggravates a pre-existing condition. For example, asthma is aggravated by dust. (4) diseases caused by working conditions, such as

hemolytic blood circulation disorders. Legally, occupational diseases are related to diseases arising from work relations. Diseases that arise due to work relations are diseases caused by work or work environment.

These diseases consist of Pneumoconiosis (silicosis, anthracosilicosis, asbestosis) & silicotbc, lung disease due to hard metal dust, lung disease due to cotton dust, vlas, henep & sisal (bissinosis), occupational asthma, allergic alveolitis due to organic dust, diseases due to beryllium or its compounds, diseases due to cadmium or its compounds, diseases due to phosphorus or its compounds, diseases due to chromium or its compounds, diseases due to its compounds, diseases due to As or its compounds, diseases due to Hg or its compounds, diseases due to Pb or its compounds, diseases due to F or its compounds, diseases due to CS2, diseases due to Halogens from aliphatic or aromatic compounds, diseases due to benzene or their homologs, diseases due to nitro and amines from benzene or its homologs, diseases due to nitroglycerin or esters nitric acid, alcohol, glycol or ketones, pain due to gas / vapor that causes asphyxia or poisoning of CO, HCN, HS2 or their derivatives, NH3, Zn, braso and Ni, hearing loss due to noise, abnormalities due to mechanical vibrations (disorders of muscles, tendons, joints, peripheral blood vessels or peripheral nerves), Diseases due to over pressured air, Diseases due to electromagnetic radiation and ionizing radiation, Skin diseases due to physical, chemical or biological causes, primary epithelioma skin diseases due to pits, bitumen, mineral oil, anthracene or, their compounds, products or residues of these substances, cancer lung or mesothelioma due to asbestos, infectious diseases by viruses, bacteria or parasites in workers at special risk of contamination, diseases due to high or low temperatures or radiation heat or high humidity, diseases due to other chemicals including medicinal substances.

Some Occupational Diseases / Diseases Due to Employment Relationships Respiratory Tract Diseases

Occupational diseases of the respiratory tract can be acute or chronic. Acute, for example, work-related asthma. Often diagnosed as acute or viral tracheobronchitis. Chronic, for example: asbestosis. Such as symptoms of Chronic Obstructive Pulmonary Disease (COPD). Acute pulmonary edema. Can be caused by chemicals such as nitrogen oxides.

Hearing Damage

Many cases of hearing loss show the result of prolonged noise exposure, in some cases it is not due to work. A detailed employment history should be obtained from everyone with a hearing loss. Recommendations are made regarding the prevention of hearing loss.

Symptoms on the Back and Joints

There is no test or procedure that can distinguish back diseases that are work-related from those that are not work-related. The determination may depend on work history. Arthritis and tenosynovitis are caused by repetitive movements that are not normal.

Cancer

There is a significant percentage of cancer cases caused by workplace exposures. Evidence that the substance in the workplace is a carcinogen is often obtained from individual clinical reports rather than epidemiological studies. In cancer exposure to carcinogens begins> 20 years before diagnosis.

Liver Disease

Often diagnosed as liver disease due to viral hepatitis or alcohol-induced cirrhosis. Important occupational history, as well as existing toxic substances.

Neuropsychiatric Problems

Neuropsychiatric problems related to the workplace are often overlooked. Peripheral starch neuro, often associated with diabetes, alcohol use or unknown cause, CNS depression due to substance abuse or psychiatric problems. Bad behavior may be an early symptom of work-related stress. More than 100 chemicals (a.I solvent) can cause CNS depression. Some neurotoxins (including arsenic, lead, mercury, methyl, butyl ketone) can cause peripheral neuropathy. Carbon disulfide can cause symptoms such as psychosis.

Disease that does not Know the Cause

Allergies, anxiety disorders may be related to chemicals or the environment, sick building syndrome, multiple chemical sensitivity (MCS), eg perfume, petroleum derivatives, cigarettes.

Causing Factors

There are many causes of occupational diseases (WORK-DUE DISEASES) depending on the materials used in the work process, work environment or work methods, so it is impossible to mention them individually. The causative factors can be grouped into 5 groups: (1) Physical category: sound (noise), radiation, temperature (hot / cold), very high pressure, vibration, poor lighting. (2) Chemical group: chemicals used in the work process, as well as those found in the work environment, can be in the form of dust, vapor, gas, solution, cloud or mist. (3) Biological groups: Bacteria, Viruses or Fungi. (4) Physiological group: usually caused by the arrangement of the workplace and the way of working. (5) Psychosocial group: work environment that causes stress

Early Detection

In controlling occupational diseases, one of the efforts that must be made is early detection, so that treatment can be given as quickly as possible. Thus, the disease can recover without causing disability. At least, it does not cause further disability. Early detection should have caused Occupational Disease. an integral part of occupational health. It is not an exaggeration if in 1974, the Executive Board of the World Health Organization (WHO) asked the Director General of WHO to implement. Comparison and evaluation of various methods of early detection of health problems in workers. Even early detection of occupational diseases is further emphasized in the Work Program for worker health endorsed by WHO. In many cases, occupational diseases are severe and result in disabilities.

However, there are two factors that make this disease easy to prevent. First, the ingredients that cause the disease are easy to identify, measure and control. Second, the population at risk is usually easily visited and can be regularly monitored and treated. In addition, initial changes can often be reversed. with proper handling. That's why early detection of occupational diseases is very important. The work environment often contains a variety of health hazards, both physical, chemical, biological and psychological. Early detection is a disease due to work keywords to overcome various occupational diseases.

According to WHO, there are at least three things that can be used as guidelines in early detection, namely biochemical and morphological changes that can be measured through laboratory analysis. For example, inhibition of cholinesterase activity on exposure to organophosphate pesticides, decreased hemoglobin (Hb) levels, abnormal sputum cytology and so on. Changes in physical condition and function of body systems that can be assessed through physical and laboratory examinations. For example, electrocardiogram, physical work capacity test, nerve test and so on. General health changes that can be assessed from

medical history. For example feel for and mucosal irritation after exposure to organic solvents.

Diagnosis of Work-Due Diseases

To be able to diagnose Occupational Diseases in an individual, it is necessary to take a systematic approach to obtain the necessary information and interpret it appropriately. The approach can be organized into seven steps that can be used as a guide.

Determine the Clinical Diagnosis

(1) Clinical diagnosis must be enforced first, by utilizing existing supporting facilities as is generally done to diagnose a disease. After diagnosis, the clinic is established and then it can be further considered whether the disease is work-related or not. (2) Determine the worker's exposure so far. Knowledge of the exposure experienced by an employee is essential to be able to link an illness with his job. For this it is necessary to take a careful and thorough history of work, which includes: careful and thorough history of work, which includes: (1) The explanation pertains to all the work that has been done by the sufferer in a chronic way (2) Long time doing their respective jobs (3) Produced material (4) The material (raw materials) used (5) The amount of exposure (6) Use of self-protection tools (masks) (7) The pattern of occurrence is symptomatic (8)Information regarding other labor issuers (a Workrelated Disease, some have similar symptoms) (9) Existing written information regarding the ingredients used (MSDS, labels, etc.). (3) Determine what illness is due to work. The exposure can indeed cause the disease. Occupational Disease There is scientific evidence in the literature that supports the opinion that the exposure experienced causes the disease suffered. If in the literature there is no scientific basis that states this, it cannot be confirmed a diagnosis of occupational disease. If there is something in the literature support, it is necessary to learn more specifically about the exposure so that it can cause the disease suffered (concentration, amount, duration, and so on). (4) Determine occupational diseases. The number of exposures experienced is large enough to cause the disease. If the disease can occur in certain conditions of exposure, it is important that the patient's occupational exposure be investigated further and compare it with existing literature to determine a diagnosis of occupational disease. (9) Determine occupational diseases. There are other factors that may be at play. Occupational diseases include information from the medical history and occupational history, which can change the state of exposure, for example the use of Personal Protective Equipment, a history of previous exposure to peels so the risk increases. Occupational disease: The patient has a health history (family history) which makes the patient more susceptible / more sensitive to the exposure experienced. (6) Make a decision on Occupational Disease the disease is caused by the job. After implementing the five steps above it is necessary to make a decision based on the information that has been obtained which has a scientific basis. As previously stated, work is not always a Occupational Disease as a direct cause of an illness, sometimes work only aggravates a pre-existing condition. This needs to be differentiated at the time of making the diagnosis. An occupation / exposure is stated as the cause of a disease if without doing work or without certain exposure, the patient will not suffer from the disease at this time.

Meanwhile, work is stated to aggravate a situation if the disease is present or occurs at the same time regardless of the job, but the job / exposure aggravates / accelerates the onset of the disease.

From the description above, it can be understood that in order to establish a diagnosis of Disease As a result, specific knowledge is needed, the availability of various information

obtained from both clinical examination of patients, examination of the environment in the workplace (if possible) and epidemiological data.

Prevention of Work-Due Diseases

Primary Prevention

Primary prevention is the effort or action of workers not to be exposed to hazardous substances. These efforts include: (1) Make laws and regulations regarding occupational diseases. (2) Modify industrial tools. (3) Substitution. Namely by replacing hazardous materials with non-hazardous materials, without reducing the work output or quality. (4) Ventilation, both in general and locally, namely by means of clean air that is channeled into the workspace by sucking air out of the room. (5) Personal Protective Equipment. This tool can be in the form of Occupational Diseases, hats, head protectors, gloves, shoes coated with steel fronts to withstand heavy loads, special masks to protect inhalation against harmful dust or gases, special glasses etc. (6) Health checks before work. This includes health checks before work and periodic examinations to look for causative factors that cause health problems or disorders in the workforce. (7) Exercises and information before work. (8) So that workers are aware of and are aware of various possible hazards. (9) Education and counseling on K3, Conducted regularly.

Secondary Intercept

Secondary prevention is needed to detect occupational diseases. Secondary prevention, among others, can be done such as: (1) Education (2) Identification of hazardous substances. (3) Regular health checks. (4) Occupational disease surveillance.

Tertiary Prevention

That is, preventing disability of workers who have contracted occupational diseases. This can be done, among others: (1) Restoring workers (2) Doing the transfer of workers from places that used. (3) Perform periodic checks for disease evaluation. There are many methods of prevention, but according to researchers, the way to prevent disease at work is discipline.

Conclusion

Occupational Diseases are diseases that arise due to work, work tools, materials, processes and work environment. We can prevent this disease in the ways described above. Some tips for preventing WORK-DUE DISEASES, including: Occupational Diseases of PPE properly and regularly. Recognize the occupational risks and prevent them from occurring further. Immediately access the nearest health place in case of ongoing injuries. Occupational health and safety are very important in development because work illnesses and accidents will cause lost benefit to a company or country. Therefore, occupational health and safety must be maximally managed not only by health workers but the entire community.

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