

Conference Paper

Worker's Health Profile Derived from Medical Check Up at X Hospital

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Abstract

Workers might suffer either infectious or non-infectious diseases. Stress, cancer, and degenerative diseases are some types of non-infectious diseases. Degenerative disease is a medical term that describes certain types of diseases that are caused by degeneration of cells functions in the human body. Hypertension, stroke, diabetes mellitus, coronary heart disease, dyslipidaemia, obesity, and osteoporosis are some examples of degenerative diseases. One of the triggers of a degenerative disease is a condition known as a metabolic syndrome. In many cases, the onset of a metabolic syndrome is often associated with factors related to a person's occupation. Certain types of occupations may lead a person to an unhealthy or inactive life style known as sedentary works, such as secretary, typist, accountant and other office worker. The objective of this study is to review the results of the medical check-up conducted to Hospital X's employees and how they are managed. It is a survey-based descriptive research using secondary data obtained from the results of the medical check-up conducted to Hospital X's employees. From the study, we learnt that the medical check-up conducted to Hospital X's employees shows that a number of them are suffering from degenerative diseases, such as overweight, dyslipidaemia, obesity, diabetes mellitus, coronary heart disease, and hypertension. Of the five conditions identified, two among them, that is, diabetes mellitus and hypertension, are managed well by the hospital under its Hospital Health Promotion Unit (*Promosi Kesehatan Rumah Sakit/ PKRS*). The PKRS Unit has set up an education team that provides counselling to the employees diagnosed with the two diseases and even organized calisthenics activities for those diagnosed with diabetics. The conclusion is that the hospital should also extend the programme to provide counselling and care to the rest of its employees diagnosed with the other health conditions that have been identified, that is, dyslipidaemia, overweight, and obesity, to avert bigger health problems in the future, from both the perspective of the employees and the cost to be incurred by the hospital.

Keywords: ailment among workers, degenerative disease, metabolic syndrome, medical check-up, managing the result of medical check-up

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1. Introduction

Occupational health is an attempt to maintain and improve the level of physical and mental health as well as the social well-being of all workers to the highest-level possible [1]. One of the dangers that potentially may cause harm to a company is the threat associated with an unhealthy lifestyle. An unhealthy lifestyle includes a lack of physical activity, and food pattern that is low in fibre content and high in fat. Health impact from leading an unhealthy lifestyle is degenerative diseases. In this era of globalization, we have seen changes in disease patterns, which follow the changes in the lifestyle and dietary habits among the Indonesians. Data from the 2013 Riskesdas (*Basic Health Research*) put the unhealthy inclination among the public to consume high-risk delicacies such as sugary foods and beverages at the second place (53.1%) followed by the consumption of foods high in fat at the third place (40.7%), whereas the consumption of food enriched with flavour enhancers is the highest (at 77.3%). These are the types of behaviours that will increase the risk of degenerative diseases.

Degenerative disease is not an actual name of a disease; it is a medical term that describes certain types of diseases, which are caused by degeneration of cell functions in the human body. Put it simply, it is a disease, which is caused by human cells that ceases to function in a normal manner. Some examples of degenerative diseases include hypertension, stroke, diabetes mellitus, coronary heart disease, dyslipidaemia, obesity, and osteoporosis. In Indonesia, heart disease is the second leading cause of death after stroke (Research and Development Office of the Ministry of Health, 2014).

Workers are the heart of any organization and the motor that drives a company's productivity. As the most important resources in an organization, workers should have clear access to an occupational health programme that facilitates the achievement of health and work capacity to the highest degree, while at the same time protects them from the possible adverse effects due to exposure to hazardous elements at the work place [1].

With respect to a worker's health, a medical check-up is one of the important activities to carry out in order to select a healthy worker who matches the health risk that s/he may encounter at the work place. To get a worker who is 'fit' to work, the company's management is obliged to provide medical check-up to the workers, which includes a check-up prior to hiring or placement, a periodical check-up, and a special check-up [1].

Such a programme should be conducted to match the identified health problems and risk factors. Therefore, there is a clear need to identify the health status of all

workers in a company that would allow the proper measures to be taken for any health problems found. Hospital X is a company that provides health care services, and its activities are governed by the prevailing laws and regulations on employment, whereas as a company, it is required by law to carry out periodic medical check-up for its employees. The medical check-up for Hospital X's employees was carried out in December 2015, and of the 489 registered employees, 430 of them showed up for the scheduled medical check-up.

The objective of this study is to assess and analyse the result of the medical check-up of Hospital X's employees and how they are managed.

2. Methods

This is a survey-based descriptive study on the results of the medical check-up conducted to Hospital X's employees in December 2015. The population in this study is the entire 430 employees of Hospital X who participated in the medical check-up. Samples for the research are the total population. The data were analysed using a univariate analysis to obtain the distribution pattern of the respondents based on their characteristics such as age, gender, education, employment, and an overview of their health as obtained from the results of the medical check-up (MCU).

3. Results

Results of the medical check-up of the 430 employees reveal the following figures: the largest group of the respondents with 377 employees is between the ages of 21 and 40 years old (87.7%), followed by 53 employees who are between the ages of 41 and 56 years old (12.6%). The majority of the respondents or 275 employees (64%) are women. The greater part of the respondents or 248 employees (57.7%) have Diploma degree (studying for 3 years). Most of them or 352 employees (81.9%) are direct caregivers. A quick peek at the employees' health condition reveals the following figures: a large number of them suffer from some types of degenerative diseases, that is, 111 of them (25.8%) are overweight; 74 of them (17.3%) have dyslipidaemia; 44 employees (or 10.2%) are obese (suffering from obesity); 23 employees (5.3%) have diabetes mellitus; and 12 of the employees (2.7%) are suffering from a heart disease.

An observation of the employees' health condition based on the medical check-up to detect the five degenerative diseases reveals the employees who are having

problems related to overweight, obesity, dyslipidaemia, and diabetes mellitus: are in the 21–40 years old group (85.6%), in which the majority of them are women (65.1%) and 74.2 percent of them are direct caregivers. With respect to the respondents who suffer from a heart disease, eight of them are between the ages of 41 and 56 years old (66.7%), nine among them are women (75%), and seven of them are direct caregivers (58.3%).

4. Discussion

Degenerative disease is a medical term that describes certain types of diseases, which are caused by degeneration of cells functions in the human body. It is not contagious; nonetheless, it can be life threatening, and the number of cases continues to rise each year. It is thought that this group of diseases is closely associated with a person's genetics, age, and lifestyle. Data in Indonesia show that heart disease is the second leading cause of death after stroke (Research and Development Office of the Ministry of Health, 2014).

The research [4] reveals that the majority of workers fall under the category of people who perform low or medium physical activities; meanwhile, low or medium physical activities have been known to trigger condition known as metabolic syndrome. On the other hand, being involved in rigorous physical activities have been known to lessen some of the risk factors, including, among others, reducing the levels of low density lipoprotein (LDL) and triglycerides, and increasing the level of high density lipoprotein (HDL), improving insulin sensitivity, lowering blood pressure and risk factors associated with heart disease, and other chronic diseases [7].

A number of factors that have been known to cause dyslipidaemia, including, among others, a lack of fibres in the food we consume, respondents who prefer to eat outside (canteen, restaurant, etc.) despite the fact that the food served in these establishments are lacking in food fibres. Moreover, many among us have not included vegetables and fruits in our daily intake of nutrients.

These findings also reaffirm the previous studies on related subjects that on average an Indonesian only consumes 10.5 gm of food fibres per day [5], whereas the Indonesian National Agency of Drug and Food Control (NA-DFC) (*Pengawasan Obat dan Makanan Republik Indonesia/POM RI*) recommends an intake of at least 30 gm of food fibres per day.

High cholesterol level will form atherosclerosis, which can cause hypertension and blockage of blood vessels in the brain, heart, and leg veins. Blockage in the blood

vessels of the brain will lead to a stroke, while blockage in the heart will cause cardiovascular diseases such as coronary heart disease, whereas blockage in the limbs will cause peripheral vascular disease. This condition often occurs in the foot and can cause pain, cramps, numbness, and even gangrene [2].

The consequences of health problems among workers, especially those related to degenerative diseases can be quite detrimental to a company. Overall, the estimated annual losses incurred by companies as a result of occupational diseases and accidents are more than US\$ 2.8 trillion or 4 percent the gross domestic product [1].

The cost of lost productivity is equal to the cost of treatment for a worker with the same condition and similar health risk. Assessment on the workers' lost performance can be used by the business owners to assess the financial impact of the workers' health to their companies. An approximation of lost working time may help business owners to realize the importance of maintaining the health of their workers.

Costs of productivity start as low as \$15 to as high as \$1601 or more per year for a worker without the condition or health risk. It means that a company with 10,000 employees could face close to \$3.8 million in lost productivity each year, not to mention the medical expenses to cover these conditions.

5. Conclusions

The results of medical check-up conducted to employees of Hospital X in December 2015 reveal that the majority of the respondents or 377 employees (87.7%) of the total population who participated in the medical check-up belonged to the 21-40 years old group and 273 of them or 63.5 percent are indicated as having degenerative health conditions. The result should serve as a warning to Hospital X's management and prompt them to give special attention and assistance to their employees who are indicated or diagnosed with certain diseases, such as hypertension, heart disease, obesity, dyslipidaemia, etc. Some of the recommendations to the management are to design and optimize the management of degenerative diseases care through occupational health activities specifically by promoting occupational health at the work place, because degenerative diseases may occur even among the younger workers, and the number of sufferers continues to rise. Efforts that may forestall the onset of degenerative diseases that need to be done and optimized are physical activity programmes.

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