

EXTENDED ABSTRACT

Analyze of Utilization of Occupational Health Unit to Control Occupational Disease Among Informal Workers in Medokan Ayu

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SUMMARY

Puskesmas (Indonesian: Pusat Kesehatan Masyarakat, English: Primary Health care) Medokan Ayu is appointed by the government health centers to be the industrial health care in Surabaya. OHU (English: Occupational Health Unit, Indonesian: Unit Kesehatan Kerja) is a form of health efforts come from, and to the people who provide basic health services (primary health care) for the working people, particularly informal workers. This study aim to analyze the utilization of the OHU to control of occupational diseases among informal workers in Medokan Ayu. This study was a qualitative research with type of research was case study design. Sample research were all of informal workers (home industry workers) who visited the post OHU. The data collection were conducted by interviews and observations. Interview was conducted to determine the characteristics of workers and the utilization of OHU. Observation was conducted to determine the environmental factors that can cause acute respiratory infections in the workplace. The result showed that the utilization of OHU are still lacking possibly cause of some factors such as limited of implementation program (OHU only held twice a month) and limited number of health workers. The disease mostly occurred of informal workers were respiratory diseases caused by environmental factors such as indoor air pollution, lack of ventilation, density residential houses, and lack of lighting. OHU as a healthcare for informal workers can't handle all of occupational disease. Therefore, OHU can provide referral effort to Puskesmas to hold an environmental health program to handle the occupational disease.

Keywords: Utilization, Occupational health unit, Occupational disease, Informal workers

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INTRODUCTION

In Indonesia, industry sector divided into formal sector and informal sector. Formal sectors are business that get permission and registered from government. While informal sectors are business that do not have permission and not registered from government. The examples of informal sector such as coffee seller, peddler, home industry like tempeh seller, bakery. In Act No. 36 of 2009 on the health, it states that occupational health efforts aimed to protect the workers to live healthy and be free of health problems [1]. Occupational disease are a diseases caused by work and / or work environment [2]. OHU post is required to provide public health services for workers at risk of exposure to works and the working environment. On the Regulation of the Ministry of Health of the Republic of Indonesia Number

13 of 2015 on the Implementation of Health Services, Environmental Health Center states that every health care must give service delivery in the form of counseling, environmental health inspections, and environmental health interventions [3]. In fact, the attention to health care for the informal sector, especially related to the environmental health aspects are still lacking in Indonesia. Many people are busy to work so they forget about their health [4]. Health system constantly seek better ways to make health services accessible, affordable, equitable and responsive [5]. The accessibility to health care is a multidimensional concept and a prerequisite for active participant in community activities [6]. Access to health care is an important public health issue [7]. Currently some countries are reforming their health systems to improve service delivery and cost efficiency of primary health care [8]. Based on data about disease trends in health care Medokan Ayu in 2017, the most common disease is respiratory acute infection. This study was conducted to analyze the utilization of the OHU to control of occupational diseases among informal workers in Medokan Ayu.

MATERIALS AND METHODS

Puskesmas Medokan Ayu was built in 1994/1995 and was inaugurated on 29 November 1995. Puskesmas Medokan Ayu is located at Jl. North Asri Medokan IV / 31. Puskesmas Medokan Ayu is one of the health centers design as industrial health centers in Surabaya. This study was a qualitative research with type of research was case study design. The sampling method of respondents was using purposive sampling. Sample research were all of informal workers (home industry workers) who visited the post OHU such as tailor, vegetable seller, coffee seller, grocer, tempeh seller, food seller, gallon seller, and laborers. OHU was a part of the health care system used to facilitate the informal sector workers. The primary data collection were conducted in January-February 2018 by interviews and observations. Interview was conducted to determine the characteristics of workers and the utilization of OHU. Observation was conducted to determine the environmental factors that can cause acute respiratory infections in the workplace. The secondary data collection were from Public Health Service of Surabaya and Social Insurance Administration Organization of Employment to find out which one of health care that had an OHU and the most frequent disease had been known by Medokan Ayu Health Care’s Profile. The research variables were utilization of occupational health unit and occupational disease such as acute respiratory infections (Indonesian: Infeksi Saluran Pernapasan Akut or ISPA). This research was approved by The Ethics Committee of the Faculty of Public Health Airlangga University with an ethical certificate number: 580-KEPK.

RESULTS

Based on table I, all of sixteen (16) informal workers who visited the post OHU were women. The most age characteristics were in the age of 41-50 years (7 people) with their last education were mostly middle and high school (each was six (6) people).

Table I: Individual Characteristic

	Characteristic	Number (n)
Gender	Man	0
	Women	16
Age (years)	21-30	1
	31-40	6
	41-50	7
	51-60	0
	61-70	2
	Primary school	3
Education	Middle school	6
	High school	6
	Vocational high school	1

From the data, it was found that the most frequent diseases of informal workers (56%) were acute respiratory infection (ISPA) (Figure 1). There are thirteen basic task and functions of OHU such as worker’s meeting, self-surveillance survey, community of work meeting, forming OHU post, planning of OHU, conseling of OHU, medical check, reference effort, intersectoral collaboration, managing OHU financial, assisting worker’s economic empowerment, and build up self-ability. OHU as a healthcare for informal workers can’t handle all of occupational disease cause of limited number of health workers. Therefore, OHU can provide referral effort to Puskesmas to handle the occupational disease.

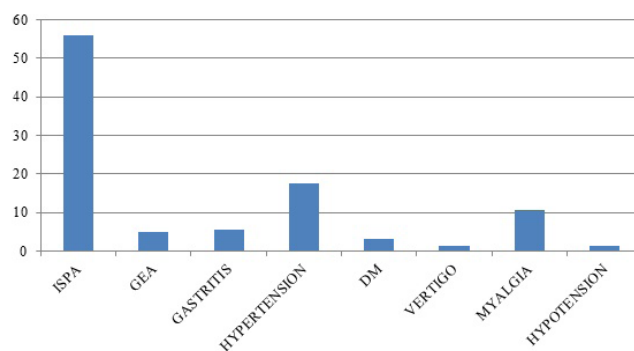


Figure 1: The Most Frequent Diseases of Informal Workers at Puskesmas Medokan Ayu in 2017

DISCUSSION AND CONCLUSION

Puskesmas Medokan Ayu has implemented several environmental health services such as monitoring and control of water quality, control of public places, supervision, and control of sanitation and environmental health training institutions. Puskesmas Medokan Ayu has occupational health unit held every Saturday or Sunday first in Rusun Penjaringan. The OHU Medokan Ayu as a healthcare for informal workers has carried out various activities such as medical check (blood pressure) and conseling education.

Based on the results above, the most frequent diseases of informal workers were acute respiratory infection (ISPA). The environmental factors that may affect ISPA include[9]:First, it was indoor air pollution. In addition to the workload of the job, female workers are also doing the cooking activity, so that every day women workers are always in contact with the smoke in the kitchen, based on studies in developing countries, itcshows a relationship between exposure to pollution in the home and pneumonia, upper respiratory tract infection, as well as middle ear infections. Four major drivers of global lung disease are tobacco, indoor air pollution, external air pollution, and occupational exposure[10].Second it was house ventilation. Ventilation is very helpful to force air circulation inside the house to maintain the balance of oxygen for the people in the house. In addition, ventilation affects the humidity, the greater the amount of ventilation, the humidity in the house can

be reduced. Ventilation also affects the process of air dilution to dilute the concentration of germs carried in the house and die due to ultraviolet rays. The third factor is residence density, based on demographic conditions in local communities, Medokan Ayu belongs to dense populated area, most of the social levels of society in Medokan Ayu are at medium level. The density also effects on oxygen consumption and the airflow velocity in the respiratory system that affects the amount of dust exposure received by the residents of the house. In addition, the denser the residence, it will facilitate disease transfer, especially diseases through the air on fellow residents. The fourth factor is lighting, a healthy home requires adequate lighting from the sunlight containing ultraviolet light to kill germs in the home. Sunlight into the house should be at least 60 lux and should not be dazzling.

Based on the discussions, health centers as health care facilities should optimize the work program related to environmental health as the promotive and preventive efforts on the spread of respiratory diseases. The OHU Medokan Ayu as a healthcare for informal workers has carried out various activities such as medical check (blood pressure) and counseling education. However, environmental health programs are still not carried out because of many activities that carried out by puskesmas. This condition causes a lack of utilization of the OHU Medokan Ayu. Lack of utilization of OHU is possibly the cause of some of the factors such as limited of implementation programs (only held twice a month) and limited number of health workers.

The OHU Medokan Ayu can collaborate with Puskesmas Medokan Ayu to hold an environmental health program. Environmental health efforts that can be done in environmental health poly include public places control, this can be done through the provision of green open space and planting trees to absorb air pollutants in ambient air. Other than that, supervision and control of sanitation can be done by conducting counseling activities such as counseling about healthy home with sufficient ventilation to ensure air circulation in the home, the importance of applying good housekeeping and maintenance. In addition, regular monitoring of air quality around settlement is needed for prevention against air pollution.

Based on the analysis of the results and discussion in this study, it can be concluded that: First, occupational Health Unit is one of the OHU health centers of Medokan Ayu which one of the health services is poly environmental health. Second, lack of utilization of OHU Medokan Ayu possibly cause of some factors such as limited

of implementation program (OHU only held twice a month) and limited number of health workers. Third, from the data of diseases in health care Medokan Ayu region in 2017, it is found that the most frequent diseases is acute respiratory infection (ISPA). Fourth, environmental health services as the promotive and preventive efforts that have been implemented by Puskesmas Medokan Ayu include supervision and control of water quality, control of public places, supervision, and control of sanitation and environmental health training institutions. Promotive and preventive activities aimed first aid at work accidents and occupational diseases to reduce or eliminate the risk of accidents and occupational diseases as well as to improve workers health. Last, the environmental factors that affect ISPA include indoor air pollution, lack of ventilation, density residential houses, and lack of lighting.

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