

Analysis Of Knowledge Of The Use Of Personal Protective Equipment (Ppe) Against Working Diseases In Workers At Cv. Bintang Indah Marmer Campurdarat, Tulungagung District

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ABSTRACT

Work-related illnesses which are risks that must be faced by workers in carrying out work, including accidents that occur on the way from home to work, and returning home via normal or reasonable roads.. The purpose of this study is to analyze the influenceknowledge of the use of Personal Protective Equipment (PPE) against the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency. The research design was an observational quantitative study with a cross sectional approach with the focus of the research being aimed at analyzing the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency. with a population of 46 respondents and a sample of 41 respondents who were drawn using the simple random sampling technique. The findings show that hNearly half of the respondents have knowledge of the use of PPE in the moderate category as many as 17 respondents (41.5%). Most of the respondents had experienced respiratory problems as many as 21 respondents (51.2%). The results of the study used the test *Logistic Regression* It shows that the p-value is $0.002 < 0.05$, then H_0 is rejected and H_1 is accepted, so it is concluded that there is the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational respiratory disorders in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency. It is expected that respondents when doing work that has a high risk of accidents while working to use personal protective equipment (PPE) completely and behave in a safe work so that work security and safety can be increased.

Keywords : Compliance, Covid 19 & Knowledge

INTRODUCTION

Work-related diseases which are risks that must be faced by workers in carrying out work, including accidents that occur on the way from home to work, and returning home via normal or reasonable roads. Occupational diseases can be caused by 2 factors, namely unsafe action or human factors and unsafe conditions or work environment factors (Jamsostek, 2014).

Personal protective equipment (PPE) is basically a very important tool, because it is the last resort in an effort to protect workers after engineering and administrative efforts by the company. This is intended to protect and reduce the level of work accidents that often occur (Ramli, 2010).

Based on the results of a preliminary study conducted by researchers on November 8, 2020 to 10 respondents at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency, it was found that a total of 7 respondents (70%) had experienced respiratory problems in the form of coughs, colds, sneezing and even shortness of breath but there was no previous history of asthma. Where this is due to the low compliance with using personal protective equipment properly and correctly. Workers are very vulnerable to the presence of a lot of dust

due to cutting stones using cutting tools so the use of personal protective equipment according to standards is very important here, especially masks.

Every activity that involves human, machine and material factors that go through the stages of the process has a hazard risk with different levels of risk that allow occupational accidents and diseases to occur. The risk of occupational diseases is due to sources of danger resulting from work activities in the workplace. Labor is a company asset that is very important in the service process, so it is necessary to make efforts so that the health status of the workforce is always in optimal condition. Generally in all workplaces there are always sources of danger. Almost no workplace is completely free from sources of danger (Syukri, 2013).

Work environment hazards, both physical, biological and chemical, need to be controlled in such a way so as to create a work environment that is healthy, safe and comfortable. Various ways of controlling can be done to overcome the hazards of the work environment, but technical control on the source of the hazard itself is considered to be the most effective and is the recommended first alternative, while the use of Personal Protective Equipment (PPE) is the last option (Endang, 2014).

One of the efforts in the framework of providing labor protection for Occupational Safety and Health (K3) in health services is by providing PPE. Giving PPE to workers is a last resort if engineering efforts and safe work practices have been maximally carried out (Hartati, 2011).

The forms of protection provided are in addition to methods of elimination, substitution, engineering and administration, but also by providing Personal Protective Equipment (PPE) for workers, guests and practitioners. This is done because Quality Healthy Safety and Environmental (QHSE) is also aware of the high potential hazards that exist in the work environment (Indarto, 2014).

The phenomenon that occurs is that the use of PPE has not been fully implemented according to the procedure. Therefore, work safety must really be applied in a health service or other work place where workers do their work. It is not only the supervision of machines and other equipment but more importantly for the human being or the workforce. This is done because humans are the most important factor in a production process. Humans as workers who can cause work accidents that result in disability and death (Boedi, 2011)

Hindratmo (2010) states that Personal Protective Equipment (PPE) is basically a very important tool, because this tool is the last resort in an effort to protect workers after engineering and administrative efforts by the company. This is intended to protect or reduce the level of work accidents that often occur.

Based on the above conditions, the authors are interested in researching the knowledge analysis of the use of Personal Protective Equipment (PPE) against the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency.

METHODS

In this study, researchers used a quantitative analytic design with a cross sectional approach, namely a study to study the dynamics of regression between risk factors and effects, by approaching, observing or collecting data at once (point time approach), that is, each subject. The research was only observed once and measurements were made of the character status or subject variables at the time of examination. This does not mean that all research subjects were observed at the same time (Notoadmojo, 2012). This research will analyze the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat,

Tulungagung Regency with a population of 46 respondents and a sample of 41 respondents who were drawn using the simple random sampling technique.

RESULTS

Table 1 Logistic Regression Analysis Results analysis of knowledge on the use of Personal Protective Equipment (PPE) against the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

No.	Variable	B	Sig
1	Behavior	34,224	0.002
2	Constant	52,220	0.003

Based on the results of the Logistic Regression analysis, it shows that the p-value is $0.002 < 0.05$, then H_0 is rejected and H_1 is accepted, so it is concluded that there is the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational diseases in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency.

DISCUSSION

A. Knowledge of the Use of Personal Protective Equipment (PPE) on Workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

The results showed that almost half of the respondents had knowledge of the use of PPE in the medium category as many as 17 respondents (41.5%). In addition, a number of 14 respondents (34.1%) have knowledge of the use of PPE in the low category. While a number of 10 respondents (24.4%) have knowledge of the use of PPE in the high category.

Personal protective equipment (PPE) is a device that has the ability to protect a person whose function is to isolate part or all of the body from potential hazards in the workplace. In Raoda's research (2015), the Health Action Process Approach (HAPA) model. In compliance with the SOP of traditional sea cucumber diving, it is directly influenced by the self-efficacy of sea cucumber maintenance and economic value. Indirectly, the compliance of traditional diving fishermen is influenced by knowledge of diving Standard Operating Procedures (SOP), risk perception, economic value of sea cucumbers and self-efficacy of duties.

Personal protective equipment (PPE) is basically a very important tool, because it is the last resort in an effort to protect workers after engineering and administrative efforts by the company. This is intended to protect and reduce the level of work accidents that often occur (Hindratmo, 2010).

Every activity that involves human, machine and material factors that go through the stages of the process has a hazard risk with different levels of risk that allow occupational accidents and diseases to occur. The risk of accidents and occupational diseases is caused by the existence of sources of danger resulting from work activities in the workplace. Labor is a company asset that is very important in the service process, so it is necessary to make efforts so that the health status of the workforce is always in optimal condition. Generally in all workplaces there are always sources of danger. Almost no workplace is completely free from sources of danger (Syukri, 2013).

Work environment hazards, both physical, biological and chemical, need to be controlled in such a way so as to create a work environment that is healthy, safe and comfortable. Various ways of controlling can be done to overcome the hazards of the work environment, but technical control on the source of the hazard itself is considered to be the most effective and is the recommended first alternative, while the use of Personal Protective Equipment (PPE) is the last option (Endang, 2014).

According to the researcher, the use of personal protective equipment on workers is very important, especially if the worker is doing his job as a marble craftsman where in his work the worker is dealing with dirt, dust and heavy equipment which if an accident can be fatal. Based on the results of the study, it was found that most of the respondents had low knowledge in using complete personal protective equipment from head to toe. And there are still many respondents who use personal protective equipment incompletely and even the PPE that is used is not suitable for use. This is due to the lack of knowledge of workers and also because the attitude of workers is still lacking in understanding the hazards of work. Shouldwherever when someone is associated with an unsafe environment, he must pay attention to the occurrence of work accidents by using self-protection devices when carrying out these activities.

B. Occurrence of Occupational Respiratory Disorders in Workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

The results showed that most of the respondents had experienced respiratory problems as many as 21 respondents (51.2%). Meanwhile, 20 respondents (48.8%) did not experience respiratory problems.

Occupational Health and Safety (K3) according to Ramli (2013) is a condition or factor that affects or can affect the health and safety of workers or other workers (including temporary workers and contractors), visitors, or everyone in the workplace.

Work accidents include occupational diseases which are risks that must be faced by workers in carrying out work, including accidents that occur on the way from home to work, and returning home via normal or reasonable roads. Work accidents can be caused by 2 factors, namely unsafe action or human factors and unsafe conditions or work environment factors (Jamsostek, 2014).

The results of the research by Sahrial Angkat (2013) also showed the effect of using PPE at work on the occurrence of work accidents, where 63.64% of industrial workers who became respondents without PPE had an accident. Hindratmo (2010) states that Personal Protective Equipment (PPE) is basically a very important tool, because this tool is the last resort in an effort to protect workers after engineering and administrative efforts by the company. This is intended to protect or reduce the level of work accidents that often occur.

According to researchers, the potential for accidents or work-related diseases in masmer craftsmen is the rawness of the body parts being exposed to work equipment such as burrs, besides that there is also the potential for dust to enter the eyes of workers, and there is also the risk of being hit by stones if you do not use complete personal protective equipment. Based on the results of the study, it was found that most respondents experienced respiratory problems where it was caused by lack of knowledge and lack of behavior to maintain work health, besides that, indifference to health was another factor that caused work-related accidents or illnesses to increase. And the most important thing is that the use of personal protective equipment is incomplete and unfit for use.

C. The Influence of Knowledge on the Use of Personal Protective Equipment (PPE) on Occurrence of Work-related Respiratory Disorders in Workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

Based on the results of the Logistic Regression analysis, it shows that the p-value is $0.002 < 0.05$, then H_0 is rejected and H_1 is accepted, so it is concluded that there is the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational respiratory disorders in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

One of the efforts in the framework of providing labor protection for

Occupational Safety and Health (K3) in health services is by providing PPE. Giving PPE to workers is a last resort if engineering efforts and safe work practices have been maximally carried out (Tarwaka, 2016).

The forms of protection provided are in addition to methods of elimination, substitution, engineering and administration, but also by providing Personal Protective Equipment (PPE) for workers, guests and practitioners. This is done because Quality Healthy Safety and Environmental (QHSE) is also aware of the high potential hazards that exist in the work environment (Dyah, 2014).

The phenomenon that occurs is that the use of PPE has not been fully implemented according to the procedure. Therefore, work safety must really be applied in a health service or other work place where workers do their work. It is not only the supervision of machines and other equipment but more importantly for the human being or the workforce. This is done because humans are the most important factor in a production process. Humans as workers who can cause work accidents that result in disability and death (Barizqi, 2015).

Hindratmo (2010) states that Personal Protective Equipment (PPE) is basically a very important tool, because this tool is the last resort in an effort to protect workers after engineering and administrative efforts by the company. This is intended to protect or reduce the level of work accidents that often occur.

According to researchers, the number of incidents is caused by work processes that have a high risk of danger plus the rawness of the body parts being exposed to work equipment such as burrs, in addition to the potential for dust to enter the workers' eyes, and also the risk of being hit by stones if they do not use complete personal protective equipment. Most of the workers already wear Personal Protective Equipment (PPE), especially gloves, boots, goggles, hats and masks, but the PPE that is used does not meet the requirements because it is still wearing damaged PPE and lack of maintenance. So it can be concluded that there is an effect of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational respiratory disorders among workers at CV. Bintang Indah Marble Campurdarat, Tulungagung Regency.

CONCLUSION

1. Nearly half of the respondents have knowledge of the use of PPE in the moderate category as many as 17 respondents (41.5%).
2. Most of the respondents had experienced respiratory problems as many as 21 respondents (51.2%).
3. There is the influence of knowledge on the use of Personal Protective Equipment (PPE) on the incidence of occupational respiratory disorders in workers at CV. Bintang Indah Marmer Campurdarat, Tulungagung Regency

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