RELATIONSHIP KNOWLEDGE OF OHS AND EMPLOYEE BEHAVIOR ON COMPLIANCE WITH PPE USE

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ABSTRACT

Research on K3 Knowledge with Use Compliance PPE . The type of research used in this study used a descriptive analytic method with a cross sectional approach, because the research conducted was related to statistical tools for processing the results of the questionnaire so that it could be seen whether or not there was a relationship between OSH Knowledge and PPE Compliance. The data analysis method used in this research is validity test analysis, reliability test, spearman rank correlation coefficient analysis, and correlation coefficient hypothesis testing processed using SPSS 20. Based on the results of data processing, it shows that K3 Knowledge and PPE Compliance use PT have a positive relationship, the questionnaire shows the average respondent's answers to the K3 Knowledge variable and PPE Use Compliance. with a correlation coefficientRank Spearmanof 0.730 which means it has a relationship level in the strong category. The results of the coefficient of determination obtained KD = 53.29% This means that K3 knowledge has a contribution/role to employee performance of 53.29%, while the remaining 46.71% is explained by other factors outside K3 knowledge. The results of the correlation coefficient hypothesis test show that tcount > ttable (7.4000 > 1.676) then Reject Ho and Accept Ha, meaning that there is a positive relationship between OSH Knowledge and PPE Compliance. So there is a relationship between K3 Knowledge and Compliance with PPE Use. to be able to increase K3 Knowledge for its employees by finding out what is the accident rate and what things are overlooked by each employee so as to minimize the accident rate in the company and so for the sake of occupational health and safety for each of its employees.

Keywords: Knowledge of K3, Compliance with the Use of PPE.

INTRODUCTION

Occupational safety and health is very important to note for all workers. Occupational safety and health can also affect the level of performance and productivity of the workforce. Every company, both institutions and private companies, must prioritize occupational safety and health in order to run and reduce the level of risk for both the company and the workforce, especially for the workforce.

Philosophically, OSH is defined as an effort and thought to guarantee the integrity and perfection of both the physical and spiritual human beings in general from the workforce in particular and their work in the framework of leading to a just, prosperous and prosperous society. Scientifically K3 is defined as science and its application technically and technologically to prevent the emergence of work accidents and occupational diseases from any work performed. Meanwhile, from the point of view of law, OSH is defined as one of the safeguards so that every workforce and other people entering the workplace are always in a healthy and safe condition and the sources of the production process can be carried out safely,

efficiently and productively (Tarwaka, 2014).
According to (Buntarto, 2015) personal protective equipment (PPE) is equipment that must be used when working according to work hazards and risks to maintain the safety of the workers themselves and other people around them.

According to the latest estimates released by the International Labor Organization (ILO), 2.78 million workers die each year due to work-related accidents and diseases. 1 About 2.4 million (86.3 percent) of these deaths are due to work-related diseases, while more than 380,000 (13.7 percent) due to work accidents. Every year, there are almost a thousand times more non-fatal work accidents than fatal work accidents. Non-fatal accidents are estimated to affect 374 million workers each year, and many of these accidents have serious consequences for the earning capacity of workers (Hämäläinen et al., 2017). Young workers have a higher rate of work accidents than adult workers. According to recent European data, the incidence of non-fatal accidents at work is more than 40 percent higher among young workers aged between 18 and 24 years than among adult workers (EU-OSHA, 2007). In the United States, the risk of young workers between the ages of 15 and 24 experiencing a non-fatal work accident is two times higher than that of workers aged 25 and over (CDC, 2010).

In contrast, based on the above views, statistics show that the incidence of occupational diseases is lower among young workers than among older workers. This is not because young workers have greater resistance to occupational diseases. Young workers are actually more vulnerable to occupational diseases because they are still developing, both physically and mentally, which makes them more vulnerable to hazards from chemicals and other hazardous substances. The lower incidence of occupational diseases among younger workers is most likely because occupational diseases often appear only after cumulative exposures and/or latent periods. In addition, it is difficult to obtain accurate data on occupational diseases, and especially data on occupational diseases caused by exposure to hazards at work during youth (EU-OSHA, 2007). As well as causing untold human suffering, occupational accidents and diseases carry significant economic costs, with an estimated annual loss of 3.94 per cent of global GDP (ILO, 2017c). The costs for the seriously injured and long-term impaired youth working community can be far greater than the costs for similarly injured working adults. The consequences of occupational injuries are more serious when these injuries occur early in a young worker's life. A young worker with long-term impairment may cease to be an active member of society and not take advantage of the education and training they have received.

Many countries are making significant investments in employment, education, training, skills development and job creation for young people. It is very important to include occupational safety and health (K3) in these programs. To that end, it is necessary to understand and address the safety and health risk factors faced by young workers between the ages of 15 and 24 years. Young workers under the age of 18 are recognized in law and policy as a vulnerable group and afforded special protection under child labor and prohibition of hazardous work standards, but those between the ages of 18 and 24 do not receive legal recognition or an equivalent level of protection at work , even though their risk of injury is steadily increasing.

It emphasizes the importance of improving OSH for young workers, both to promote decent work for youth and to contribute to efforts aimed at combating hazardous child work. 2 Out of 151.6 million children engaged in child labor globally, almost half (72.5 million)

engaged in hazardous work. About 24 per cent (over 37 million) are between the ages of 15 and 17 (ILO, 2017b).

Minister of Labor (Minister of Labor) Ida Fauziyah said the casework accidentincreased. He noted that in 2019 the number of work accidents was 114,000. Meanwhile in 2020 there will be 177,000 accident cases.

Numberwork accidentcontinues to show an increasing trend. The Employment Social Security Administration Agency (BPJS) noted, in 2017 the numberswork accidentreported 123,041 cases, while in 2018 there were 173,105 cases with claims for Work Accident Insurance (JKK) of IDR 1.2 trillion. Annually, on averageBPJS of Employmentserved 130 thousand caseswork accident, from mild cases to fatal cases. Among all the cases handled, cases are still dominatedwork accidentlight work in a factory-characterized work environment," said the Service DirectorBPJS of Employment, Krishna Syarif on the sidelines of the commemoration of the 2019 National Occupational Health and Safety (K3) Month, at Istora Senayan, Jakarta, Tuesday 15 January 2019.

Overall related to work safety based on BPJS Employment data, in West Java in 2019 there were 22,988 cases recorded, of which 20,592 caseswork accident, 2,099 cases while unable to work, 111 cases of disability, and 186 cases of death. "Meanwhile, in 2020 there were 35,291 cases, of which 26,699 caseswork accident, 7,391 cases while unable to work, 930 cases of disability, and 271 cases of death," said Taufik at the Manpower and Transmigration Office.West Java, Wednesday (10/2). The number of companies in West Java was recorded at 50,000 with a classification of 12,527 small companies, 5,166 medium companies, and 32,307 large companies with a total workforce of 2,008,814 people. The data is obtained from company data that are Compulsory Employment Report Online (WLKP) accidents caused by human error, worker negligence, and small companies that ignore improper equipment.

Thus it can be said that Occupational Safety and Health is very important where the regulations, implementation and programs made by a company to minimize the occurrence of work accidents. And on Occupational Safety and Health it must also be applicable to all workers in the company. As stated by Cooper (2000), which states that there are 3 elements that make up the OSH culture, namely the psychological aspects of the workers themselves which consist of the level of knowledge, expectations, and motivation. The second element is the behavioral aspects of workers and organizational and situational aspects.

But in fact the company PT. there are still many workers who do not use it, still neglect safety and health for themselves and still lack knowledge of the use of PPE in work that can be high risk, thereby causing an increase in work accidents and a high risk for the company.

In the initial survey conducted by researchers on 5 workers of PT. by interviewing production workers. Based on the researchers' observations, almost all workers encountered during the initial survey had knowledge about the use of PPE where they did not know the use of masks, gloves, shoes and helmets at work. Workers think that the work they are doing does not pose a dangerous risk to their own safety, so workers are always negligent and ignore their own safety measures. Lack of knowledge about the use of PPE due to lack of counseling to workers about the use of PPE so that workers do not know about the proper way to use PPE.

Based on the background above, the authors feel interested in conducting research with the title The Relationship between Knowledge and the Use of Personal Protective Equipment

(PPE).

RESEARCH METHODS

The design of this study uses analytic descriptive method with a cross sectional approach. crosssectional. The population in this study were all workers in the heavy equipment and industrial machine repair division of PT. as many as 53 workers. The sample in this study were all workers in the production section using the total population, namely all workers at PT. The instrument used in this research is a questionnaire. Data analysis used univariate and bivariate analysis with the Spearman rank test.

RESEARCH RESULT

Based on the results of data processing, it shows that K3 Knowledge and PPE Compliance use PT have a positive relationship, the questionnaire shows the average respondent's answers to the K3 Knowledge variable and PPE Use Compliance. with a Spearman Rank correlation coefficient of 0.730, which means it has a strong relationship level. The results of the coefficient of determination obtained KD = 53.29% This means that K3 knowledge has a contribution/role to employee performance of 53.29%, while the remaining 46.71% explained by other factors outside K3 Knowledge. The results of the correlation coefficient hypothesis test show that tcount > ttable (7.4000 > 1.676) then Reject Ho and Accept Ha, meaning that there is a positive relationship between K3 Knowledge and Compliance with PPE Use. So there is a relationship between K3 Knowledge and Compliance with PPE Use. to be able to increase K3 Knowledge for its employees by finding out what is the accident rate and what things are overlooked by each employee so as to minimize the accident rate in the company and so for the sake of occupational health and safety for each of its employees.

DISCUSSION

There are 3 factors that influence adherence to the use of personal protective equipment (PPE), namely:

1. Predisposing Factors

   Predisposing factors include several factors, including:

a. Knowledge

   Knowledge is human sensing, or the result of knowing someone about the object they have. At the time of sensing to produce knowledge is strongly influenced by the intensity of attention and perceptions of the project. Based on research by Darmayanti, et al (2015) there is a positive relationship between knowledge and adherence to the use of PPE on farmers who use pesticides.

b. Attitude

   Attitudes can be assessed in terms of good and bad as well as positive and negative. Attitude is a feeling that is constant and directed to an object, either person, action, or idea (Lawrence Green, 1980).

c. Education

   The education in question is formal education obtained in school. According to Notoatmojo

(1981), education is every effort, influence, protection and assistance given to students towards maturity. A person's education determines the extent of one's knowledge where people with low education find it very difficult to accept something new. This indirectly affects the behavior of workers. Worker education programs in the field of occupational health and safety can provide a fundamental foundation that requires effective participation in finding solutions to problems in the workplace. The education referred to in this case is formal education obtained in school.

d. Years of service

An individual will perform an action based on his experience. Experienced health workers will take action according to the habits that have been applied every day based on the experience gained while working.

e. Perception

Perception is a process preceded by sensing, namely a process in the form of receiving a stimulus by an individual through the senses.

f. Motivation

Motivation is a stimulus or encouragement that is owned by a person or group of people who want to cooperate optimally in doing something that has been planned to achieve a set goal. Within the scope of work safety, worker motivation is one of the factors that influence worker compliance in using personal protective equipment. Meanwhile, a condition that has an effect on arousing, directing, and maintaining behavior related to the work environment is work motivation (Mangkunegara, 2011). Within the scope of work safety, worker motivation is one of the factors that influence worker compliance in using personal protective equipment. Brito's 2015 research shows that workers who have good work motivation are mostly.

3. Enabling Factors

Enabling factors are the skills and resources needed to perform health behaviors. Resources in question include health care facilities, personnel or similar resources. Enabling factors also pertain to the accessibility of these various resources. Cost, distance, available transportation and so on, in this case are also enabling factors.

a. Facility Availability

Availability of health resources, which is manifested in the physical environment, availability or unavailability of facilities or facilities. In order to manifest an attitude into a real action, supporting factors or a possible condition are needed, including the facilities that this factor manifests in the physical environment, the availability or unavailability of facilities or means which are resources to support behavior.

b. Working facilities

A person's work in carrying out their duties, the quality level of the results is largely determined by the facilities and infrastructure, which are accompanied by guidelines that will have a lot of influence on work productivity and good work quality.

3. Reinforcing Factors

Reinforcing factors are factors that determine whether health measures are supported or not. In occupational health education programs, reinforcement can be provided by colleagues, superiors, heads of units and families. Positive or negative reinforcement

depends on the attitude and behavior of the person concerned. This factor includes the attitude and behavior of other people, such as parents, health workers, friends and neighbours.

CONCLUSION

1. The results of the Spearman Rank correlation analysis obtained rxy = 0.730. It means Knowledge of K3with Employee Performance has a moderate relationship.
2. The results of the coefficient of determination obtained KD = 53.29% This means that K3 knowledge has a contribution/role to Compliance with PPE Use of 53.29%, while the remaining 46.71% explained by other factors outside K3 knowledge.
3. The results of the correlation coefficient hypothesis test show that tcount > ttable with a result of (7.4000 > 1.676) then Reject Ho and Accept Ha, meaning that there is a positive relationship between K3 Knowledge and Compliance with PPE Use.

SUGGESTION

With the results of the research that I did. with the data that I received and then processed and associated with indicators where on. there is still a lack of K3 knowledge of its employees. Where the results of Compliance with the Use of PPE are still lacking in the use of PPE for each employee. Due to the lack of K3 knowledge, the level of work safety is still a factor that is underestimated by employees. Therefore I give advice for. to be able to increase K3 Knowledge for its employees by finding out what is the accident rate and what things are overlooked by each employee so as to minimize the accident rate in the company and so for the sake of occupational health and safety for each of its employees.

REFERENCES

1. Pichot E, Delarue R. International Labor Organization (ILO). in:
2. Research Handbook on the European Union and International Organizations. 2019.
3. Qaisrani MI, Baig N, Rathore T, Yousuf F. Occupational Health Hazards Of Livestock Workers In Pakistan. Pakistan J Public Heal. 2018;8(1).
4. Manuele FA. Occupational safety and health management. in: Handbook of Occupational Safety and Health. 2019.
5. Ministry of Manpower and Transmigration of the Republic of Indonesia. Regulation of the Minister of Manpower and Transmigration Number Per.13/Men/X/2011 concerning Threshold Values for Physical and Chemical Factors in the Workplace in 2011. Minister of Manpower and Transmigration. 2011.
6. Affianti N, Purnami N, Etika R. Noise and hearing loss experience among ground handling workers in Juanda airport Surabaya. Pollut Res. 2019;38(August Suppl. Issue):S61–5.
7. Safrina Ramadhani, Gerry Silaban WH. Use of Personal Protection Equipment for Hearing Impaired Ground Handling Workers at Kualanamu Airport. Andalas Public Health. 2017;
8. Retnaningsih R. Related Knowledge and Attitudes of Ear Protection Equipment Usage on Workers of PT. X. J Ind Hyg Occup Heal. 2016;1(1):67–82.

9. Sahu AK, Suresh S, Mathew R, Aggarwal P, Nayer J. Impact of personalprotective equipment on the effectiveness of chest compression – A systematic review and meta-analysis. Vol. 39, American Journal of Emergency Medicine. 2021. p.m. 190–6.
10. Manzoor J, Mamta, Jaganadha Rao R, Wani KA. Health impact and noise exposure assessment in the cricket bat industry of Kashmir, India. Int J Occup Saf Ergon. 2016;22(4):473–8.
11. Gama APM, Alves CA. Research Methodology. In: Accounting, Finance, Sustainability, Governance and Fraud. 2021. p.m. 59–70.
12. Jahangiri M, Ansari H. Risk Perception, Knowledge and Safety Attitude and Hearing Protector Use in Petrochemical Industry Workers. Audiology. 2008;17(1):11–8.
13. Lehrer K. Theory of knowledge. Theory of Knowledge. 2015. 1-212 p.
14. Absolon K. Indigenous Wholistic Theory: A Knowledge Set for practice. First Peoples Child Fam Rev. 2020;5(2):74–87.
15. Olufemi TD. Theories of attitudes. In: Psychology of Attitudes. 2012.p.61–78.
16. Rind Z. Theories of Attitude: Implications for Head Teachers. Sukkur IBA J Educ Sci Technol. 2022;1(2):47–52.
17. Kircher R, Fox S. Attitudes towards Multicultural London English: implications for attitude theory and language planning. J Multiling Multicult Dev. 2019;40(10):847–64.
18. Yeşiltepe A, Karadağ G. The effect of occupational training provided to workers in a glass factory on their use of ear protectors. Int J Occup Saf Ergon. 2022;
19. Milhem W, Abushamsieh K, Pérez Aróstegui MN. Training Strategies, Theories and Types. J Accounting, Bus Manag [Internet]. 2014;21(1):12–26.