

Occupational Safety and Health (K3) Counseling about Education to Prevent Occupational Diseases that Can Attack Workers on the Kinara Boarding House Building Project

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ABSTRACT

According to data from the International Labor Organization (ILO), it is estimated that there are around 340 million work accidents and 160 million cases of occupational diseases (PAK) each year worldwide. This condition shows the importance of implementing occupational safety and health (K3) in every workplace, including in office environments and construction projects. This community service activity is new because it focuses on the socialization of K3 in the construction project environment as a form of preventive effort against work accidents and work-related diseases. The socialization was carried out at the Kinara Dormitory Development Project on July 20-25, 2024. The purpose of this activity is to increase the knowledge of project workers regarding the importance of K3 and the use of personal protective equipment (PPE), so that they can work more safely and avoid the risk of accidents and PAK. This activity was attended by five workers and was carried out in small groups. The method used was lectures and questions and answers with the help of flipcharts and leaflets. Based on the results of observations, the average worker works for 10 hours per day, six days a week, with a break time of one hour. However, it is known that workers have not used PPE in carrying out their duties. Through this activity, there was an 85% increase in worker knowledge regarding K3 and the use of PPE. Thus, the implementation of K3 is very necessary to create a healthy, safe, and comfortable work environment, as well as to maintain worker productivity. Socialization of occupational safety and health (K3) has been proven to prevent work accidents and occupational diseases (PAK) in the Kinara Dormitory Development Project.

Keywords: occupational diseases, prevention, workers (K3)

Received: January 8, 2025

Revised: February 11, 2025

Accepted: March 28, 2025



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INTRODUCTION

Work accidents are accidents that occur in the work environment, including accidents that occur on the way from home to work and from work to home and work accidents that cause

work-related diseases caused by the work environment (Government Regulation No. 44 of 2015). The factors causing accidents are human factors (unsafe human acts) and environmental factors (unsafe conditions).

Work accidents are unwanted and unexpected events that can cause various kinds of losses, which occur inside or outside the workplace related to the work process. Work accidents seen from human factors occur due to lack of knowledge and skills, working not according to procedures, working while joking, not using personal protective equipment (PPE), fatigue, boredom, and others. When viewed from environmental factors, work accidents occur due to unsafe environmental conditions such as: work equipment that is no longer good but is still used, inadequate lighting, non-ergonomic workspace layout, and environmental conditions seen from physical, chemical, biological aspects (Wirawan, et al., 2016). Occupational Safety and Health (K3) problems are easily found in construction workers, in the construction process the workers do not use personal protective equipment such as helmets, gloves, and boots. The International Labor Organization (ILO) estimates that around 2.3 million women and men worldwide die from work-related accidents or diseases each year. This equates to more than 6,000 deaths every day. And it is estimated that there are approximately 340 million work-related accidents and 160 million victims of work-related diseases each year worldwide. Data on work-related accidents and occupational diseases (PAK) in Indonesia shows an increasing trend in recent years, although there are still shortcomings in PAK reporting. In 2023, there were 370,747 cases of work-related accidents. Meanwhile, PAK cases are still not widely reported. East Java recorded the highest number of work-related accident cases in Indonesia in 2024, with 80,771 cases. In detail, 74,319 cases occurred in wage-earning participants, 5,585 in non-wage-earning participants, and 867 in construction workers. This figure is around 17.5% of the total cases of work-related accidents throughout Indonesia.

Viewed from the human factor, work accidents occur due to work not in accordance with procedures, working while joking, not using Personal Protective Equipment (PPE), placing goods or tools incorrectly, fatigue, boredom and so on. While from the environmental factor, work accidents occur due to unsafe environmental conditions such as: work equipment that is no longer good for use but is still used, inadequate lighting, non-ergonomic workspace layout, and environmental conditions seen from a physical, chemical, biological perspective. Occupational safety and health (K3) is a very important aspect in every construction project. Project workers are susceptible to various diseases due to unhealthy work environment conditions. Therefore, appropriate education is needed to increase workers' awareness and understanding of disease prevention in the workplace.

The purpose of community service activities is to create a safe and comfortable working environment in the Kinara Dormitory construction project. So that work risk accidents and occupational diseases can be controlled. While the expected benefits of community service activities are that workers and dormitory owners can implement K3 culture in the workplace, so that potential hazards in the workplace and the risks that arise can be anticipated as early as possible.

METHODS

The methods used in this community service activity are divided into two types, namely 1) The first day, July 20, 2024, a permit was obtained to carry out community service to the owner of the Kinara Boarding House development project and an observation was made whether personal protective equipment was available at the location, 2) counseling on Occupational Safety and Health (K3) and Personal Protective Equipment (PPE). This community service was carried out on July 25, 2024 and community service was carried out

for 5 days, the population of workers on the Kinara Boarding House development project, a sample of 5 workers on the Kinara Boarding House development project

RESULTS

Personal Protective Equipment (PPE)

The activity began by introducing Personal Protective Equipment (PPE) that is suitable for use by workers in the Kinara Boarding House Development Project, including 1) Project helmets, 2) Project gloves.

Figure 1 Project helmet



Figure 2 Project gloves



Education

This outreach activity will be carried out at the Kinara Dormitory Construction Project Workers. The number of participants involved is around 5 people. The outreach is carried out using flipcharts and leaflets. In implementing this activity, the team collaborated with the Kinara Dormitory Construction Project Workers. The stages of this outreach activity go through several stages including the preparation stage, assessment of the use of personal protective equipment, implementation of activities consisting of outreach and at the end of the activity the team measures knowledge with a questionnaire through a questionnaire, monitoring stage, evaluation stage and report writing stage. In the preparation stage, the team identified the problems that existed at the Kinara Dormitory Construction Project Workers in order to decide on the topic for this community service activity. Furthermore, the team and the Construction Project Workers agreed on the implementation schedule and prepared materials related to office K3. At the implementation stage, the activities carried out included delivering materials, Q and A if there might be an explanation that was not yet understood regarding the K3 project. Then, the activity was closed by conducting a post-test to measure knowledge, then monitoring and evaluation to get input for the next activity. For the smooth

running of this socialization activity, the Team used the following tools and materials: 1) Flip sheets, 2) Materials on K3, 3) questionnaires and attendance, 4) Office K3 Implementation Form. The implementation of this socialization used a small group method by means of lectures and Q&A. And the media used by the team were flip sheets and leaflets.

Figure 3 Counseling



DISCUSSION

From the results of the implementation of education that is felt to be able to reduce the impacts arising from work accidents. One of them is the implementation of the use of Personal Protective Equipment (PPE) properly and correctly. By implementing the use of Personal Protective Equipment (PPE), it is hoped that workers will avoid work accidents such as slipping, being scalded, the risk of fire, and being hit by sharp objects so that an evaluation can be carried out before counseling on occupational health and safety, most factory employees have not used complete PPE due to lack of knowledge about occupational health and safety, most of the Flolaris factory does not use PPE at all. After counseling on Occupational Health and Safety, a small portion has used complete PPE. Based on the results of this evaluation, it was carried out as a form of implementing the results of previous research where this PPE can prevent workers from work accidents. Thus, the incidence of work accidents can be minimized. Personal protective equipment is a tool used by workers which functions to protect workers from injuries or diseases that can be caused by contact with hazards in the workplace environment, whether chemical, biological, radiation, physical, electrical, mechanical and others. Personal protective equipment (PPE) in the world of work is very much needed, especially in workplaces that have an environment that has many potential hazards that threaten the health and safety of workers such as in the metal casting industry, or other industries. However, in fact, there are still many companies whose workers do not use personal protective equipment (PPE), which is caused by many factors such as companies that do not provide it, inappropriate personal protective equipment (PPE), or factors from the workers themselves such as knowledge, attitudes, or comfort in using personal protective equipment (PPE) while working (Dahyar 2018). The results of research conducted by Fairyo & Wahyuningsih (2018) There is a relationship between compliance with the use of personal protective equipment in iron and steel assembly workers and the attitude of workers. Occupational safety and health must be managed as with other aspects in the company, the K3 aspect will not be able to run without intervention from management with planned efforts to manage it (Waruwu, 2016). There are three groups of accidents: (1) Accidents due to work in companies and offices; (2) Traffic accidents; (3) Accidents at home.

There are three main causes of Work Accidents, namely: (1) Work equipment and equipment; (2) Unavailability of safety and protective equipment for workers; (3) Unqualified workplace conditions, such as physical factors and chemical factors that do not comply with the requirements that are not permitted. 4) Workers lack knowledge and experience about work methods and work safety and poor physical and mental conditions of workers. By providing K3 protection, it is hoped that workers can work safely, healthily, and productively (Kani, 2013). As the regulations and provisions for occupational safety and health have been regulated and have been widely implemented by companies, one of which is the use of personal protective equipment, the use of proper PPE and according to the type of work in the construction area will maximize the function of the PPE itself and compliance from workers in using PPE is very necessary to prevent work accidents. The role of work safety is very much needed in preventing work accidents because if a company or service business has experienced a work accident, it will cause many losses (Saputri, 2014).

CONCLUSION

This K3 housing socialization activity was carried out as an effort to prevent work accidents and work-related diseases in the Kinara Dormitory construction project workers, running smoothly and according to the expected target. Participants' knowledge of K3 increased, so that participants began to realize the importance of implementing occupational safety and health. As a follow-up to this activity, the team suggested that the contractor's leadership conduct an assessment or evaluation of K3 implementation so that construction workers can take the right steps in implementing K3 in the Kinara Dormitory construction project.

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