

Implementation of Occupational Safety and Health (K3) in Community Workers of Pulau Pinang, Malaysia

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Abstract: Based on data from Bank Indonesia, there are 1.67 million Indonesian migrant workers in Malaysia, both in the formal and non-formal sectors. One of the destinations for Indonesian migrants is Pulau Pinang, Malaysia. PERMAI stands for Pertubuhan Masyarakat Indonesia di Pulau Pinang Malaysia, which is a non-governmental, non-political NGO engaged in social education and culture. Efforts to apply occupational safety and health (K3) to workers are very important for workers when carrying out work activities. Especially for employees who work in a work environment that has high safety and health risks, work safety in the company is not only caused by the system that has been implemented by the company but also by the awareness of everyone to avoid work accidents. The purpose of this activity is to provide an introduction to occupational health and safety (K3) to business owners and workers who are in Pulau Pinang, Malaysia, and to equip business owners and workers to apply K3 in their work activities to prevent injuries, occupational diseases, or accidents. The method used in this activity is to provide health promotion counseling on occupational health and safety. This counseling uses media in the form of leaflets and provides pre- and post-tests in the form of questions and questionnaires to workers to determine their knowledge and understanding. The evaluation results show that the level of compliance with wearing personal protective equipment ("APD") is still low, with a percentage of 37%. Based on the IPA Cartesians diagram, variables X_5 , X_6 , and X_8 are variables that have importance and good performance.

Keywords: work safety; permai pulau pinang; personal protective equipment; importance of performance analysis

INTRODUCTION

The era of globalization has contributed to an increase in employment in the informal sector, which is usually characterized by flexibility and hazardous and unsafe work that poses great risks to workers. Every job has occupational hazards, which usually lead to occupational diseases caused by the work environment or workplace. One of the potential hazards in the workplace is ergonomics (Yusvita and Fitriani 2021). Work posture refers to the different body positions of workers when doing work, especially part-time workers with various types of work to be carried out. (Fiddien et al. 2023).

Based on previous research, it is suggested that the factors that cause accidents are human factors, machines, materials, environment, methods, and measurements, which are the basic causal factors (Anwar 2023). Most accidents are caused by unsafe action, which is a lack of concentration at work and not using APD, and unsafe conditions, namely limited space for workers to move and poor housekeeping (Anwar 2023; ISSWOV 2018). There are two factors that cause work accidents:

contributing causes of accidents and immediate causes of accidents. The immediate causes of accidents are divided into two factors: unsafe acts and unsafe conditions (BAYRAM 2019).

Employee participation is a key component of workplace safety, and effective workplace safety plays an important role in worker engagement (Fiddien et al. 2023). Because K3 is so important, the responsibility of all company members (from board members to executive management) should be emphasized when implementing K3, as the objectives of SM3K can only be achieved with the participation of all members (Ridwan et al. 2021). If employers make efforts to improve safety performance by eliminating hazards and risks in the workplace, then employees who report complaints and make suggestions to the authorities are likely to participate in safety management issues. The high risk of accidents and occupational diseases that can occur to young workers and the lack of knowledge of them and employers on the importance of organizing occupational safety and health (K3) in various work sectors, especially for workers in Pulau Pinang Malaysia, the reference search results show that many part-time workers who pursue their work targets on average experience fatigue (Rafi'ah and Maliga 2021). They also do not care about working time, so their lifestyle is irregular, ranging from diet to sleep patterns, which can cause a decrease in the health status of workers (Rosita and Nastiti 2022). The decline in workers' health status can be seen from their frequent shortness of breath, frequent coughing, colds, and difficulty sleeping.

As an educational institution entity, Universitas Mercu Buana organizes international community service activities for Indonesian citizens working in Malaysia, especially Pulau Pinang, through NGO Permai, which is an application of one of the Tridharma of Higher Education activities. It is hoped that this activity can increase knowledge and awareness of the importance of K3 for workers so that a safe and comfortable work system can be optimally created, and the safety, health, and welfare of workers can be achieved. If young workers must work, then ensuring safety and decent wages is the responsibility of all, including the government and employers (Kongtip, Yoosook, and Chantanakul 2008).

METHODOLOGY

The method carried out in this activity by providing activity participant cards can be seen in Figure 1, as well as health promotion counseling on occupational health and safety. This counseling uses media in the form of leaflets and provides pre- and post-tests in the form of questions to workers to determine their knowledge and understanding of occupational safety and health (Isradi, Andraiko, and Firdaus 2023; Prasetijo et al. 2021). The results of the pre-test and post-test were used to determine the effectiveness of the counseling that had been conducted.



Figure 1. Participant Card and Activity Attendance

The targets of the implementation of community service activities are business owners and full-time workers in the informal sector. The service is carried out on all workers, both new workers and senior workers, including business owners. The implementation of this activity was carried out using the method of lectures and discussions with workers by visiting the activity venue, which was located at the Permai Learning Center meeting hall in Bukit Jambul, Pulau Pinang, Malaysia. Some of the activities and implementation steps are:

1. Identification of data is needed in the implementation of activities and teaching aids in order to provide material that is easily understood by partners. The output of this stage is the availability of data needed to find out what problems are faced by partners and design suitable methods for delivering community service activities (Isradi et al. 2022).
2. Delivering material about the importance of implementing K3 in the workplace. Some of the things discussed were the importance of providing and using APD when working, the risks of using welding equipment, cutting equipment, and noisy equipment if exposed for years without personal protection, the importance of maintaining cleanliness in the workplace, and returning equipment to its place after use. The output of this activity is to demonstrate the importance of obeying and implementing K3 in work activities.
3. Provide an opportunity to ask questions and provide input on the material presented. The output of this activity is the realization of good and harmonious communication between the implementing team and partners.
4. Carrying out the evaluation of this community service activity, after the lecture method was carried out, continued with filling out a short questionnaire in the form of 12 questions to re-ask the level of understanding of workers about K3. The output of this activity is to monitor the results of community service activities.

RESULTS AND DISCUSSION

This community service activity was held on Sunday, January 28, 2024, at the Permai learning center in Bukit Jambul, Pulau Pinang Malaysia, and was attended by 64 participants with a variety of different backgrounds. The following is an overview of the participants in this community service activity based on gender, age, and occupation:

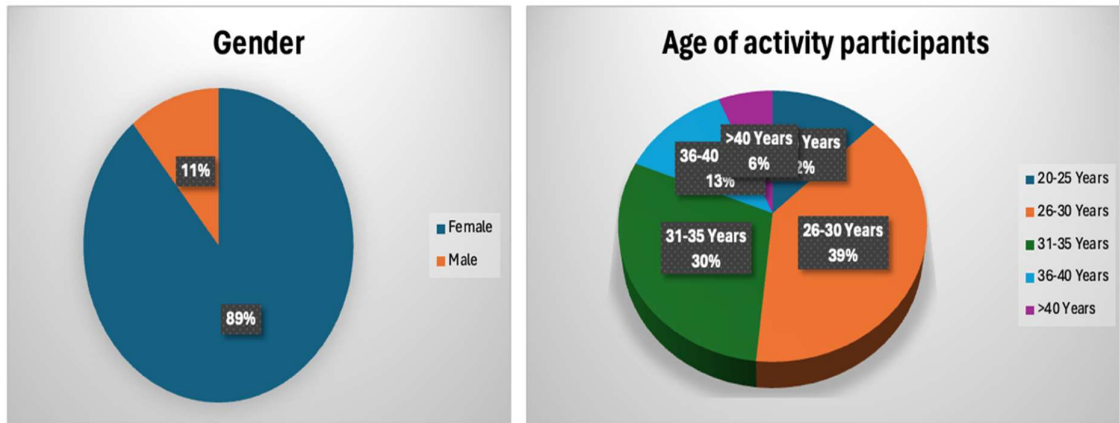


Figure 2. Graph of Community Service Activity Participants by Gender and Ages

Based on Figure 2 above, it is found that the average participant is female (89%), and the average age of most participants is 26 to 30 years (39%). While participant data based on the type of work can be seen in Figure 3 below:

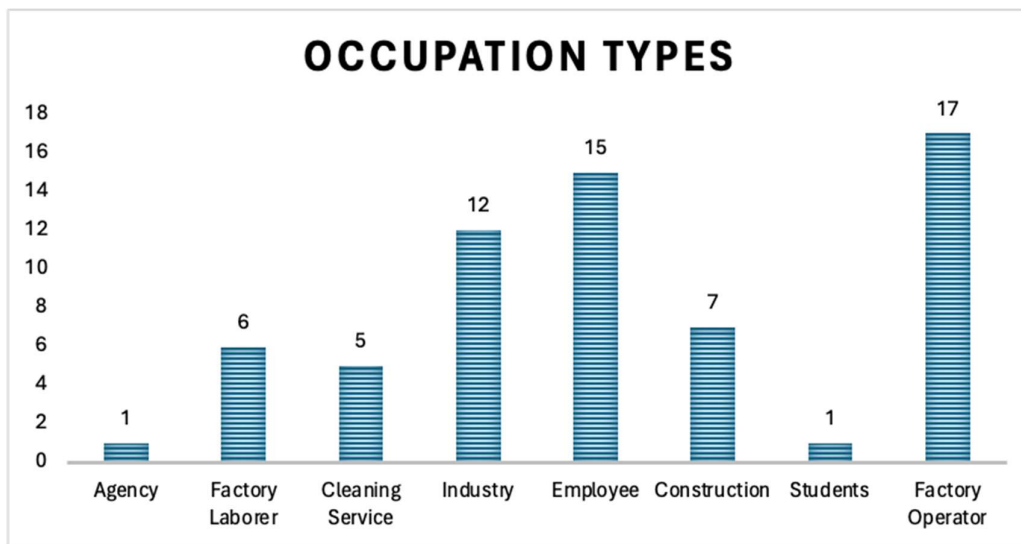


Figure 3. Participants in Community Service Activities by Occupation Types

The purpose of this activity is to provide an introduction to occupational health and safety (K3) to business owners and workers who are in Pulau Pinang, Malaysia, as well as equip business owners and workers to apply K3 in their work activities to prevent injuries, occupational diseases, or accidents. In Figure 4, it can be seen that participants were given counseling and had direct discussions to find out various kinds of problems and obstacles in the application of K3.



Figure 4. Extension Activity Process

Participants were very enthusiastic and supportive in this socialization activity; there was interaction and discussion between participants and presenters, especially for construction workers and factory workers, as can be seen in Figure 5 below. It was also discussed about their experience in terms of work accidents during their work in Pulau Pinang, Malaysia.



Figure 5. Discussion and Interaction with Participants

To determine the success of this community service activity, an evaluation was carried out before and after the implementation through the distribution of questionnaires. Based on the evaluation results obtained through the distribution of short questionnaires, it was found that the knowledge of workers increased in the aspect of the benefits of using APD at work. In the initial results before the service was carried out, the obstacle for workers was a lack of discipline in the use of APD and the application of K3 due to the lack of comfort of the equipment used at work. This reason was considered to hinder speed and comfort at work and reached 37%.

In addition, the evaluation was also carried out to determine the level of satisfaction of the participants with the performance of this service (Dermawan, Bimantara, and Isradi 2021; Dwiatmoko et al. 2022; Widyaningsih and Daniel 2019). The evaluation was carried out by distributing questionnaires to all participants and asking questions about as many as 12 variables, such as:

Table 1. Variables in the questionnaire

Variable	Description
X ₁	The material for service activities is in accordance with the problems in the community.
X ₂	The community service method used is in accordance with the theme and objectives of the community service program.
X ₃	Facilities and infrastructure supporting service activities, such as a place or building for service activities, tools and materials, and other supporting facilities, are adequate.
X ₄	The team implementing the service program looks compact when carrying out activities.
X ₅	The team implementing the service program has competence with the material provided.
X ₆	The implementation team is very interested in packaging the service program.
X ₇	The community enthusiastically participates in community service activities.
X ₈	The community benefits greatly from the service program provided.
X ₉	The community is very interested and enthusiastic about service activities.
X ₁₀	The community is satisfied with the community service program carried out.
X ₁₁	The service program is in accordance with what is expected by the community.
X ₁₂	The duration of the service program is as expected by the community

Based on the results of the analysis, a cartesian diagram is obtained for the Importance Performance Analysis Graph, as shown in Figure 6 below:

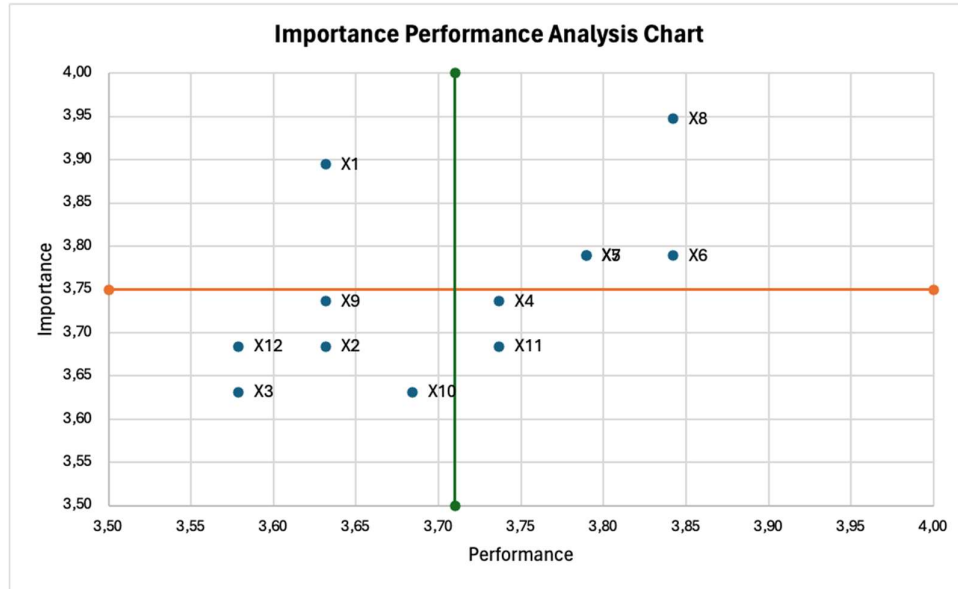


Figure 6. Importance Performance Analysis Chart

Based on Figure 6 above, it can be seen that variables X₅: The team implementing the service program has competence with the material provided; X₆: The implementation team is very interesting in packaging the service program; and X₈: The community benefits greatly from the service program provided. These three variables have a high level of importance and have very good performance. However, there are still several variables that are less than satisfactory for participants, and this is an indicator that must be improved to support the success of this activity in the future, such as methods, facilities, and infrastructure, and the time period given for this activity.



Figure 7. Documentation of Community Service Activities in Pulau Pinang, Malaysia

CONCLUSIONS

The cooperation and collaboration between Universitas Mercu Buana and Permai Pulau Pinang Malaysia can be improved on an ongoing basis by providing the necessary topics and themes according to the needs of the Indonesian community in Pulau Pinang Malaysia.

Based on the results of community service activities, it is known that there is still a lack of awareness among workers about implementing K3 management, which is 37%, because workers feel that the use of APD can hinder and reduce their comfort at work.

Based on the distribution of questionnaires and the results of the cartesian diagram importance performance analysis obtained, variables X_5 , X_6 , and X_8 are variables that have a high level of importance and have very good performance. However, there are still several variables that are less than satisfactory for participants, and this is an indicator that must be improved to support the success of this activity in the future, such as methods, facilities, and infrastructure, and the time period given for this activity.

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