JURNAL ABDIMAS INDONESIA Vol. 5, No. 4, 2025
E-ISSN 2797-2887
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Facilitating of Green Healthy and Safety in Building and Environment for Indonesian Migrant Workers in Pulau Pinang, Malaysia

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Abstrak:

In the recent world, environment become as critical isues, the integration of environmental sustainability into health and safety practices has become more crucial than ever. This paradigm shifted toward Green HSE (Health and Safety Environment) reflects a growing awareness of the interconnectedness between workplace safety, human well-being, and the health. Traditionally, health and safety initiatives have focused primarily on protecting workers from immediate physical hazards. However, a broader perspective acknowledges that the environment in which work occurs is equally critical to long-term well-being. Green HSE recognizes between a healthy environment and the overall health and safety of employees. Green HSE ensures that organizations not only meet these standards but go beyond, demonstrating a commitment to sustainable practices. Sustainable practices often lead to resource efficiency, reduced energy consumption, and operational cost savings, making Green HSE not just environmentally responsible but also economically prudent. This approach ensures a holistic understanding of workplace threats. Implement Green HSE for Indonesian Migran Workers (Pekerja Migran Indonesia/PMI) represents a holistic approach to workplace well-being by recognizing the symbiotic relationship between human health, safety, and environmental sustainability. Facilitating activity can creates a safer, healthier for PMI, and more resilient workplace.

Kata Kunci: *Facilitating, Green Safety, Indonesian Migrant Workers, Pulau Pinang-Malaysia*

Introduction

Partner in community service activity is Pertubuhan Masyarakat Indonesia (PERMAI) in Pulau Pinang, Malaysia. Chief officer of PERMAI is Khozaeni Bin Rahmad. PERMAI is non-government organization with activity focus for advice and assist of PMI (Pekerja Migran Indonesia) in working standard and regulation. New standard or regulation especially basic principles likes green safety must be known for practical implementation in the working areas. Target member for community service program is about 40 persons (typical one classroom for discussion effectiveness), represent member of PERMAI related with the topics.

The era of globalization has contributed to an increase in employment, 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

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caused by the work environment or workplace. One of the potential hazards in the workplace is ergonomics (1). Work posture refers to the different body positions of workers when doing work, various types of work to be performed (2).

Based on previous research, it is suggested that the factors that cause accidents are human factors, machines, materials, environment, methods, and measurement, which are the basic causal factors (3). Most accidents are the result of unsafe behaviors, such as losing focus at work and failing to use safety tools (Alat Pelindung Diri/APD), as well as unsafe surroundings, such as little room for worker movement and poor housekeeping. 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, namely unsafe acts and unsafe conditions (4). Based on statistical data on work accidents can be seen in Figure 1. Fatalistic Cases in Malaysia, Figure 2. Comparison of Accidents Recorded in the Construction Industry and Other Industries (Number of Accident) in Malaysia and Table 1. Accident Rate Base on Region Area in Malaysia as follow.

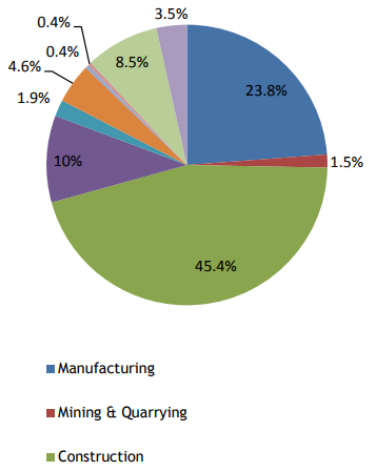


Figure 1. Main Sector Fatalistic Cases in Malaysia

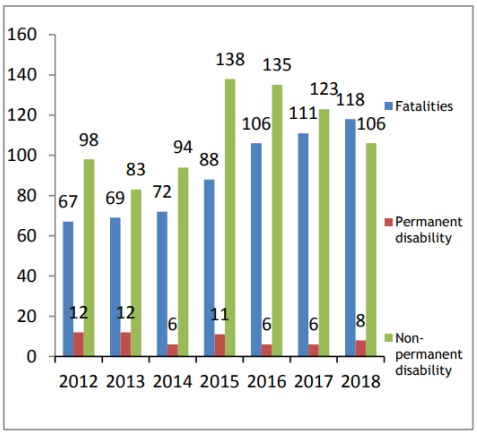


Figure 2. Fatalistic Cases in Industry

Table 1. Accident Rates

NEGERI	BILANGAN THUK	BILANGAN HUK	BILANGAN MAUT	JUMLAH
JOHOR	1082	59	24	1165
KEDAH	396	3	7	406
KELANTAN	115	4	5	124
MELAKA	362	7	2	371
N SEMBILAN	382	13	6	401
PAHANG	366	9	19	394
PERAK	747	26	20	793
PERLIS	12	0	2	14
PULAU PINANG	695	15	13	723
SABAH	227	22	9	258
SARAWAK	290	26	20	336
SELANGOR	1301	38	29	1368
TERENGGANU	135	3	11	149
WPKL	188	1	19	208
WP LABUAN	8	1	0	9
JUMLAH	6306	227	186	6719

Implementation Method

The method used in this activity is to provide health promotion counseling on Green HSE (5). This counseling uses media in the form of leaflets and gives pre- and post-tests in the form of questions to part-time workers to determine their knowledge and understanding of ergonomics. The results of the pre-test and post-test are used to determine the effectiveness of the counseling that has been carried out. The targets of the implementation of community service activities are workers in the several sector for Indonesian Migran Workers (Pekerja Migran Indonesia/PMI). The service is carried out on all workers, both new workers and senior workers. The implementation of this activity was carried out using the presentation and discussion method. Team member and partner working in the location together. Team member supporting for healty and safety basic knowleges presentation, also tools for demontration. Partner team member facilitating for all equipment in meeting rooms and introduction to participants. Activity describes as follows.

1. Initial survey and partner signing. The output of this stage is the signing of the partner's letter of agreement.
2. 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 activity is the availability of data needed to find out what problems are faced by partners and design suitable methods for delivering community services activities (Pengabdian Kepada Masyarakat/PKM).
3. When planning a project, it's not just about how to accomplish the project in the most efficient way possible. However, think about and plan for other resources as well, such as safety requirements. The output of this activity is an activity monitoring report to achieve efficiency in implementation.
4. Present material about the importance of implementing Green Health Safety and Environment (Green HSE) in the workplace. Some of the things conveyed are the importance of providing and using Personal Protective Equipment/PPE when working, the danger 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 Green HSE in work activities.

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5. Provide an opportunity to ask questions and provide input on the material presented. The output of this activity is the occurrence of good and harmonious communication between the implementing team and partners.
6. Implementing an 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 Green HSE. The output of this activity is to monitor the results of PKM activities.
7. Publish and report PKM activities. The output of this stage is a publication article and a PKM activity report.



Figure 3. Community Services Activity

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 is shorthand for Pertubuhan Masyarakat Indonesia di Pulau Pinang Malaysia, which is a non-political, non-governmental NGO engaged in social education and culture. Experts consist of Indonesian people who live in Malaysia, among others: expatriates, businessmen, lecturers, teachers, students, and workers who are in Malaysia.

Presentation and discussion attendant is followed by 32 participants. The majority of participants (65%) worked in the sector manufacturing industry, with the remaining (35%) working in the construction, plantation, oil and gas and other sectors. Based on the questionnaire, which measured satisfaction with the presentation and discussion materials on a scale of 1-4, the overall average score was 3.80, indicating satisfaction. Participants hoped that the activities could continue periodically, focusing on current topics in accordance with local regulations.

Result

Efforts to implement occupational safety and health (Keselamatan dan Kesehatan Kerja/K3) in working area are very important for workers when carrying out work activities (6,7,8). 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 each individual to avoid work accidents (9,10).

Green HSE represents a holistic approach to workplace well-being by recognizing the symbiotic relationship between human health, safety, and environmental sustainability. As organizations increasingly prioritize corporate social responsibility, integrating Green HSE practices becomes a strategic imperative. Embracing a sustainable approach to health and safety not only safeguards the planet for future generations but also creates a safer, healthier, and more resilient workplace today. The results of community service activities are in line with recently research results on the importance of integrating occupational safety and health with maintaining a sustainable environment. (11).

Acknowledgement

The community service team would like to thank the Research and Community Service Institute of Universitas Mercu Buana as a sponsor and the PERMAI as partner for the activity facilitator.

References

Azmi, N. S., Sukadarin, E. H., & Aziz, H. A. (2020). The performance of safety implementation towards accident occurrence in Malaysia construction industry. Malaysian Journal of Public Health Medicine, Special Volume(1), 14-22.

Anwar, T. A. (2023). Pelatihan manajemen kesehatan dan keselamatan kerja pada anggota asosiasi pengusaha jasa boga Indonesia Provinsi Jawa Barat. Jurnal Abdimas Kartika Wijayakusuma, 4(1), 53–61.

Bayram, M. (2019). Safety training and competence, employee participation and involvement, employee satisfaction, and safety performance: An empirical study on occupational health and safety management system implementing manufacturing firms. Alphanumeric Journal, 7(2), 301–318.

Kongtip, P., Yoosook, W., & Chantanakul, S. (2008). Occupational health and safety management in small and medium-sized enterprises: An overview of the situation in Thailand. Safety Science, 46(9), 1356–1368.

Ridwan, A., Susanto, S., Winarno, S., Setianto, Y. C., Gardjito, E., & Siswanto, E. (2021). Sosialisasi pentingnya penerapan keselamatan dan kesehatan kerja (K3) pada karyawan pabrik semen Tuban. Jurnal Abdimas Berdaya: Jurnal Pembelajaran, Pemberdayaan dan Pengabdian Masyarakat, 4(01), 36.

Ferusgel, A., Butar-Butar, M. H., Chaniago, A. D., & Situmorang, R. K. (2021). Penyuluhan keselamatan dan kesehatan kerja pada driver ojek online di Medan. Abdimas Galuh, 3(2), 379.

Rosita, R., & Nastiti, F. E. (2022). Pelatihan kesehatan dan keselamatan kerja bagi siswa SMK kesehatan Darul Hidayah. Jurnal Duta Abdimas, 1(2), 19–24.

Rafaelin, F. F., Rifai, A. I., Isradi, M., & Prasetijo, J. (2023). Implementation of driver briefing policy in improving driver safety at multinational company workshop in Batam, Indonesia. International Journal of Entrepreneurship and Business Development, 6(5), 885–899.

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Dwiatmoko, H., Isradi, M., & Prasetijo, J. (2023). Accident prevention and traffic safety for Sekolah Alam Robbani Bekasi - (KidSafe). 2(1), 56–63.

Hong, N., Mei, Q., Liu, S., & Zhang, J. (2024). Effect of green supply chain collaboration on the HSE performance of manufacturing SMEs. Finance Research Letters, 68, 106013. **https://doi.org/10.1016/j.frl.2024.106013**

Green HSE: Integrating environmental sustainability into health and safety practices. (2024). NIST Global. **https://nistglobal.com/2024/Green%20HSE%20Integrating%20Environmental%20Sustainability%20into%20Health**