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The Creation of a Safety Induction for Building A at the Pakupatan Campus

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Abstract

Safety and security in the campus environment are essential elements as they involve human lives. With a safe and secure environment, the academic community will feel protected from the dangers of fires and natural disasters. This community service activity aims is to provide education to building users and strengthen the culture of maintaining personal and collective safety through hazard identification, creation of evacuation routes, determination of assembly points, and the production of a safety induction video.This community service activity began with the observation and interviews related to building needs. The next stage was a discussion with the Head of Occupational Health and Safety (OHS) at Pakupatan Campus to meet the building needs analysis from the first stage. The third stage was implementation, which included the collection and processing of data used in hazard potential analysis, creation of building layouts, development of evacuation routes, determination of assembly points, and the production of a safety induction video. The outcome of this service aligned with the objectives, resulting in the completion of the safety induction for Building A.

Keywords: Safety, Campus, Building A, Safety Induction

INTRODUCTION

A campus is a building complex where the academic community gathers and various activities take place, such as teaching and learning, discussions, research, seminars, hearings, laboratory activities, and more. Universitas Sultan Ageng Tirtayasa is the largest university in Serang City, with several campus locations spread across Sindangsari, Ciwaru, Cilegon, and Pakupatan. The Pakupatan campus consists of 11 buildings used for academic activities. One of them is Building A, which has the largest capacity of 1,250 people and contains 36 rooms. In Building A, there are medical laboratories, a skill lab, practical rooms, classrooms, faculty offices, a storage room for medical equipment, a warehouse, and restrooms.

Safety and security on campus are essential elements because they involve human lives. With a safe and secure environment, the academic community will feel protected from the dangers of fire and natural disasters. One way to create a safe working environment is by implementing the Occupational Safety and Health Management System (SMK3). SMK3 is an integral part of workforce protection. Its implementation can prevent both moral and material losses, reduce work time loss, and ensure the safety of workers and the surrounding environment from potential accidents (Siagian, 2023) . One component of SMK3 is safety induction. Safety induction is a process of introducing individuals in the area to potential hazards, gathering points, and self-evacuation procedures. According to the Ministry of Public Works and Housing Regulation No. 14 of 2017 concerning Building Accessibility

Requirements, the provision of facilities and accessibility in buildings must consider, among other things, evacuation facilities. The provision of evacuation facilities aims to facilitate evacuation personnel in evacuating building users and visitors during a disaster or other emergency (Ministry of Public Works and Housing).

A gathering point is an open area located near residential areas that serves as a place for people to assemble before being moved to a safer location during an emergency. An evacuation route is a path that connects residences or gathering points to the route leading to a Temporary Evacuation Site (TES) and then to the Final Evacuation Site (TEA) (Damayanti, 2023) . Work accidents will inevitably cause losses, regardless of the scale, although their impact can be mitigated. The number of workplace accidents in Indonesia continues to rise each year, making occupational safety and health a key concern (Setyadi *et al*., 2024) . The community service activity focused on creating a safety induction video has proven effective in enhancing the knowledge and awareness of employees at PLN Borobudur regarding workplace safety (Zakiyabarsi *et al*., 2024) . This community service activity aims to provide education to building users and strengthen the culture of maintaining personal and collective safety through hazard identification, the creation of evacuation routes, the determination of assembly points, and the production of a safety induction video.

METHOD

This community service activity begins with observation and interviews related to safety and health issues at Building A, Pakupatan Campus. Following this, a needs analysis is conducted based on the results of the building observation. The second stage involves drafting and submitting a proposal to the Head of Occupational Safety and Health (K3) at Pakupatan Campus, suggesting community service activities such as hazard analysis, creation of building layouts, evacuation routes, identification of gathering points, and the production of a safety induction video.

The third stage involves data collection and processing. Data collection includes information dealing with available rooms for creating building layouts, potential hazards, evacuation routes, and identification of gathering points. Data processing is conducted using a laptop and HIRARC tables. The final stage is making a safety induction video for Building A at the Pakupatan Campus.

RESULTS AND DISCUSSION

Building A at Pakupatan Campus has 36 rooms with a total capacity of 1,250 people. The building does not yet have an evacuation route map, and safety signs are only present on

the 2nd and 3rd floors. The fire extinguishers (APAR) in Building A have not been properly distributed. The layouts created are as follows:

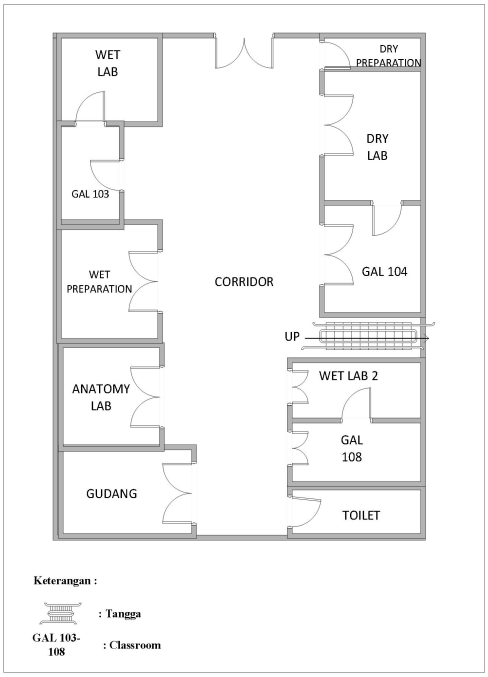

Figure 1. Layout of Building A, Floor 1

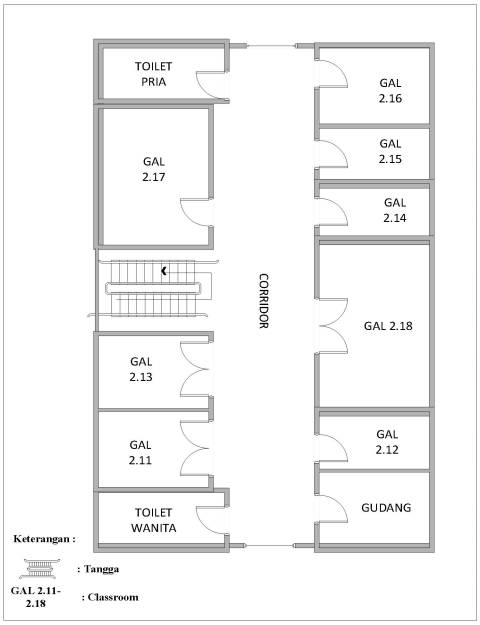

Figure 2. Layout of Building A, Floor 2

The activities conducted in Building A include lectures for law students and practical sessions for medical students. This building also contains equipment supporting the educational activities of the medical department. Identifying potential hazards is crucial for understanding what dangers may arise so that control or preventive measures can be implemented. The results of the hazard identification for Building A, involving lecture and

practical activities, include risks from lighting and cables that cross several rooms. The potential risks associated with these hazards are eye strain, electrical shorts, and tripping. It is necessary to replace the lighting and conduct routine inspections of lighting conditions. The risk of electrical shorts can be managed by removing or relocating cables to safer areas, using wireless alternatives, employing cable protectors, and establishing standard operating procedures (SOPs) for pedestrian traffic.

An evacuation route is a specially designed path for connecting all areas to a safe location, serving as a gathering point for everyone present or active in the area, to avoid threats or dangerous situations (Yadi *et al*., 2023) . An evacuation route is a path taken by citizens to escape during a disaster or unexpected event. Therefore, the existence of evacuation routes and facilities is a priority. Evaluating these routes and facilities is crucial for reducing casualties during a disaster. The ideal evacuation route is the shortest, fastest, and safest path to a designated safe area. Regular evaluations of evacuation routes and facilities are essential (Murtiadi *et al*., 2021). Evacuation routes in Building A are present on each floor. Here are some of the evacuation routes:

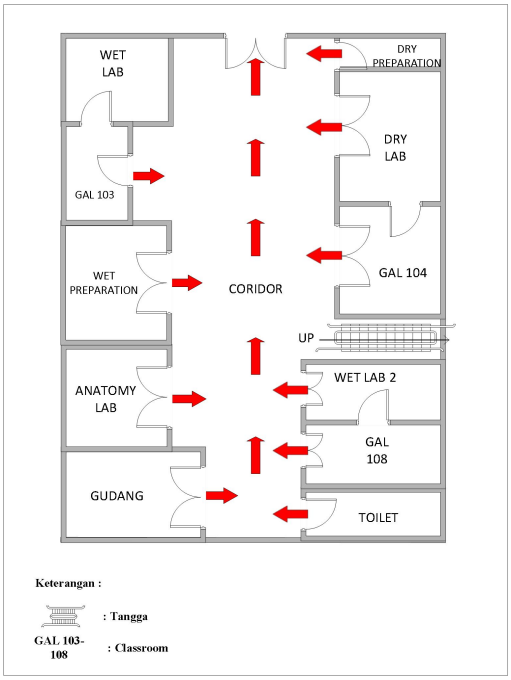

Figure 3. Evacuation Route, Floor 1

Evacuation routes will lead to a gathering point. Building A has two gathering locations. The distance from Building A to the sports field is 45 meters, while from Building A to the parking area is 42 meters. The evacuation plan and procedures serve as measures to create a safe environment (Kurniawan, 2020).

The community service activity on creating displays has previously been conducted in a hotel building by (Tresna *et al*., 2023) . At PT. PCC, evacuation routes are designed for fire

emergencies (Azis *et al*., 2024). Community service through the creation of a safety induction video has proven to be an effective way to enhance students' awareness and understanding of Occupational Safety and Health (OSH) and emergency response. In addition to raising students' awareness in schools, this method also has the potential to make a significant contribution to the overall safety and health of the community (Mirza *et al*., 2024). Here is the safety induction video.

Ficture 4. Safety Induction Video Footage

Ficture 5. Safety Induction Video Footage

Community service at Edu Wisata Lontar Sewu demonstrated an increase in visitors' knowledge about tourism safety following the safety induction that introduced the potential hazards at the tourist site (Nilamsari *et al*., 2022) . Community service involving safety induction outreach to business administration students at Mulawarman University resulted in a 95% increase in knowledge (Bharata *et al*., 2023).

CONCLUSION

The community service activity was carried out to strengthen the safety culture at the Pakupatan Campus in Building A of Sultan Ageng Tirtayasa University. Understanding workplace safety is crucial to prevent the risk of accidents. This program includes various activities, such as safety risk identification, evacuation route creation, and the production of a safety induction video. It is hoped that this program will raise awareness and preparedness among the academic community in facing potential risks. Additionally, effective

implementation of the program is expected to create a safer campus environment, support the quality of learning, and enhance the well-being of the entire academic community.

To ensure the sustainability of the safety induction program, this community service initiative can be extended by providing additional training that covers more advanced materials.

SUGGESTIONS

This community service activity requires further simulation to determine the actual time needed during evacuation. Efforts to develop and enhance understanding of Occupational Safety and Health (OSH) are carried out through training or seminars for the academic community.

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