

Development of Safety Briefing Kit for School of Health Sciences

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Abstract

Occupational safety and health (OSH) briefings for employees and other interested parties are crucial in ensuring the proper dissemination of minimal OSH requirements and information across the organization ^[1]. The implementation in Malaysia is based on OSH regulations as outlined by the Department of Safety and Health Malaysia. The challenge here is the requirement for OSH briefing shall be different depending on the facility and operations themselves. Adding up, it is crucial for OSH briefing to be delivered with the right content to everyone efficiently and simply but as accurately and easily understandable as possible ^[2]. Several studies have indicated the multiple types of hazards available in tertiary education settings (i.e., university, college, polytechnic, etc.) which include physical, chemical, biological, electrical, and even radiological ^[3-5]. As tertiary education settings have multiple types of occupancy ranging from students, academic staff, support staff, contractors, and visitors, the risk of injury to the occupants is feasible. Hence, the objective of this study was to identify the elements of OSH briefing content and develop an OSH briefing kit for tertiary education settings.

Understanding and evaluating elements of OSH briefing require a systematic approach for reviewing documents, both printed and electronic materials, hence document analysis methods were utilized ^[6]. Reports, articles, books, standards, and guidelines with a keyword of safety briefing were used to filter the identified documents and every identified information on OSH briefing is categorized into larger elements. These produced the total elements needed in conducting an effective OSH briefing. An OSH briefing kit was developed for the School of Health Sciences, Universiti Sains Malaysia (USM) based on the identified elements. By utilizing the face validity method ^[7], the OSH was then discussed and verified by seven experts consisting of the school emergency team. Using an adopted four sections, thirteen questions of five points Likert scale questionnaire were used to assist experts in reviewing the OSH briefing kit. This study has been reviewed and approved by the USM Human Research Ethics Committee (USM/JEPeM/22020125).

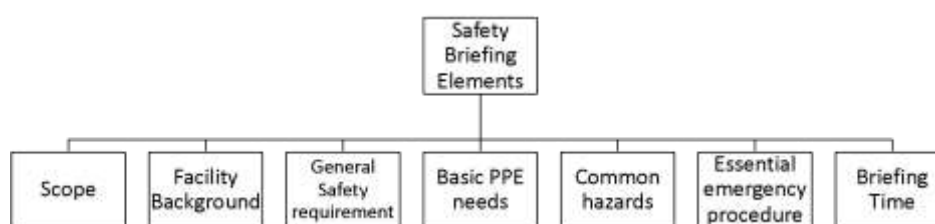


Figure 1: Seven elements of safety briefing

Through extensive literature, there were seven safety briefing elements identified for a good safety briefing [1–3,5,8] as summarized in Figure 1. The scope of the safety briefing served as the learning outcomes must be informed to the participant earlier during each safety briefing session. A specified facility background is necessary as different facilities might have different layouts and arrangements. General safety and security requirements should be stated clearly as each facility is unique and might have different risks. Basic personal protective equipment (PPE) is required to ensure that everyone entering the facility is minimally protected in preventing or minimizing injuries. Common hazards, which are typically identified by a comprehensive risk management process, will ensure that everyone understands the hazards located across the facility while reiterating the necessity of general safety and security regulations and basic PPE needs. An essential emergency procedure provides everyone with an understanding of basic response to the emergency which includes notification, communication, evacuation process, and route including assembly area and accountability process. Finally, the briefing time should be less than 15 minutes to ensure short and precise communications and to minimally disrupt the main activity or operations.

The developed OSH briefing kit was tailored to the School of Health Sciences requirements and consisted of a presentation slide for a manual briefing by respective emergency team personnel as well as the three minutes and 40 seconds of pre-recorded OSH briefing multimedia depending on the availability of non-emergency team members. There were 13 slides in the presentation, each with pre-written text to make the briefing process simpler. School event organizers could have the option to use any of the two materials from the OSH briefing kit. The kit utilizes the elements of effective safety briefing identified earlier. Through the experts' validations process, it was agreed that the OSH briefing kit has good information quality with an average score of 4.26 indicating the accuracy of the content covered. The usefulness of the kit was also consented by experts at 4.52 average score indicating comprehensive general OSH requirement in the school. The OSH briefing kit scored 4.24 on average for usage characteristic and the overall satisfaction of the kit was at 4.29 average score.

It is concluded that in developing an effective OSH briefing, a total of seven (7) elements should be considered to ensure the comprehensiveness of the briefing, hence the novelty of this study. The elements are suitable to be used in developing an OSH briefing for tertiary education settings, but the content should be tailored based on the entity itself. Future studies will include the evaluation of the developed OSH briefing kit for the end-user in understanding the acceptability and understanding of the minimum OSH requirement in tertiary education settings.

Keywords

Emergency procedure, OSH briefing kit, Safety, Tertiary education settings

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