

Abstracts of Oral Presentations-WADEM Congress on Disaster and Emergency Medicine 2019

RISK AND PLANNING

Comprehensive Safe Hospital Implementation in Rural Area of Indonesia

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Introduction: Located on the Pacific Ring of Fire, Indonesia has to cope with the constant risk of many disasters. Hospitals in Indonesia are very vulnerable. Around 1,300 hospitals suffered damage since the Aceh tsunami (2006), with losses reaching 3 billion USD. Muhammadiyah is an Indonesian non-governmental organization (NGO) that has more than 300 hospitals. It is one of the forerunners in the Safe Hospital Initiative in Indonesia and has implemented a program named Hospital Preparedness and Community Readiness for Emergency and Disaster (HPCRED), which strengthened PKU Muhammadiyah hospitals in Bima (West Nusa Tenggara), the only hospital in Bima City, and in Palangkaraya (Central Borneo), funded by the Australian government.

Methods: HPCRED improved the hospital through implementing two trainings (Hospital Disaster Management and Disaster Medical Officer), three workshops (Disaster Risk Management Policy, Hospital Emergency Response Plan, and Forming Hospital Disaster Management Committee and Disaster Medical Team), four exercises (Medical Skill Drill, Table Top, Command Post, and Full Scale). The improvement was evaluated through Muhammadiyah Safe Hospital Standard and Assessment Tool, which assessed four standards based on WHO Comprehensive Safe Hospital Framework (2015): (1) Management, (2) Human Resource, (3) Structure and Infrastructure, and (4) Integration and Cooperation.

Results: After two years of program, both hospitals improved significantly. The PKU Muhammadiyah Palangkaraya index improved from 53 to 331 while the PKU Muhammadiyah Bima Hospital index improved from 83 to 374.

Discussion: Before the program, hospitals were not ready to face disasters. The PKU Muhammadiyah Bima Hospital

collapsed during a flash flood in December 2016. PKU Muhammadiyah Palangkaraya was overwhelmed during a haze disaster that occurred in April 2016. After the program, the hospitals were safe and ready to face similar disasters. They also already had the ability to respond to disasters on other islands, such as the earthquake in Lombok and Palu (2018).

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Consideration and Practice on Hospital Incident Command System During Mass Casualty Incidents in Chinese Hospitals

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Introduction: More and more hospitals are using the Hospital Incident Command System (HICS) for organizational management under emergency conditions. HICS is an incident management system based on principles of the Incident Command System (ICS), which assists hospitals and healthcare organizations in improving their emergency management planning, response, and recovery capabilities for unplanned and planned events. This study aims to explore how Chinese hospitals manage their organizations with HICS in Mass Casualty Incidents (MCI).

Aim: To explore the feasibility of HICS in Chinese hospitals under MCI.

Methods: A combination of literature analysis and empirical research was used in this study. Through case studies and experience summarization, the necessity and feasibility of the incident command system (ICS) and the emergency medical response system (EMRS) was demonstrated in the early stage of MCI. Based on this, a new "1 SECTION-5 GROUPS-10 TEAMS" model was proposed, and its value of practical application was discussed in MCI.

Results: Multiple resources must be mobilized in MCI, and it is necessary to establish an ICS and an EMRS as soon as possible in the early stages of MCI. The earlier ICS is set up, the more initiative can be taken. The "1 SECTION-5 GROUPS-10 TEAMS" model proposed in this study has a good effect on the practice of drills and rescues, indicating that this model has a certain promotion effect in the hospital's response to MCI.

Discussion: The "1 SECTION-5 GROUPS-10 TEAMS" model has high feasibility and can be further verified in the subsequent rescue practice.

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