

exist, is in the approximate size of 2-3 points on a 100-point scale. The lack of effect may be due to limitations in the study design, but may also indicate that the use of moulage in addition to victim cards is not necessarily beneficial for novice students' learning.

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Patient Healthcare Following a Disaster: Guidelines for Family Doctors

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Introduction: Health effects of disasters are mostly consistent across hazard types. Those working in communities affected by disasters have an opportunity to provide surveillance and early management to patients affected by disaster through increased understanding of the epidemiology or health consequences in the days, weeks, months, and years after disasters. Disasters have been called a social determinant of health and population-level changes or social determinants that have been documented post-incident. Environmental and community disruption contribute to health effects. Consequent health effects are evidenced across body systems, affecting both physical and mental health. **Aim:** To develop guidelines for primary care patient review following a disaster, based on the temporal pattern of disease epidemiology.

Methods: A systematic review of the literature was undertaken to examine the epidemiology of health consequences following disasters.

Results: Guidelines for Family Doctors based on the literature review were developed to assist preventative care, surveillance, early identification of emerging conditions, and ongoing management of pre-existing disease.

Discussion: Healthcare management in disasters focuses on acute healthcare in emergency departments and hospitals. However, healthcare is also being provided in primary healthcare settings during the first days to weeks of the catastrophe, with many health consequences ongoing in the weeks, months, and years after the event.

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Seven First Minutes - Community Emergency Response Training

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Introduction: Following a mass casualty incident (MCI), it can take several minutes for emergency medical services (EMS) to arrive. The course was developed by Magen David Adom (MDA) based on unique experience in dealing with MCIs, and the time between alerting emergency services to such an

incident until they arrive. The course is focused on teaching the general public to channel their desire to help in such a situation into useful skills which can potentially improve patient outcomes. The seminar focuses on key principles such as safety, calling for help, providing an accurate picture of the scene, and initiating basic treatment with an emphasis on hemorrhage control.

Aim: MDA examined the ability of the general public with no previous medical training to perform a basic triage and treatment in an MCI situation. Additionally, the study examined the abilities of the study groups to manage a scene until the arrival of EMS based on the principles taught in the course.

Methods: MDA has sent teams of instructors around the world to teach over 1,000 participants. Upon completing the course, the participants partake in a drill that assesses their ability to manage a scene of 20 patients. Their ability to initiate the call for help, provide an accurate picture, initiate treatment, and give an accurate report to arriving emergency responders are examined.

Results: The average times were recorded. Within 38 seconds, dispatch was alerted to the situation. Within 2:30 minutes, treatment was initiated for all patients. Within 4:37 minutes, the scene was fully under control, and within 6:37 minutes, an accurate report was transferred to EMS on the scene.

Discussion: The participants demonstrated an unexpected willingness to learn, practice, and partake in the drills, and the results were unexpected.

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A Surprise Mass Casualty Incident Simulation: Does It Improve Knowledge or Is It Just a Bit of Fun?

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Introduction: We opened a national conference in Australia with a surprise mass casualty simulation scenario of a van versus multiple persons outside the conference venue. The purpose of this exercise was to increase awareness of, and preparation for, mass casualty incident (MCI) events for the conference delegates who were paramedics, emergency department nurses, and doctors.

Aim: The aim of the research is to understand whether a surprise MCI simulation is a useful way to increase knowledge and motivate preparedness.

Methods: A survey hosted on Qualtrics was circulated to delegates via email. The survey was designed by the research team and had 38 questions about demographics and respondents' experience with MCIs, as well as their perceptions of the simulation exercise. The questions were a mixture of 5-point Likert scales, multiple choice, and short answers.

Results: The majority of respondents were clinicians (n = 66, 76%) and those who worked in emergency departments or the prehospital setting (n = 75, 86%). While the majority had not responded to an MCI in the past 5 years (n = 67, 77%), more than half (n = 50, 57%) had undertaken MCI training during

this time. Overall, a vast majority of respondents found the simulation to be a worthwhile exercise that increased knowledge and preparedness. An overwhelming majority also reported that the simulation was relevant to practice, of high quality, and a useful way to teach about major incidents.

Discussion: Our surprise major incident simulation was a fun and effective way to raise awareness and increase knowledge in prehospital and emergency department clinicians about MCI response. This approach to simulation can be easily replicated at relatively low cost and is, therefore, a useful solution to training a group of multidisciplinary health professionals outside of the workplace.

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Training Emergency Department Charge Nurses Through Tabletop Exercises

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Introduction: In a disaster or mass casualty incident, the Emergency Department (ED) charge nurse is thrust into an expanded leadership role, expected to not only manage the department but also organize a disaster response. Hospital emergency preparedness training programs typically focus on high-level leadership, while frontline decision-making staff get experience only through online training and infrequent full-scale exercises. Financial and time limitations of full-scale exercises have been identified as major barriers to frontline training.

Aim: To discuss a cost-effective approach to training ED charge nurses and informal leaders in disaster response.

Methods: A formal training program was implemented in the ED. All permanent and relief charge nurses are required to attend one four-hour Hospital ICS course within their first year in their position, as well as participate in a minimum of one two-hour ED-based tabletop exercise per year. The tabletop exercises are offered bimonthly, covering various mass casualty scenarios such as apartment complex fires, riots, and a tornado strike. Full-scale exercises involving the ED occur annually.

Results: ED permanent and relief charge nurses expressed increased skills and knowledge in areas such as initiation of disaster processes, implementation of hospital incident command, and familiarization with protocols and available resources. Furthermore, ED charge nurses have demonstrated strong leadership, decision-making, and improved response to actual mass casualty incidents since implementing ICS training and tabletop exercises.

Discussion: Limitations of relying on full-scale disaster exercises to provide experience to frontline leaders can be overcome by the inclusion of ICS training and tabletop exercises for ED charge nurses in a hospital training and exercise plan. Implementing a structured training program for ED charge

nurses focusing on leadership in mass casualty incidents is one step to building a more resilient and prepared ED, hospital, and community.

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Use of Moulage in Multi-Disciplinary Mass Casualty Incident (MCI) Training: Cost-Effective Tool or an Expectation?

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Introduction: A 2018 poll by the American College of Emergency Physicians shows 93% of surveyed doctors believe their emergency department is not fully prepared for patient surge capacity in the event of a natural or man-made disaster. While an emergency disaster plan is activated during any incident where resources are overwhelmed, many US emergency physicians today think of a mass casualty incident (MCI) as the inciting event. To better prepare our communities, an MCI simulation took place in Chicago 2018 with participation from local and federal representatives. Included were Chicago fire, police, and emergency medical services agencies, emergency medicine physicians, resident participants, and medical student volunteer victims.

Aim: The study's aim was to determine whether resource intensive moulage was an expected component or a beneficial adjunct, if moulage-based training would improve physician preparedness, and if such a training would increase the likelihood of future involvement in local disaster preparations. Analysis was performed on pre- and post-training surveys completed by participants. By reviewing the benefits versus cost, future MCI simulation planners can efficiently use their funds to achieve training goals.

Methods: Thirty-two emergency medicine physicians were surveyed before and after a five-hour training session on October 20, 2018, which included 89 moulage victims. Twenty-four after-event surveys were completed. All completed surveys were utilized in data analysis.

Results: Of polled participants, a 68% improvement in general preparedness was achieved. While only 19% of participants cited current involvement in their facility's disaster planning in pre-event survey, the likelihood of involvement after training was 8.2/10. Overall, the importance of moulage an essential component to such trainings remained constant.

Discussion: Moulage is an expected and crucial element to MCI training and should be incorporated as extensively as resources allow. MCI trainings improve physician preparedness and potentially increase physician involvement in disaster planning at home institutions.

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