A Mass Casualty Experience: Carbon Monoxide Poisoning in a Group of Restaurant Workers

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Study/Objective: To investigate the treatment of CO poisoning using oxygen.

Background: Acute carbon monoxide poisoning is a common cause of accidental poisoning. The incident described here occurred in a restaurant in Singapore, where a group of workers were exposed to CO due to a malfunctioning ventilation system. Thirty patients were sent to our ED as our hospital has the only burn unit in Singapore, as well as being the closest in proximity to the incident site.

Methods: All patients involved in the incident were charted upon arrival and seen by a team of Emergency Department doctors, including three medical officers and two toxicologists. Once the diagnosis of the index case was confirmed with an elevated carboxyhemoglobin, he was initiated on 100% oxygen using a Non-breather Mask (NRM). Subsequent cases were also initiated on NRM once there is confirmed history of being in the affected area of the restaurant, and patients complained of symptoms of headache, giddiness, breathlessness, or chest tightness. All cases were screened with the following investigations - Chest X Ray, full blood count, renal panel, troponin T, carboxyhemoglobin, venous/arterial blood gas, and lactate levels. **Results:** Two patients were admitted to inpatient and 17 to our observation unit. All cases displayed down trending of carboxyhemoglobin levels with oxygen. Three cases with raised Troponin had initial complaints of chest tightness that resolved with oxygen therapy. All patients were discharged and none required HBOT.

Conclusion: Carbon monoxide poisoning is readily treatable once the diagnosis is clinched through a thorough history taking, physical examination, and appropriate investigations. Importantly, a concomitant cyanide poisoning should be excluded, as the treatment is different. A mass-casualty situation can also happen in such instances, so a protocol should either be activated or drawn up immediately upon identification of the first few cases. Hyperbaric oxygen treatment is a consideration in severe cases.

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Disaster Preparedness and Social Media: Experience from an Earthquake in Hawassa 2016

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Study/Objective: To create awareness for the community in the region of an earthquake. To disseminate preparedness information during an earthquake.

Background: Hawassa is found within the rift valley system, known to be the most vulnerable area in the country for volcanic activity including earthquakes. It is known that an earthquake with a magnitude of 5.2 Richter scale was registered in Yergalem, Hosana, and Werabe in Southern Ethiopia regional state a year ago. This year in January 24-25, a successive earthquake of 4.1 and 4.3 Richter scale respectively hit Hawassa, the capital of Southern Ethiopia regional state, 275 km (170 miles) south of Addis Ababa. The shock, which was also felt in Halaba and Shashemene areas, registered at approximately 9:35 pm local time, according to Dr. Atalay Ayele, earthquake science expert from the Addis Ababa University. According to regional authorities, the shock didn't bring significant injuries to people. The shock caused no serious damage to buildings except cracks in some buildings.

Methods: A total number of 100 people were reached through social media (Facebook) and a brief precaution and preparedness diagram was sent individually, as well as being posted to social media groups addressing health care. Each of the 100 social media contacts were instructed to disseminate precautionary measures to as many people as they could. Health care professionals and contacts of social media were addressed with particular emphasis.

Results: All of the 100 people responded, their thoughts in the following table:

Conclusion: In disaster situations, particularly in earthquakes, adequate disaster preparedness will benefit in preventing more serious injuries. Public media education, as well as social media, is very important in minimizing risk.

Average Likert Score of Respondents	
Content Areas	Average Score
General knowledge before for precautions.	2.9
General knowledge after for precautions.	4.9
Willingness for disseminating precautions.	4.8
Their peer response for precautions.	4.9

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"It Takes a Village": Integration of Emergency Management in Public Health Responses

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Study/Objective: During recent public health response coordination activities in New York City (ie. Ebola Virus (2014), Legionnaires' Disease (2015) and Zika (2016), the NYC Emergency Management (NYCEM) saw an "all hands" approach, where public health and medical partners worked closely with other Emergency Support Function (ESFs). These efforts included public information, community outreach, waste management in non-clinical settings, social services support in quarantine scenarios, surge staffing licensed workers, alongside worker health and safety guidance for various tiers of exposure/risk levels. This